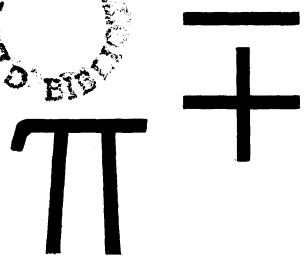


CERN/HERA 72-1
11.5.1972

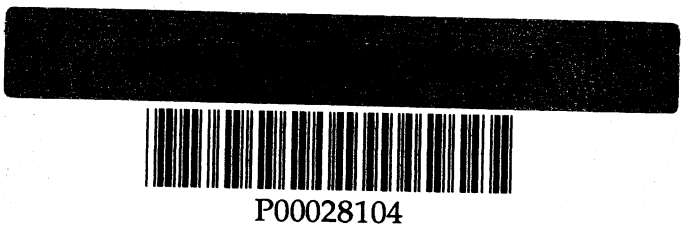
COMPILATION OF CROSS SECTIONS

I - π^- AND π^+ INDUCED REACTIONS

E. Bracci, J.P. Droulez, E. Flaminio, J.D. Hansen and D.R.O. Morrison

CERN, Geneva, Switzerland

High-Energy Reactions Analysis Group



CERN EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

GENEVA - 1972

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I - π^- AND π^+ INDUCED REACTIONS

E. Bracci*, J.P. Droulez, E. Flaminio*, J.D. Hansen and D.R.O. Morrison

CERN, Geneva, Switzerland

Abstract

A compilation of cross sections of reactions produced by negative and positive pions on targets of protons, neutrons and deuterons, is presented. This is an updated version of CERN/HERA 70-5 and 70-7 and contains 40% more data values than the earlier publications. Graphs of the variation of cross section with incident laboratory momentum are plotted. Values of the rate of decrease of cross section with incident momentum are given.

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* Permanent address: Istituto di Fisica dell'Università di Pisa ed I.N.F.N., Sezione di Pisa.

CERN - Service d'Information Scientifique - H/509 - 2000 - Juillet 1972

CONTENTS

1. INTRODUCTION

In high energy strong interactions a considerable amount of data has been and is being produced. To make this information readily available, compilations are required. The present work is a compilation of cross sections, which is an important and useful quantity. The complete series of publications will contain cross sections for reactions with incident protons, antiprotons, pions and kaons on targets of protons, neutrons deuterons and helium nuclei. The present publication is an updated edition of our previous compilation [1]. Here for reasons of economy, we have now changed and compressed the presentation. The whole series of publications consists now of three volumes: one on $\pi^{\pm}$, one on $K^{\pm}$ and the last on P and $\bar{P}$ induced reactions. All strong interactions have been considered in the sense that values are given for total cross sections, elastic, quasi two-body, many-body and phenomenological (i.e. prong number) cross sections.

The cross sections, σ, are tabulated against the laboratory momentum, p_{Lab}, but the corresponding values of the square of c.m. energy and of the kinetic energy of the incoming particle are also given. For any reaction with a cross section determined at a reasonable number (≈ 6) of momenta, a plot is given of the log σ against log p_{Lab}.

No theoretical interpretation of the data is given, but as the rate of fall-off of a cross section with p_{Lab} at high energy is of interest, an empirical fit to the data has been made with the parameterization

$$\sigma = \text{constant} \times (p_{Lab})^{n} \qquad (1)$$

It has previously been shown [2] that this expression fits two-body reactions and the exponent n is related to the exchange mechanism which dominates the reaction. An extension for many-body reactions has been made [3].

This compilation started from a presentation of data on two-body reactions at the Stony Brook Conference (1966) [2] . It was enlarged and became part of the European project of data compilation, High Energy Reaction Analysis, HERA.

We have tried to compile all data published before August 1971 some more recent data are also included.

Although we have tried to check all numbers, there are probably errors and omissions - please, tell us. Suggestions on how to improve these compilations are very welcome.

2. USE OF COMPILATION - SUMMARY

The results of this compilation are in table 6 where the cross sections for the various reactions are listed. Plots of the cross section versus p_{Lab} for the main reactions are given at the end of the compilation. The reactions considered are listed in tables 5 and 7. The order of this listing is explained in Section 5. Each reaction is given a number and the same numbers are used in tables 5 and 6 for the π^- data, in tables 7 and 8 for the π^+ data and on the plots.

The symbols used for the particles and resonances are summarized in table 1. The abbreviations used for the quotations of the publications are listed in table 2. Further conventions used to described the reactions are given in table 3. The list of footnotes and their corresponding code letter are in table 4.

3. ERRORS - A WARNING

Great care should be taken with all the errors quoted in this compilation. In almost all cases the errors quoted are those given in the publications. As can be seen from the dispersion of points on the plots, these errors on cross sections tend to be underestimated. In general the errors quoted here are only statistical, as values of systematic errors are rarely given except for total and elastic cross sections.

4. ORGANISATION OF THE DATA

For each experimental result, a punched card is prepared containing the values of the incident momentum, cross section, error and the reference. These quantities are then put on magnetic tape from which are produced the listings of the data and the plots, on a log-log scale of the cross section against the incident momentum. The result of the fit of equation (1) to the experimental points is also plotted and the values of the exponent, n, and the probability of the fit are given in table 6.

Each reaction is identified by a TITLE given in the form

Initial State = Final State

e.g. $\pi^+ p = p\pi^+\pi^+\pi^-\pi^o$

which we write PI+P = PPI+PI+PI-PIO

or Initial State = Intermediate State = Final State

e.g. $\pi^+ p = N^{*++}\eta = p\pi^+\pi^+\pi^-\pi^o$.

Here the cross section is for production of the $N^{*++}\eta$ reaction in which only the η decay into $(\pi^+\pi^-\pi^o)$ state is considered. If the title had been $\pi^+ p = N^{*++}\eta$, then the cross section value would include all decay modes of the eta-meson.

Each particle or resonance is denoted by a conventional symbol (consisting of a small number of letters and numbers) as similar as possible to its "nickname". A list of the symbols used for the various particles is given in table 1.

To help find the plot of the cross section values, a number is given in the listings for each reaction, and the same number is printed on the corresponding plot.

5. ORDERING OF REACTIONS

A. Ordering of the particles in the initial state

The first particle from the left is always the incident particle in the laboratory system; the second is the target. The reactions are arranged in groups according to the mass of the target, the groups appearing in order of increasing target mass value for the latter e.g. pp, pn, pd and pHe.

B. Ordering of the particles in the final state

The particles appearing in the final state are ordered firstly according to their baryonic numbers, then their mass and charge, as follows

BARYONS		MESONS		ANTIBARYONS		Unseen Neutrals
HEAVIEST	LIGHTEST	HEAVIEST	LIGHTEST	HEAVIEST	LIGHTEST	Z^o
+,-,o	+,-,o	+,-,o	+,-,o	+,-,o	+,-,o	

each of these quantities determining in turn the position of the particle inside the group of the final state particles, as shown in this table. The symbol Z^o is described further in Section 8C.

So first come the baryons, then the mesons; in the group of the baryons, the heavy positive baryons are first, then the heavy negative, and then the heavy neutral baryons. After come the "light" positive baryons, then the negative and so on. No fit (Z^o) always comes last e.g., $\pi^- p = p\pi^+\pi^-\pi^- Z^o$, $K^- p = \Lambda p\, \pi^+\pi^- pZ^o$:

An exception is for elastic scattering where we write,

PI+P = PI+P and not PI+P = PPI+

in order to avoid any confusion with backward elastic scattering.

C. Ordering of reactions coming from the same initial state.

For a given initial state, the reactions are ordered according to the nature of the first particle appearing in the final state, in the following way. If the first particle appearing in the final state is a baryon, then those final states for which the strangeness S of the baryon is +1, will appear first, then those with S = 0, S = -1, etc. For a given strangeness the reactions are ordered according to the mass of the baryon, in order of increasing mass. For fixed S and mass, the order then depends on charge, positive first, then negative and lastly neutral. If the first particle is a meson, i.e. there are no baryons, then the ordering is based on mass and charge only, and strangeness is ignored.

If the first particle appearing in the final state of two different reactions has the same baryon number, mass and charge, then the ordering is governed by the baryon number, strangeness, mass and charge of the particle which appears second in the final state, the ordering being the same as for the first particle. If an intermediate state is also given (e.g. K-P = PK*-890 = PK-PI+), then what matters for the ordering is always the intermediate state. There are cross sections which cannot be classified in the above manner, such as the cross sections for production of two-prongs, four-prongs, annihilation (in case of $\bar{p}p$), etc. They will be quoted in the following order:

1) Total cross sections
2) Elastic cross sections
3) Topological cross sections as seen in bubble chambers, e.g. two-prongs, four-prongs, etc.
4) All other cross sections in the order described above.

However, to help the reader, some reactions are given in order of increasing multiplicity, e.g. $\pi^- p \to p\pi^+\pi^-\pi^-$ should be given before $\pi^- p \to p\pi^-\pi^o$, but here the ordering is $\pi^- p \to p\pi^-\pi^o$, $\pi^- p \to p\pi^+\pi^-\pi^-$, $\pi^- p \to p\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-$ etc.

For "stable" particles appearing in the final state, like Λ^o, Σ^o, K^o, etc., which have neutral decay modes, the quoted cross section is always assumed to include a correction for unseen decays, unless explicitly stated.

Sometimes no charge is specified for the particles in the final states, e.g., if the reaction is written as

PI-P = YKPIPI

then the cross section is the sum of the cross sections for the final states which include any hyperon, any kaon, and any two pions, consistent with conservation of charge and strangeness. The reaction listed as

K+P = P(KPI)+

refers to the sum of the two different final states, $K^+p = pK^+\pi^o$ and $K^+p = pK^o\pi^+$.

For the sum of the reactions $K^-p = \Sigma^+\pi^-\pi^o$ and $K^-p = \Sigma^-\pi^+\pi^o$, we have written

K-P = S(+, -) PI(-, +)PIO

B. Cross sections for final states containing one or more resonances.

The same convention on the correction for unseen decay modes holds for a decaying resonance. In any case, when not explicitly stated, the quoted cross section refers to all the possible decay modes of the resonance. If, on the contrary, the cross section refers to a given decay mode only, this has been specified:

$\pi^-p = N^{*o}\omega^o = p\pi^+\pi^-\pi^-\pi^o$ or, in the program language

PI-P = N*012360M = PPI+PI-PI-PIO

the meaning of which is that for the N^{*o} only the decay mode into $p\pi^-$ was considered, and for the ω only the decay into $\pi^+\pi^-\pi^o$.

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the meaning of which is that for the N^{*o} only the decay mode into $p\pi^-$ was considered, and for the ω only the decay into $\pi^+\pi^-\pi^o$.

C. Explanation of the Symbol Z^o.

In event analysis using kinematic fitting, if there is one or more constraint, then the event is said to be "fitted". If there is more than one undetected neutral particle, then the event is not fitted. In bubble chamber work, a symbol, here Z^o, is given to the sum of the missing neutrals, i.e. Z^o is treated as a single particle required to conserve energy and momentum in the reaction. Thus the reaction $K^-p = pK^-Z^o$, means that two charged particles were observed and in addition there were two or more neutrals: the cross section given for this reaction does not include reactions produced with only one neutral such as $K^-p = pK^-\pi^o$.

D. Ambiguous Particle Assignments.

Sometimes the nature of the observed charged particles cannot be established. For example in the reaction quoted in Section C above, if one cannot distinguish whether the event belongs to the reaction

$K^-p = pK^-Z^o$ or $K^-p = p\pi^-Z^o$, then the reaction is written as

$K^-p = p(K/\pi)^-Z^o$.

Similarly $\pi^-p = (\Lambda/\Sigma)^o K^o$ represents the sum of the cross sections for the reactions $\pi^-p = \Lambda K^o$ and $\pi^-p = \Sigma^o K^o$.

E. Antiparticles.

The charge specified for antiparticles is not the charge of the corresponding particles, but that of the antiparticle itself. This means that the antiparticle of the Ξ^- will be denoted by AXI+, i.e., the charge printed is the observed positive charge of the anti-particle.

F. Topological Cross Sections

For reactions of the type :

pp = 6 prongs + V^o, where by V^o we mean a decaying strange particle, we adopted the following conventions :

a) the number of prongs is written first, and then the V and its charge
b) a comma is used to separate the number of prongs from the V.

examples :

K^-p = 4 prongs + V^o becomes K-P = 4 PRONGS, VO

π^-p = 6 prongs + (Σ^o, Λ^o) becomes PI-P = 6 PRONGS, (SO/L)

G. Charge Conjugate Final States.

For the sum of two charge conjugate final states the symbol CC has been used e.g.,

APP = NPI+AP CC

means the sum of $pp = n\pi^+\bar{p}$ and $pp = p\pi^-\bar{n}$.

H. Shortening of Title.

In some cases it has been necessary to shorten the title, or the reference, because of limitations of space. If necessary, additional information is given in a footnote.

I. Footnotes.

Further comments or information have sometimes been added as footnotes. The presence of a footnote is signalled by a letter in the last column of the listing. The footnotes are listed in table 4.

J. Widths of Resonances.

The cross section value quoted in a publication for a reaction involving one or more resonances, depends to some extent on the width of the resonance used to fit the experimental mass distribution. Since the resonance widths used sometimes vary appreciably from publication to publication, this may be a factor affecting the dispersion of cross section values. As, in general, we take the value given by the authors, it is recommended in case of doubt that the reader check the original publication.

References

1. E. Flaminio, J.D. Hansen, D.R.O. Morrison, N. Tovey; Compilation of cross sections:

I-Proton induced reactions, CERN-HERA 70-2
II-Antiproton induced reactions, CERN-HERA 70-3
III-K^+ induced reactions, CERN-HERA 70-4
IV-π^+ induced reactions, CERN-HERA 70-5
V-K^- induced reactions, CERN-HERA 70-6
VI-π^- induced reactions, CERN-HERA 70-7

2. D.R.O. Morrison, Stony Brook Conference on Two-body Reactions (1966).

3. J.D. Hansen, W. Kittel and D.R.O. Morrison, Nuclear Physics B25 (1971) 605.

TABLE 1

Symbols used for particles and resonances

MESONS

π	PI	f^{o} (1260)	F
K	K	D (1285)	D
K_1^o	KS	A_2 (1300)	A_2
K_2^o	KL	Q or K^* (1320)	K*1320
η (549)	ET	K^* (1400)	K*1400
K (725)	K725	E (1420)	E
ρ (765)	RH	f^* (1500)	F*
ω (783)	OM	A_3 (1640)	A3
K^* (890)	K*890	ϕ_N (1650)	PHI1650
X^o or η'	XO	G (1660)	G
δ (965)	DEL	ρ (1700)	R
H (990)	H	L or K^* (1790)	K*1790
ϕ (1019)	PHI	S (1930)	S
S^* (1070)	S*	U^o (2420)	UO
A_1 (1070)	A1	THRESHOLD ENHANC.	TE
$A_{1.5}$ (1190)	A1.5	MISSING NEUTRALS	ZO
B (1220)	B	γ	GAM

TABLE 1 (cont'd)

BARYONS

Proton	P	Δ (2420)	N*2420
Neutron	N	Δ (2850)	N*2850
Λ	L	Λ (1405)	Y1405
Σ	S	Λ (1520)	Y1520
Ξ	XI	Λ (1670)	Y1670
Ω^-	OM-	Λ (1700)	Y1700
Hyperon	Y	Λ (1820)	Y1820
De	DE	Λ (2100)	Y2100
De*	DE*	Λ (2340)	Y2340
N (1400)	N1400	Λ (2340)	Y2340
N (1525)	N1525	Σ (1385)	Y*1385
N (1570)	N1570	Σ (1660)	Y*1660
N (1688)	N1688	Σ (1690)	Y*1690
N (1700)	N1700	Σ (1770)	Y*1770
N (2190)	N2190	Σ (1910)	Y*1910
N (2650)	N2650	Σ (2035)	Y*2035
N (3030)	N3030	Σ (2260)	Y*2260
N (3230)	N3230	Z (1900)	Z1900
Δ (1236)	N*1236	Ξ (1530)	XI*1530
Δ (1670)	N*1670	Ξ (1700)	XI*1700
Δ (1920)	N*1920	Ξ (1815)	XI*1815
Δ (2360)	N*2360	Ξ (1930)	XI*1930
		Ξ (2030)	XI*2030

Antiparticles are denoted by the same symbols used for the corresponding particles, with the prefix A.

For a given excited state of an isobar or hyperon, the charge is given before the mass.

TABLE 2

List of symbols and abbreviations used in the references to denote reviews, journals, conference reports, preprints, etc.

JOURNALS, REVIEWS, ETC.

AF	ARKIV FOR FYSIK
AJP	AUSTRALIAN JOURNAL OF PHYSICS
ANPHY	ANNALS OF PHYSICS
BAPS	BULLETIN OF THE AMERICAN PHYSICAL SOCIETY
CRAS	COMPTES RENDUS, ACADEMIE DES SCIENCES
DOKY	SOVIET PHYSICS - DOKLADY (TRANSLATION)
HELPA	HELVETICA PHYSICA ACTA
JETP	SOVIET PHYSICS - JOURNAL OF EXP. AND THEOR. PHYSICS
JETPL	SOVIET PHYSICS - JETP LETTERS
JNP	SOVIET JOURNAL OF NUCLEAR PHYSICS (TRANSLATION)
JPSJ	JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN
NC	NUOVO CIMENTO
NCS	SUPPLEMENTO AL NUOVO CIMENTO
NP	NUCLEAR PHYSICS
PHM	PHILOSOPHICAL MAGAZINE
PHY	PHYSICA
PL	PHYSICS LETTERS
PR	PHYSICAL REVIEW
PRL	PHYSICAL REVIEW LETTERS
PRS	PROCEEDINGS OF THE ROYAL SOCIETY
PPS	PROCEEDINGS OF THE PHYSICAL SOCIETY
RMP	REVIEWS OF MODERN PHYSICS
USPEK	SOVIET PHYSICS - USPEKHI (TRANSLATION)

Table 2 (cont'd)

PREPRINTS

ABBCCW	AACHEN-BERLIN-BONN-CERN-CRACOW-WARSAW COLLABORATION	
ABCLV	AACHEN-BERLIN-CERN-LONDON-VIENNA COLLABORATION	
ANL	ARGONNE ILL. USA	ARGONNE NAT. LAB.
BNL	UPTON, L. I., N.Y. USA	BROOKHAVEN NAT. LAB.
CEA	SACLAY, FRANCE	COMM. ENERGIE ATOMIQUE
CERN	GENEVA. SWITZERLAND	EUROP. ORGANIZATION NUCL. RESEARCH
CERNS	GENEVA, SWITZERLAND	CERN SYMPOSIUM
COO	LAFAYETTE, IND. USA	PURDUE UNIVERSITY
DUBNA	DUBNA, URSS	JOINT INST. FOR NUCL. RESEARCH
EFINS	CHICAGO, ILL. USA	E. FERMI, INSTITUTE, UN. CHICAGO
ICTP	LONDON, ENGLAND	IMPERIAL COLLEGE
IHEP	SERPUKHOV, URSS	INST. FOR HIGH ENERGY PHYSICS
INR	WARSAW, POLAND	INSTITUTE OF NUCLEAR RESEARCH
ITPST	STANFORD, CAL. USA	INST. THEOR. PHYS., STANFORD UN.
LHEB	BRUXELLES, BELGIUM	LAB. DES HAUTES ENERGIES
MIT	CAMBRIDGE, MASS., USA	MASS. INST. OF TECHNOLOGY
NEV	NEW YORK, N.Y., USA	NEVIS CYCL. LAB., COLUMBIA UN.
NTDM	NOTRE DAME, IND., USA	UN. OF NOTRE DAME
NWTUN	EVANSTONE, ILL. USA	NORTHWESTERN UN.
PAM	PARIS, FRANCE	COLLEGE DE FRANCE
PLANCK	MUNCHEN, GERMANY	MAX-PLANCK INST.
RPP	CHILTON, DIDCOT, BERKS. ENGLAND	RUTHERFORD HIGH ENERGY LAB.
RUTGERS	NEW BRUNSWICK, N.J., USA	STATE UNIVERSITY, RUTGERS
SLAC	STANFORD, CAL., USA	STANFORD LIN. ACC. CENTER
TATA	BOMBAY, INDIA	TATA INST. FUNDAMENTAL RES.
UCLA	LOS ANGELES, CAL., USA	UNIV. OF CALIFORNIA
UCRL	BERKELEY, CAL., USA	UNIV. OF CALIFORNIA, LRL
UCOL	BOULDER, COL., USA	UNIVERSITY OF COLORADO
UR	ROCHESTER, N.Y., USA	UNIVERSITY OF ROCHESTER
VANBLT	NASHVILLE, TENN., USA	VANDERBILT UNIVERSITY
WIS	MADISON, WIS., USA	UNIV. OF WISCONSIN

Table 2 (cont'd)

CONFERENCE PROCEEDINGS

ROCH60	1960 INTERNATIONAL CONFERENCE ON HIGH ENERGY PHYSICS AT ROCHESTER
AIX61	AIX-EN-PROVENCE INTERNATIONAL CONFERENCE ON ELEMENTARY PARTICLES 1963
CERN62	1962 INTERNATIONAL CONFERENCE ON HIGH ENERGY PHYSICS AT CERN
ATHENS63	ATHENS TOPICAL CONFERENCE ON RESONANT PARTICLES 1963
SIE63	SIENNA INTERNATIONAL CONFERENCE ON ELEMENTARY PARTICLES 1963
DUB64	1964 INTERNATIONAL CONFERENCE ON HIGH ENERGY PHYSICS AT DUBNA
ATHENS65	SECOND ATHENS TOPICAL CONFERENCE ON RESONANT PARTICLES 1965
OXF65	OXFORD INTERNATIONAL CONFERENCE ON ELEMENTARY PARTICLES 1965
BER66	1966 INTERNATIONAL CONFERENCE ON HIGH ENERGY PHYSICS AT BERKELEY
HEID67	HEIDELBERG INTERNATIONAL CONFERENCE ON ELEMENTARY PARTICLES 1967
CERN68	TOPICAL CONFERENCE ON HIGH ENERGY COLLISIONS OF HADRONS CERN 1968
VIENNA68	INTERNATIONAL CONFERENCE ON HIGH ENERGY PHYSICS VIENNA 1968
LUND69	LU D INTERNATIONAL CONFERENCE ON ELEMENTARY PARTICLES 1969
STONYBRK.	CONFERENCE ON HIGH ENERGY TWO-BODY REACTIONS, STONY BROOK, LONG ISLAND
KIEV70	INTERNATIONAL CONFERENCE ON HIGH ENERGY PHYSICS, KIEV, 1970

OTHERS

ABS	ABSTRACT
PC	PRIVATE COMMUNICATION
TBP	TO BE PUBLISHED
BGO COLL.	BIRMINGHAM-GLASGOW-OXFORD COLL., 10 GeV/c K^+
SCAND.COLL or SCANDINAVIA	COPENHAGEN-HELSINKI-OSLO-STOCKHOLM COLL.

TABLE 3

Conventions used in the description of reactions

$\bar{\Xi}^-$	is written as AXI+
MPI	for one or more pions
CC	reaction given plus charge conjugate
V	visible decay of a strange particle
NPRONGS	N charged particles in the final state
(L/SO)	Λ or Σ^o
(KPI)+	$K^o\pi^+$ and $K^+\pi^o$
PI(+,-)	π^+ or π^-

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TABLE 4
LIST OF FOOTNOTES

A = SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES
B = AVERAGE VALUE TAKEN OVER THE MOMENTUM RANGE 1.2-1.4 GEV/C
C = CROSS SECTION CORRECTED FOR UNSEEN KO DECAYS
D = NOT CORR. FOR HIGH MOMENTUM TRANSFER(GT.50 PI MSQ) TO THE N,NOR FOR KAK DECAY
E = ERROR IS ABOUT TEN PER CENT
F = CROSS SECTION OBTAINED FROM PI+DE=PP, USING DETAILED BALANCING
G = CROSS SECTIONS OBTAINED FROM NORMALIZATION OF TOTAL NUMBER OF EVENTS
H = CROSS SECTIONS OBTAINED FROM COUNT OF TAU DECAYS
I = O TRUE AND P TRUE
J = ONLY THE DECAY MODE INTO PROTON AND K- OF THE Y* IS CONSIDERED
K = 1 TRUE AND A TRUE
L = LOWER LIMIT
N = NEUTRON IS A SPECTATOR
O = ORDER OF MAGNITUDE
P = PROTON IS A SPECTATOR
Q = L TRUE AND * TRUE
R = CROSS SECTION FOR FINAL STATES OBSERVED IN THE BUBBLE CHAMBER
S = STATISTICAL ERROR ONLY
T = S TRUE AND A TRUE
U = UPPER LIMIT
V = 1 TRUE AND U TRUE
W = A TRUE AND U TRUE
Z = NO EVENTS OBSERVED
1 = AVERAGE VALUE OVER A BAND OF MOMENTA
2 = CROSS SECTION NOT CORRECTED FOR SCREENING IN THE DEUTERON
3 = CROSS SECTION CORRECTED FOR SCREENING IN THE DEUTERON
4 = CROSS SECTION DEDUCED FROM THE CHARGED DECAY MODE OF THE ETA
5 = CROSS SECTION DEDUCED FROM THE NEUTRAL DECAY MODE OF THE ETA
6 = FINAL STATE IS A O PRONG + ANNIHILATION INTO 2,4 AND 6 PRONGS
7 = CROSS SECTION DERIVED FROM K01K01 EVENTS OBSERVED
8 = FROM A SINGLE K01 OBSERVED, OTHER KO FROM KINEMATIC FITTING
9 = FINAL STATE IS PK+PI+PI-PIO
* = CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS
$ = DATA POINT NOT USED IN FITTING OR PLOTTING
A1 = CROSS SECT.OBTAINED COMBINING RESULTS FROM 2 EXPTS,IN DE AND IN HYDROGEN
AO = A TRUE AND O TRUE
AU = A TRUE AND U TRUE
B1 = NOT CORRECTED FOR OTHER DECAY MODES OF RESONANCE
WR = WARNING *** RESONANT STATE NOT WELL ESTABLISHED
1H = COULOMB CONTRIB. SUBTRACTED **** ALSO CROSS SECT. OBTAINED FROM TAU COUNT
S4 = SYSTEMATIC ERROR IS 0.4 PER CENT
S5 = SYSTEMATIC ERROR IS 0.5 PER CENT
S6 = SYSTEMATIC ERROR IS 0.6 PER CENT
S7 = SYSTEMATIC ERROR IS 1.4 PER CENT

17/02/72

TABLE 5
LIST OF REACTIONS

REACTION NUMBER		REACTION
1	----------	PI-P=TOTAL
2	----------	PI-P=PI-P
3	----------	PI-P=PPI- (BACKWARD)
4	----------	PI-P=NEUTRALS
5	----------	PI-P=MPI
6	----------	PI-P=VO
7	----------	PI-P=0 PRONGS,NON STRANGE
8	----------	PI-P=2 PRONGS
9	----------	PI-P=2 PRONGS INELASTIC
10	----------	PI-P=2 PRONGS,STRANGE PART.
11	----------	PI-P=2 PRONGS,ZO
12	----------	PI-P=4 PRONGS
13	----------	PI-P=4 PRONGS (NON STRANGE)
14	----------	PI-P=4 PRONGS,ZO
15	----------	PI-P=6 PRONGS
16	----------	PI-P=6 PRONGS (NON-STRANGE)
17	----------	PI-P=6 PRONGS,STRANGE PART.
18	----------	PI-P=6 PRONGS,AND HIGHER
19	----------	PI-P=6 PRONGS,ZO
20	----------	PI-P=8 PRONGS
21	----------	PI-P=8 PRONGS AND HIGHER
22	----------	PI-P=10 PRONGS
23	----------	PI-P=10 PRONGS AND HIGHER
24	----------	PI-P=12 PRONGS
25	----------	PI-P=14 PRONGS
26	----------	PI-P=16 PRONGS
27	----------	PI-P=18 PRONGS
28	----------	PI-P=INELASTIC
29	----------	PI-P=CHARGED INELASTIC
30	----------	PI-P=NONSTRANGE PARTICLES
31	----------	PI-P=STRANGE PARTICLES
32	----------	PI-P=2 PI PRODUCTION
33	----------	PI-P=Z**+1300K-
34	----------	PI-P=Z**+2000K-
35	----------	PI-P=DEAP
36	----------	PI-P=(P/PI+)PI+PI-PI-ZO
37	----------	PI-P=(P/PI+)PI-ZO
38	----------	PI-P=(P/PI+)2PI+3PI-ZO
39	----------	PI-P=(P/PI+)KSKSPI+PI-PI-ZO
40	----------	PI-P=(P/PI+)KSKSPI-ZO
41	----------	PI-P=PNAP
42	----------	PI-P=PPI+PI-PI-
43	----------	PI-P=PPI+PI-PI- (NON RESONANT)
44	----------	PI-P=PPI+PI-PI-PIO
45	----------	PI-P=PPI+PI-PI-PIO(NON RESON.)
46	----------	PI-P=(PPIO/NPI+)PI+PI-PI-
47	----------	PI-P=PPI+PI-PI-ZO
48	----------	PI-P=PPI-GAM
49	----------	PI-P=PPI-PIO
50	----------	PI-P=PPI-(PIO/GAM)
51	----------	PI-P=(PPIO/NPI+)PI-
52	----------	PI-P=(PPIO/NPI+)PI-PIO
53	----------	PI-P=(P/NPI+)PI-ZO
54	----------	PI-P=PPI-PIOPIO
55	----------	PI-P=PPI-ZO
56	----------	PI-P=P2PI+3PI-
57	----------	PI-P=P2PI+3PI-PIO
58	----------	PI-P=P2PI+3PI-ZO
59	----------	PI-P=P3PI+4PI-
60	----------	PI-P=P3PI+4PI-PIO
61	----------	PI-P=P3PI+4PI-ZO
62	----------	PI-P=P4PI+5PI-
63	----------	PI-P=P4PI+5PI-PIO
64	----------	PI-P=P4PI+5PI-ZO
65	----------	PI-P=P5PI+6PI-
66	----------	PI-P=P5PI+6PI-PIO
67	----------	PI-P=P5PI+6PI-ZO
68	----------	PI-P=PK+K-PI-
69	----------	PI-P=PK+K-PI-PIO
70	----------	PI-P=PK+KOPI-PI-
71	----------	PI-P=PK-KO
72	----------	PI-P=PK-KOPI+PI-
73	----------	PI-P=PK-KOPI+PI-PIO
74	----------	PI-P=PK-KOPIO
75	----------	PI-P=PK-KOZO
76	----------	PI-P=PK-KS
77	----------	PI-P=PKOKOPI+PI-PI-
78	----------	PI-P=PKOKOPI-
79	----------	PI-P=PKOK(0,-)PI(-,0)
80	----------	PI-P=PKOKOPI-PIO
81	----------	PI-P=PKSKSPI+PI-PI-
82	----------	PI-P=PKSKSPI+PI-PI-PIO
83	----------	PI-P=PKSKSPI-
84	----------	PI-P=PKSKSPI-PIO
85	----------	PI-P=PKSKLPI-
86	----------	PI-P=PETPI+PI-PI-
87	----------	PI-P=PETPI+PI-PI-=PPI+PI-PI-ZO
88	----------	PI-P=PETPI+2PI-=P2PI+3PI-PIO
89	----------	PI-P=PETPI-
90	----------	PI-P=PETPI-=PPI+PI-PI-PIO
91	----------	PI-P=PETPI-=PPI-ZO
92	----------	PI-P=PRH+PI+PI-PI-PI-
93	----------	PI-P=PRH+PI-PI-
94	----------	PI-P=PRH-
95	----------	PI-P=PRH- (BACKWARD)
96	----------	PI-P=PRH-PI+PI-
97	----------	PI-P=PRH-2PI+2PI-
98	----------	PI-P=PRHOPI+PI-PI-
99	----------	PI-P=PRHOPI+PI-PI-PIO
100	----------	PI-P=PRHOPI-
101	----------	PI-P=PRHOPI-PIO
102	----------	PI-P=POMPI+2PI-
103	----------	PI-P=POMPI+2PI-=PPI+2PI-ZO
104	----------	PI-P=POMPI+2PI-=P2PI+3PI-PIO
105	----------	PI-P=POMPI-
106	----------	PI-P=POMPI-=PPI+PI-PI-PIO
107	----------	PI-P=P(K*K)-
108	----------	PI-P=(P/N)K*890AK=(P/N)KAKPI
109	----------	PI-P=(P/N)AK*890K=(P/N)KAKPI
110	----------	PI-P=PXOPI-
111	----------	PI-P=PXOPI-=PPI+PI-PI-(PI/GAM)
112	----------	PI-P=PXOPI-=PETPI+2PI-(ET=ZO)
113	----------	PI-P=PXOPI-=P2PI+3PI-PIO
114	----------	PI-P=PA1-=PPI+PI-PI-
115	----------	PI-P=PA1-=PPI-ZO
116	----------	PI-P=PA1-=PRHOPI-
117	----------	PI-P=PA1-=P(RHPI)-
118	----------	PI-P=PA1-PI+PI-
119	----------	PI-P=PA1-PI+PI-=PRHOPI+PI-PI-
120	----------	PI-P=PA1.5-=PPI+PI-PI-
121	----------	PI-P=PB-=PPI-PIO
122	----------	PI-P=PB-=POMPI-
123	----------	PI-P=PB-=POMPI-=PPI+2PI-PIO
124	----------	PI-P=PFPI+2PI-=P2PI+3PI-
125	----------	PI-P=PFPI-
126	----------	PI-P=PFPI-=PPI+PI-PI-
127	----------	PI-P=PFPI-=PPI-ZO
128	----------	PI-P=PDOPI-=P2PI+3PI-
129	----------	PI-P=PA2-
130	----------	PI-P=PA2-=PPI+PI-PI-
131	----------	PI-P=PA2-=PPI-ZO
132	----------	PI-P=PA2-=PK-KO
133	----------	PI-P=PA2-=PKAK
134	----------	PI-P=PA2-=PETPI-
135	----------	PI-P=PA2-=PETPI-=PPI+PI-PI-PIO
136	----------	PI-P=PA2-=PRHOPI-
137	----------	PI-P=PA2-=P(RHPI)-
138	----------	PI-P=PA3-
139	----------	PI-P=PA3-=PPI+PI-PI-
140	----------	PI-P=PA3-=PFPI-
141	----------	PI-P=PA3-=PFPI-=PPI+PI-PI-
142	----------	PI-P=PG-=PPI+PI-PI-PIO
143	----------	PI-P=PG-=PPI-PIO
144	----------	PI-P=PG-=PKK
145	----------	PI-P=PG-=PRH-RHO
146	----------	PI-P=PR-1700=PPI+PI-PI-PIO
147	----------	PI-P=NPIO
148	----------	PI-P=NPIOPIO
149	----------	PI-P=NPIOPIOPIO
150	----------	PI-P=NPI+PI-
151	----------	PI-P=NPI+PI-PIO
152	----------	PI-P=NPI+PI-PIOPIO
153	----------	PI-P=NPI+PI+PI-PI-
154	----------	PI-P=NPI+PI+PI-PI-PIO
155	----------	PI-P=NPI+PI+PI-PI-PIOPIO
156	----------	PI-P=N3PI+3PI-
157	----------	PI-P=N4PI+4PI-
158	----------	PI-P=N5PI+5PI-
159	----------	PI-P=N6PI+6PI-
160	----------	PI-P=NK+K-
161	----------	PI-P=NK+K-PI+PI-
162	----------	PI-P=NK+KOPI-
163	----------	PI-P=NK+(KPI)-ZO
164	----------	PI-P=NK-KOPI+
165	----------	PI-P=NKO
166	----------	PI-P=NKOKO
167	----------	PI-P=NKOKOPI+PI-
168	----------	PI-P=NKOKOPIO
169	----------	PI-P=NKSKS
170	----------	PI-P=NKSKSPI+PI-
171	----------	PI-P=NKSKSPI+PI-PI-PI-
172	----------	PI-P=NKSKSPIO
173	----------	PI-P=NKSKL
174	----------	PI-P=NET
175	----------	PI-P=NET=NEUTRALS
176	----------	PI-P=NET=NGAMGAM
177	----------	PI-P=NET=NPI+PI-PIO
178	----------	PI-P=N(KPI)+K-ZO
179	----------	PI-P=NRHO
180	----------	PI-P=NRHO (BACKWARD)
181	----------	PI-P=NRHO=N2PI+2PI-
182	----------	PI-P=NRHOPI+PI-
183	----------	PI-P=NRHOPIO
184	----------	PI-P=NRHO2PI+2PI-
185	----------	PI-P=NOM
186	----------	PI-P=NOM=NPI+PI-PIO
187	----------	PI-P=NOM=NPIOGAM
188	----------	PI-P=NK*K
189	----------	PI-P=NXO
190	----------	PI-P=NXO=NETPI+PI-=NPI+PI-ZO
191	----------	PI-P=NXO=NEUTRALS
192	----------	PI-P=NTE=NKSKS
193	----------	PI-P=NPHI
194	----------	PI-P=NPHI=NK+K-
195	----------	PI-P=NS*=NKSKS
196	----------	PI-P=NA1-PI+
197	----------	PI-P=NF
198	----------	PI-P=NF=NPI+PI+PI-PI-
199	----------	PI-P=NF=NPI+PI-
200	----------	PI-P=NF=NPIOPIO
201	----------	PI-P=NF=NKSKS
202	----------	PI-P=NF=NKAK
203	----------	PI-P=NFPI+PI-
204	----------	PI-P=NF2PI+2PI-=N3PI+3PI-
205	----------	PI-P=ND=NK(+,-)KOPI(-,+)
206	----------	PI-P=NA2-PI+
207	----------	PI-P=NA2O=NKSKS
208	----------	PI-P=NA2O=NKAK
209	----------	PI-P=NE=NK(+,-)KOPI(-,+)
210	----------	PI-P=NGO

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211 ----------  PI-P=NGO=NPI+PI-
212 ----------  PI-P=NGO=NKSKS
213 ----------  PI-P=N***1236
214 ----------  PI-P=N***1236PI+PI+PI-
215 ----------  PI-P=N***1236PI+3PI-
216 ----------  PI-P=N***1236PI+3PI-PIO
217 ----------  PI-P=N***1236PI-PI-
218 ----------  PI-P=N***1236PI-PI-PIO
219 ----------  PI-P=N***1236PI-PI-ZO
220 ----------  PI-P=N***1236RH-PI-
221 ----------  PI-P=N***1236RHOPI-PI-
222 ----------  PI-P=N***1236OMPI-PI-
223 ----------  PI-P=N***OM2PI-=P2PI+3PI-PIO
224 ----------  PI-P=N***A2-PI-=P2PI+3PI-
225 ----------  PI-P=N**1236PI+PI-PI-
226 ----------  PI-P=N**1236PI+2PI-=P3PIPIO
227 ----------  PI-P=N**1236PI-
228 ----------  PI-P=N**1236PI-=PPI-PIO
229 ----------  PI-P=N**1236PI-=NPI+PI-
230 ----------  PI-P=N**1236RHOPI-
231 ----------  PI-P=N*-1236PI+
232 ----------  PI-P=N*-1236PI+=NPI+PI-
233 ----------  PI-P=N*-1236PI+PI+PI+PI-PI-
234 ----------  PI-P=N*-1236PI+PI+PI-
235 ----------  PI-P=N*-1236PI+PI-PI-
236 ----------  PI-P=N*-1236RHOPI+
237 ----------  PI-P=N*01236
238 ----------  PI-P=N*01236PI+PI-
239 ----------  PI-P=N*01236PI+PI-=PPI+PI-PI-
240 ----------  PI-P=N*01236PI+PI-=PPI+2PI-
241 ----------  PI-P=N*01236PI+PI-PIO=P4PI
242 ----------  PI-P=N*01236RHO
243 ----------  PI-P=N*01236RHO=PPI+PI-PI-
244 ----------  PI-P=N*01236RHO=NPI+PI-PIO
245 ----------  PI-P=N*01236OM
246 ----------  PI-P=NO(1350/1550)PI+PI-=P3PI
247 ----------  PI-P=NO(1350/1550)RHO
248 ----------  PI-P=N+1400PI-
249 ----------  PI-P=N+1400PI-=PPI+PI-PI-
250 ----------  PI-P=N+1400PI-=PPI-PIO
251 ----------  PI-P=N+1400PI-=NPI+PI-
252 ----------  PI-P=N+1400PI-=N***1236PI-PI-
253 ----------  PI-P=NO1400PIO
254 ----------  PI-P=N+1525PI-
255 ----------  PI-P=N+1525PI-=PPI+PI-PI-
256 ----------  PI-P=N+1525PI-=N***1236PI-PI-
257 ----------  PI-P=N+15252PI+3PI-
258 ----------  PI-P=N+1525RH-=PPI+PI-PI-PIO
259 ----------  PI-P=NO1525PI+PI-
260 ----------  PI-P=NO1525PI+PI-=PPI+PI-PI-
261 ----------  PI-P=NO1525RHO
262 ----------  PI-P=NO1525OM
263 ----------  PI-P=NO157OPIO=S-K+PIO
264 ----------  PI-P=N**1670PI-=PPI-PIO
265 ----------  PI-P=N**1670PI-=NPI+PI-
266 ----------  PI-P=N*01670PIO=PPI-PIO
267 ----------  PI-P=N+1688PI-
268 ----------  PI-P=N+1688PI-=PPI+PI-PI-
269 ----------  PI-P=N+1688PI-=PPI-PIO
270 ----------  PI-P=N+1688PI-=N*01236PI+PI-
271 ----------  PI-P=N+1688RH-=PPI+PI-PI-PIO
272 ----------  PI-P=NO1688PI+PI-
273 ----------  PI-P=NO1688PI+PI-=PPI+PI-PI-
274 ----------  PI-P=NO1688RHO
275 ----------  PI-P=N+1710PI-=PPI+PI-PI-
276 ----------  PI-P=N+1710PI-=PETPI-
277 ----------  PI-P=N+1710PI-=(NPIPI)PI-
278 ----------  PI-P=N+1710PI-=(NPI)PI-
279 ----------  PI-P=N+1710PI-=LK+PI-
280 ----------  PI-P=N**1920RH-=PPI+PI-PI-PIO
281 ----------  PI-P=N+2190PI-
282 ----------  PI-P=L
283 ----------  PI-P=Y
284 ----------  PI-P=YK
285 ----------  PI-P=YKPI
286 ----------  PI-P=YK*890=YKPI
287 ----------  PI-P=YK*890=YKPIPI
288 ----------  PI-P=YK*1320
289 ----------  PI-P=YAY
290 ----------  PI-P=YAL
291 ----------  PI-P=YAY(N/P)MPI
292 ----------  PI-P=YO
293 ----------  PI-P=YOK
294 ----------  PI-P=YOK+PI-PIO
295 ----------  PI-P=YOKO
296 ----------  PI-P=YOKOPI+PI-
297 ----------  PI-P=YOKOPIO
298 ----------  PI-P=LNAL
299 ----------  PI-P=LK+PI+PI-PI-
300 ----------  PI-P=LK+PI-
301 ----------  PI-P=LK+PI-PIO
302 ----------  PI-P=LK+PI-ZO
303 ----------  PI-P=LKO
304 ----------  PI-P=LKO (BACKWARD)
305 ----------  PI-P=LKO (U=UMAX)
306 ----------  PI-P=LKO,TOTAL
307 ----------  PI-P=LKO=NEUTRALS
308 ----------  PI-P=LKOPI+PI+PI-PI-
309 ----------  PI-P=LKOPI+PI+PI-PI-PIO
310 ----------  PI-P=LKOPI+PI+PI-PI-ZO
311 ----------  PI-P=LKOPI+PI-
312 ----------  PI-P=LKOPI+PI-PIO
313 ----------  PI-P=LKOPI+PI-ZO
314 ----------  PI-P=LKOPIO
315 ----------  PI-P=LKOZO
316 ----------  PI-P=LKS
317 ----------  PI-P=LKSPIO
318 ----------  PI-P=LK
319 ----------  PI-P=LK**890PI-
320 ----------  PI-P=LK**890PI-=LK+PI-PIO
321 ----------  PI-P=LK**890PI-=LKOPI+PI-
322 ----------  PI-P=LK*0890=L(KPI)O
323 ----------  PI-P=LK*0890PIO=L(KPI)OPIO
324 ----------  PI-P=LK*01400
325 ----------  PI-P=LAL
326 ----------  PI-P=(L/SO)
327 ----------  PI-P=(L/SO)K+
328 ----------  PI-P=(L/SO)K+MPI
329 ----------  PI-P=(L/SO)K+PI+PI-PI-
330 ----------  PI-P=(L/SO)K+PI+PI-PI-PIO
331 ----------  PI-P=(L/SO)K+PI-
332 ----------  PI-P=(L/SO)K+PI-PIO
333 ----------  PI-P=(L/SO)K+PI-ZO
334 ----------  PI-P=(L/SO)K+K-KOPI+PI-
335 ----------  PI-P=(L/SO)KO
336 ----------  PI-P=(L/SO)KOMPI
337 ----------  PI-P=(L/SO)KOPI+PI+PI-PI-
338 ----------  PI-P=(L/SO)KOPI+PI+PI-PI-PIO
339 ----------  PI-P=(L/SO)KOPI+PI+PI-PI-ZO
340 ----------  PI-P=(L/SO)KOPI+PI-
341 ----------  PI-P=(L/SO)KOPI+PI-PIO
342 ----------  PI-P=(L/SO)KOPI+PI-ZO
343 ----------  PI-P=(L/SO)KOPIO
344 ----------  PI-P=(L/SO)KOPIOPIO
345 ----------  PI-P=(L/SO)KOZO
346 ----------  PI-P=(L/SO)KO3PI+3PI-PIO
347 ----------  PI-P=(L/SO)KO3PI+3PI-ZO
348 ----------  PI-P=(L/SO)KS
349 ----------  PI-P=(L/SO)(KPI)+PI+PI-PI-ZO
350 ----------  PI-P=(L/SO)OMKO
351 ----------  PI-P=(L/SO)K*0890
352 ----------  PI-P=(L/SO)K*01420(K*=KPI)
353 ----------  PI-P=(L/SO)(AL/ASO)
354 ----------  PI-P=S(+,-)L
355 ----------  PI-P=S(+,-)AL
356 ----------  PI-P=S(+,-)AS(-,+)
357 ----------  PI-P=S+
358 ----------  PI-P=S+K+
359 ----------  PI-P=S+K+MPI
360 ----------  PI-P=S+K+PI-PI-
361 ----------  PI-P=S+K+PI-PI-PIO
362 ----------  PI-P=S+KOMPI
363 ----------  PI-P=S+KOPI+PI+PI-PI-PI-PIO
364 ----------  PI-P=S+KOPI+PI+PI-PI-PI-ZO
365 ----------  PI-P=S+KOPI+PI-PI-
366 ----------  PI-P=S+KOPI+PI-PI-PIO
367 ----------  PI-P=S+KOPI+PI-PI-ZO
368 ----------  PI-P=S+KOPI-
369 ----------  PI-P=S+KOPI-PIO
370 ----------  PI-P=S+KOPI-ZO
371 ----------  PI-P=S+KS
372 ----------  PI-P=S+(KPI)+PI-PI-ZO
373 ----------  PI-P=S+K*0890PI-
374 ----------  PI-P=S-
375 ----------  PI-P=S-K+
376 ----------  PI-P=S-K+MPI
377 ----------  PI-P=S-K+PI+PI-
378 ----------  PI-P=S-K+PI+PI-PIO
379 ----------  PI-P=S-K+PIO
380 ----------  PI-P=S-K+ZO
381 ----------  PI-P=S-KOMPI
382 ----------  PI-P=S-KOPI+
383 ----------  PI-P=S-KOPI+PI+PI+PI-PI-PIO
384 ----------  PI-P=S-KOPI+PI+PI+PI-PI-ZO
385 ----------  PI-P=S-KOPI+PI+PI-
386 ----------  PI-P=S-KOPI+PI+PI-PIO
387 ----------  PI-P=S-KOPI+PI+PI-ZO
388 ----------  PI-P=S-KOPI+PIO
389 ----------  PI-P=S-KOPI+ZO
390 ----------  PI-P=S-KS
391 ----------  PI-P=S-(KPI)+
392 ----------  PI-P=S-(KPI)+PI+PI-ZO
393 ----------  PI-P=S-(KPI)+ZO
394 ----------  PI-P=S-K+725
395 ----------  PI-P=S-K**890
396 ----------  PI-P=S-K*0890PI+
397 ----------  PI-P=S-F*=S-KK
398 ----------  PI-P=SO
399 ----------  PI-P=SOK+PI+PI-PI-
400 ----------  PI-P=SOK+PI-
401 ----------  PI-P=SOKO
402 ----------  PI-P=SOKOPI+PI+PI-PI-
403 ----------  PI-P=SOKOPI+PI-
404 ----------  PI-P=SOKOPIO
405 ----------  PI-P=SOK**890PI-
406 ----------  PI-P=SOK*0890
407 ----------  PI-P=SOK*0890=SOK+PI-
408 ----------  PI-P=Y*+1385KOPI-=LKOPI+PI-
409 ----------  PI-P=Y*-1385K+
410 ----------  PI-P=Y*-1385K+=LK+PI-
411 ----------  PI-P=Y*-1385K+PIO=LK+PI-PIO
412 ----------  PI-P=Y*-1385KOPI+=LKOPI+PI-
413 ----------  PI-P=Y*-1385K**890
414 ----------  PI-P=Y*-1385K**890=LK+PI-PIO
415 ----------  PI-P=Y*-1385K**890=LKOPI+PI-
416 ----------  PI-P=Y*-1385K**890=L(KPI)+PI-
417 ----------  PI-P=Y*01385
418 ----------  PI-P=Y*01385K+PI-=LK+PI-PIO
419 ----------  PI-P=Y*01385KO
420 ----------  PI-P=Y*01385KO=LKOPIO
421 ----------  PI-P=Y*01385K*0890
422 ----------  PI-P=Y*01385K*0890=L(KPI)OPIO
423 ----------  PI-P=Y1405KO
424 ----------  PI-P=Y1405KO=S(+,-)PI(-,+)KO
425 ----------  PI-P=Y1405KOPIO=(SPI)OKOPIO
426 ----------  PI-P=Y1405KO=(SPI)OKO
427 ----------  PI-P=Y1405K*0890
428 ----------  PI-P=Y1405K*0890=(SPI)O(KPI)O
429 ----------  PI-P=Y1520KO
430 ----------  PI-P=Y1520KO=(SPI)OKO
431 ----------  PI-P=Y1520KO=((P/N)AK)O
432 ----------  PI-P=Y1520KO=LKO(PIPI)O
433 ----------  PI-P=Y1520KO=(S+-PI-+/PK-)KO
434 ----------  PI-P=Y1520(KPI)O=PK-(KPI)O
435 ----------  PI-P=Y1520K*0890=(SPI)O(KPI)O
436 ----------  PI-P=Y*01660K*0890=(SPI)(KPI)O
437 ----------  PI-P=Y1815KO=((P/N)K)KO
438 ----------  PI-P=XI-
439 ----------  PI-P=XIKKMPI
440 ----------  PI-P=XI-S
441 ----------  PI-P=XI-L
442 ----------  PI-P=XI-K+K+PI-
443 ----------  PI-P=XI-K+KO
444 ----------  PI-P=XI-K+KOPIO
445 ----------  PI-P=XI-KOKOPI+
446 ----------  PI-P=XIOL
447 ----------  PI-P=XIOK+KOPI-
448 ----------  PI-P=XIOKOKO
449 ----------  PI-P=OM-
450 ----------  PI-P=PI+
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451  ----------  PI-P=3PI+3PI-ZO
452  ----------  PI-P=4PI+4PI-ZO
453  ----------  PI-P=5PI+5PI-ZO
454  ----------  PI-P=6PI+6PI-ZO
455  ----------  PI-P=PI+PI+PI-PI-ZO
456  ----------  PI-P=PI+PI-ZO
457  ----------  PI-P=K(+,-)KS
458  ----------  PI-P=K(+,-)KL
459  ----------  PI-P=K+K-
460  ----------  PI-P=KO
461  ----------  PI-P=KOKO
462  ----------  PI-P=KOKOZO
463  ----------  PI-P=KSKS
464  ----------  PI-P=KSKSZO
465  ----------  PI-P=KSKL
466  ----------  PI-P=KSK
467  ----------  PI-P=KS(KL/K+/K-)
468  ----------  PI-P=KL(KS/K+/K-)
469  ----------  PI-P=KSAY
470  ----------  PI-P=KAK
471  ----------  PI-P=AL
472  ----------  PI-N=TOTAL
473  ----------  PI-N=NPI-
474  ----------  PI-N=N*01236PI-PIO=PPI-PI-PIO
475  ----------  PI-N=N*01236RH-=PPI-PI-PIO
476  ----------  PI-N=N*01670PI-=PPI-PI-
477  ----------  PI-N=N01525PI-PIO=PPI-PI-PIO
478  ----------  PI-N=N01525RH-=PPI-PI-PIO
479  ----------  PI-N=N01688PI-PIO=PPI-PI-PIO
480  ----------  PI-N=N01688RH-=PPI-PI-PIO
481  ----------  PI-N=S-K+PI-
482  ----------  PI-DE=TOTAL
483  ----------  PI-DE=PI-DE
484  ----------  PI-DE=NEUTRALS
485  ----------  PI-DE=CHARGED INELASTIC
486  ----------  PI-DE=DEPI+PI-PI-
487  ----------  PI-DE=DERHOPI-
488  ----------  PI-DE=DERHPI
489  ----------  PI-DE=DE*++PI-PI-
490  ----------  PI-DE=DE*0PI+PI-
491  ----------  PI-DE=DE*0RHO
492  ----------  PI-DE=DE*0F
493  ----------  PI-DE=PPPI-PI-PIO
494  ----------  PI-DE=PPRH-PI-=PPPI-PI-PIO
495  ----------  PI-DE=S-PKO
496  ----------  PI-DE=S-NK+
497  ----------  PI-DE=(SO/L)NKO
498  ----------  PI-HE=TOTAL
499  ----------  PI-HE=PI-HE
500  ----------  PI-HE=INELASTIC
```

TABLE 6

Description

The heading gives the date of printing, the number assigned to the reaction, the initial state and the final state.

In the table the first three columns describe the initial system, they are labelled, s, KIN. ENERGY, and P LAB, and represent, respectively, the total c.m. energy squared in GeV^2, the kinetic energy in GeV of the incident particle and the laboratory momentum in GeV/c of the incident particle. In the fourth column, labelled SIGMA, is the cross section in millibarns unless otherwise stated. In the fifth column, headed ERROR is the error on the cross section in the same units; however if the error quoted is asymmetric, the plus error is given in the fifth column and the negative error in the sixth (which does not have a heading). In the next section is given the reference which is so entitled. Should a foot note be required a symbol is printed in the last column and then is reprinted and explained below the set of values under the heading = FOOTNOTES".

Finally, if there are sufficient data points a fit of the formula

$$\sigma = K \; p_{LAB}^{+N}$$

is made and the results of this fit are given, that is the values and errors of K and N are quoted together with the number of points fitted, the χ^2-value and the probability of the fit. The fit is made to all data values above a certain lower limit of p_{LAB} and the value of the lower limit is also printed.

PI-P

S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 1							
TOTAL							
1.305	.077	.165	15.8000	.2000		CARTER,NP326,445-71	
1.329	.089	.181	21.0000	8.0000		ANDERSON PR85,934-52	1
1.342	.096	.190	23.1200	.1500		CARTER,NPB26,445-71	
1.345	.098	.192	21.9000	.7000		EDWARDS PPS73,856-59	
1.371	.112	.209	31.0000	9.0000		ANDERSON PR85,934-52	1
1.376	.114	.212	33.7400	.1900		CARTER,NP326,445-71	
1.387	.120	.219	33.4000	3.2000		ANDERSON PR91,155-53	
1.387	.120	.219	38.4400	.1800		CARTER,NPB26,445-71	
1.400	.127	.227	44.4800	.2100		CARTER,NPB26,445-71	
1.406	.130	.231	42.7000	2.0000		KRUSE PR116,1008-59	
1.411	.133	.234	46.9000	2.4000		ASHKIN PR96,1104-54	
1.414	.135	.236	52.0000	6.0000		ANDERSON PR85,934-52	1
1.426	.141	.243	55.3500	.2000		CARTER,NPB26,445-71	
1.432	.144	.247	48.1000	4.5000		ANDERSON PR91,155-53	
1.444	.150	.254	55.3000	1.6000		ASHKIN PR101,1149-56	
1.447	.152	.256	60.7000	3.0000		ASHKIN PR96,1104-54	
1.447	.152	.256	60.0000	2.3000		KRUSE PR116,1008-59	
1.447	.152	.256	63.7000	2.0000		KELLMAN PR129,365-63	
1.457	.157	.262	62.9000	2.4000		ASHKIN PR96,1104-54	
1.459	.158	.263	56.4000	2.0000		ZINOV JETP11,1233-60	
1.462	.160	.265	67.9000	.2500		CARTER,NPB26,445-71	
1.470	.164	.270	70.2600	.2500		CARTER,NPB26,445-71	
1.472	.165	.271	67.5000	1.5000		ANDERSON PR100,268-55	
1.472	.165	.271	64.5200	.3900		BAREYRE CEA-R3401-67	
1.472	.165	.271	69.8000	3.8000		ANDERSON PR100,268-55	
1.479	.169	.275	63.0000	4.0000		FERMI PR92,161-53	
1.480	.170	.276	62.7000	1.9000		ASHKIN PR101,1149-56	
1.480	.170	.276	66.1800	.3900		BAREYRE CEA-R3401-67	
1.484	.171	.278	67.2000	1.1000		ZINOV JETP11,1233-60	
1.485	.172	.279	70.7400	.2500		CARTER,NPB26,445-71	
1.492	.176	.283	66.0000	6.0000		ANDERSON PR85,934-52	1
1.497	.179	.286	65.9000	2.5000		ASHKIN PR96,1104-54	
1.497	.179	.286	67.2000	1.1000		ZINOV JETP11,1233-60	
1.497	.179	.286	67.3500	.3900		BAREYRE CEA-R3401-67	
1.509	.185	.293	67.7000	1.0000		ZINOV JETP11,1233-60	
1.509	.185	.293	69.7600	.2400		CARTER,NP326,445-71	
1.512	.187	.295	63.5000	1.6000		GLICKSM. PR95,1045-54	
1.519	.190	.299	65.9200	.3900		BAREYRE CEA-R3401-67	
1.519	.190	.299	67.8000	.8000		ZINOV JETP11,1233-60	
1.526	.194	.303	64.6000	2.5000		ASHKIN PR96,1104-54	
1.526	.194	.303	74.0000	5.0000		FERMI PR92,161-53	
1.528	.195	.304	63.1000	2.5000		ASHKIN PR96,1104-54	
1.529	.196	.305	64.0000	1.1000		ZINOV JETP11,1233-60	
1.539	.201	.311	63.8000	1.0000		ZINOV JETP11,1233-60	
1.548	.206	.316	59.3000	1.0000		ZINOV JETP11,1233-60	
1.553	.209	.319	59.4300	.2200		CARTER,NPB26,445-71	
1.553	.209	.319	57.2000	2.9000		GLICKSM. PR94,1335-54	
1.557	.210	.321	64.0000	5.0000		FERMI PR92,161-53	
1.557	.210	.321	58.7000	1.1000		ZINOV JETP11,1233-60	
1.565	.215	.326	55.5000	2.2000		ASHKIN PR96,1104-54	
1.565	.215	.326	55.6000	1.0000		ZINOV JETP11,1233-60	
1.569	.217	.328	54.5000	5.0000		GLICKSM. PR94,1335-54	
1.569	.217	.328	60.0000	6.0000		ANDERSON PR85,934-52	1
1.574	.220	.331	52.1000	2.3000		GLICKSM. PR94,1335-54	
1.576	.221	.332	53.2000	1.5000		ASHKIN PR105,724-57	
1.576	.221	.332	52.2000	1.0000		ZINOV JETP11,1233-60	
1.583	.224	.336	50.5000	2.1000		DEAHL PR124,1987-61	
1.584	.225	.337	50.2000	.9000		ZINOV JETP11,1233-60	
1.586	.226	.338	52.9000	1.4000		KELLMAN PR129,365-63	
1.589	.228	.340	48.2000	.9000		ZINOV JETP11,1233-60	
1.595	.231	.343	58.0000	9.0000		CARIS PR122,262-61	
1.596	.232	.344	49.0000	.9000		ZINOV JETP11,1233-60	
1.598	.233	.345	47.0600	.1800		CARTER,NP326,445-71	
1.603	.235	.348	44.5000	.9000		ZINOV JETP11,1233-60	
1.605	.236	.349	46.1000	2.4000		ASHKIN PR96,1104-54	
1.609	.238	.351	44.9000	.9000		ZINOV JETP11,1233-60	
1.612	.240	.353	48.3000	3.3000		ZINOV JETP9,429-59	
1.612	.240	.353	43.5000	2.3000		ASHKIN PR96,1104-54	
1.616	.242	.355	42.7000	.9000		ZINOV JETP11,1233-60	
1.621	.245	.358	43.1000	.9000		ZINOV JETP11,1233-60	
1.628	.248	.362	41.0000	.9000		ZINOV JETP11,1233-60	
1.633	.251	.365	39.3000	.9000		ZINOV JETP11,1233-60	
1.640	.255	.369	39.8000	.8000		ZINOV JETP11,1233-60	
1.640	.255	.369	38.4600	.1400		CARTER,NPB26,445-71	
1.645	.258	.372	38.2000	2.4000		ASHKIN PR96,1104-54	
1.645	.258	.372	38.8000	.8000		ZINOV JETP11,1233-60	
1.651	.261	.375	36.8000	.8000		ZINOV JETP11,1233-60	
1.659	.265	.380	44.0000	6.0000		LINDENB.PR100,306-55	
1.661	.266	.381	35.6000	.8000		ZINOV JETP11,1233-60	
1.668	.270	.385	36.5000	2.4000		ZINOV JETP9,429-59	
1.672	.272	.387	33.4000	.8000		ZINOV JETP11,1233-60	
1.681	.277	.392	31.1000	.8000		ZINOV JETP11,1233-60	
1.691	.282	.398	32.4000	.8000		ZINOV JETP11,1233-60	
1.700	.287	.403	31.6000	.8000		ZINOV JETP11,1233-60	
1.705	.290	.406	29.9700	.1100		CARTER,NPB26,445-71	
1.707	.291	.407	33.0000	2.0000		CARIS PR122,262-61	
1.709	.292	.408	30.5000	.8000		ZINOV JETP11,1233-60	
1.720	.297	.414	29.3000	.8000		ZINOV JETP11,1233-60	
1.729	.302	.419	28.9000	.8000		ZINOV JETP11,1233-60	
1.737	.307	.424	30.2000	1.8000		ZINOV JETP6,1007-58	
1.739	.308	.425	28.1000	.8000		ZINOV JETP11,1233-60	
1.743	.310	.427	27.7000	.7000		RUGGE PR129,2300-63	
1.745	.311	.428	27.8900	.6700		BIZARD NC44A,999-66	
1.750	.313	.431	28.7000	.7000		ZINOV JETP11,1233-60	
1.759	.318	.436	27.0000	.6000		ZINOV JETP11,1233-60	
1.770	.324	.442	26.2000	.6000		ZINOV JETP11,1233-60	
1.771	.325	.443	26.8000	1.2000		BIZARD NC44,999-66	
1.775	.327	.445	26.4000	.6000		ZINOV JETP11,1233-60	
1.779	.329	.447	26.7000	.5500		BIZARD NC44A,999-66	
1.786	.333	.451	28.8000	1.8000		ZINOV JETP6,1006-58	
1.789	.334	.453	26.0000	.6000		ZINOV JETP11,1233-60	
1.800	.340	.459	25.9800	.6200		BIZARD NC44A,999-66	
1.800	.340	.459	23.0000	11.0000		LINDENB.PR100,306-55	
1.811	.346	.465	24.9000	1.0000		ZINOV JETP11,1233-60	
1.818	.350	.469	26.7300	.4800		BIZARD NC44A,999-66	

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA

PI-P

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 1								
TOTAL								
(CONTINUATION)	1.818	.350	.469	26.7600	.4800		BIZARD NC44A,999-66	
	1.827	.355	.474	26.3600	.6700		CARTER PR168,1457-68	
	1.838	.360	.480	25.9800	.6000		BIZARD NC44A,999-66	
	1.840	.361	.481	25.2000	1.0000		ZINOV JETP11,1233-60	
	1.858	.371	.491	27.0000	2.0000		CARIS PR122,262-61	
	1.861	.373	.493	26.7000	.6000		BIZARD NC44,999-66	
	1.861	.373	.493	28.8100	1.4000		BRISSON NC19,210-61	
	1.872	.379	.499	27.0400	.5900		CARTER PR168,1457-68	
	1.876	.381	.501	27.2300	.4600		BIZARD NC44A,999-66	
	1.894	.390	.511	26.5000	.4600		BIZARD NC44A,999-66	
	1.897	.392	.513	27.4900	.5400		CARTER PR168,1457-68	
	1.932	.410	.532	27.5700	.4400		BIZARD NC44A,999-66	
	1.932	.410	.532	26.7700	.5500		BIZARD NC44A,999-66	
	1.946	.418	.540	34.0000	4.6000		DEVLIN PRL14,1031-65	
	1.950	.420	.542	28.4000	.9000		BIZARD NC44,999-66	
	1.959	.425	.547	28.0600	.4600		BIZARD NC44A,999-66	
	1.961	.426	.548	29.4400	1.4000		BRISSON NC19,210-61	
	1.965	.428	.550	27.0000	2.0000		CARIS PR122,262-61	
	1.965	.428	.550	28.5200	.5000		CARTER PR168,1457-68	
	1.988	.440	.563	27.1500	.4000		BIZARD NC44A,999-66	
	1.988	.440	.563	28.2200	.4000		BIZARD NC44A,999-66	
	1.992	.442	.565	29.3600	.4500		CARTER PR168,1457-68	1
	2.006	.450	.573	25.0000	3.0000		LINDENB.PR100,306-55	
	2.006	.450	.573	28.8000	2.7000		COOL PR103,1082-56	S
	2.010	.452	.575	33.0300	.6900		DEVLIN PR125,690-62	
	2.012	.453	.576	29.5500	.4200		CARTER PR168,1457-68	
	2.016	.455	.578	29.1100	.4000		BIZARD NC44A,999-66	
	2.019	.457	.580	32.6000	4.0000		DEVLIN PRL14,1031-65	
	2.025	.460	.583	29.3100	.4500		BIZARD NC44A,999-66	
	2.027	.461	.584	28.0000	2.0000		CARIS,PR122,262,61	
	2.038	.467	.590	29.9600	1.2000		BRISSON NC19,210-61	
	2.043	.470	.593	31.1000	.9000		BIZARD NC44A,999-66	
	2.043	.470	.593	29.5200	.4000		BIZARD NC44A,999-66	
	2.043	.470	.593	27.0000	5.0000		SHAPIRO PR92,1073-53	1
	2.045	.471	.594	31.8000	1.1000		LERAY PAM6310-63	
	2.047	.472	.595	30.9600	.4000		CARTER PR168,1457-68	1
	2.072	.485	.609	29.9100	.4000		BIZARD NC44A,999-66	
	2.094	.497	.621	34.6000	2.9000		DEVLIN PRL14,1031-65	
	2.096	.498	.622	32.8000	.3000		CARTER PR168,1457-68	1
	2.100	.500	.624	31.3000	4.8000		COOL PR103,1082-56	S
	2.100	.500	.624	30.7100	.4100		BIZARD NC44A,999-66	
	2.100	.500	.624	31.5800	.4100		BIZARD NC44A,999-66	
	2.100	.500	.624	33.2800	.4400		BIZARD NC44A,999-66	
	2.105	.503	.627	36.0100	.6100		DEVLIN PR125,690-62	
	2.114	.508	.632	34.2400	.2900		CARTER PR168,1457-68	
	2.118	.510	.634	20.0000	7.0000		LINDENB.PR100,306-55	
	2.129	.515	.640	33.3400	.4100		BIZARD NC44A,999-66	
	2.131	.516	.641	35.9000	2.3000		DEVLIN PRL14,1031-65	
	2.135	.518	.643	34.9800	1.3000		BRISSON NC19,210-61	
	2.149	.526	.651	36.6500	.2700		CARTER PR168,1457-68	1
	2.157	.530	.655	34.8400	.4000		BIZARD NC44A,999-66	
	2.157	.530	.655	34.9800	.4000		BIZARD NC44A,999-66	
	2.157	.530	.655	34.5200	.4500		BIZARD NC44A,999-66	
	2.169	.537	.662	40.0000	2.4000		DEVLIN PRL14,1031-65	
	2.173	.539	.664	39.5900	.2400		CARTER PR168,1457-68	
	2.179	.542	.667	39.9000	.7100		STIRLING CEA-R2838-66	
	2.184	.545	.670	37.7900	.4100		BIZARD NC44A,999-66	
	2.190	.548	.673	40.6900	.2100		CARTER PR168,1457-68	
	2.193	.550	.675	37.4000	3.0000		COOL PR103,1082-56	S
	2.193	.550	.675	37.4600	.4400		BIZARD NC44A,999-66	
	2.201	.554	.679	41.8600	.8100		DEVLIN PR125,690-62	
	2.206	.557	.682	43.5600	.2400		CARTER PR168,1457-68	1
	2.208	.558	.683	46.0000	2.9000		BURNST.PR137B,1044-65	
	2.213	.560	.686	39.7400	.4300		BIZARD NC44A,999-66	
	2.219	.563	.689	43.6000	2.3000		DEVLIN PRL14,1031-65	
	2.221	.564	.690	41.8800	.4800		BIZARD,PL31B,481-70	
	2.226	.567	.693	44.8200	1.3000		BRISSON NC19,210-61	
	2.226	.567	.693	45.1800	.2400		CARTER PR168,1457-68	
	2.228	.568	.694	42.3000	1.2000		BIZARD NC44A,999-66	
	2.232	.570	.696	42.9900	.4700		BIZARD NC44A,999-66	
	2.241	.575	.701	48.6900	.8400		STIRLING CEA-R2838-66	
	2.241	.575	.701	42.9700	.4600		BIZARD NC44A,999-66	
	2.243	.576	.702	45.6800	.2400		CARTER PR168,1457-68	
	2.245	.577	.703	49.0000	2.3000		DEVLIN PRL14,1031-65	
	2.259	.585	.711	46.3100	.2400		CARTER PR168,1457-68	1
	2.267	.589	.715	44.7000	.4800		BIZARD,PL31B,481-70	
	2.269	.590	.716	45.5500	.4700		BIZARD NC44A,999-66	
	2.269	.590	.716	45.0700	.4800		BIZARD NC44A,999-66	
	2.269	.590	.716	44.7800	.5700		BIZARD NC44A,999-66	
	2.271	.591	.717	45.0700	1.7000		BRISSON NC19,210-61	
	2.272	.592	.718	46.0000	.2400		CARTER PR168,1457-68	
	2.272	.592	.718	48.4000	1.5000		LERAY PAM6310-63	
	2.280	.596	.722	49.6000	2.1000		DEVLIN PRL14,1031-65	
	2.283	.598	.724	46.2000	.8400		DEVLIN PR125,690-62	
	2.287	.600	.726	23.0000	11.0000		LINDENB.PR100,306-55	
	2.294	.604	.730	45.7400	1.8000		BRISSON NC19,210-61	
	2.294	.604	.730	44.7000	1.4000		BIZARD NC44A,999-66	
	2.296	.605	.731	45.5000	1.8000		BRISSON PRL3,561-61	
	2.306	.610	.736	45.4300	.5000		BIZARD NC44A,999-66	
	2.306	.610	.736	49.0600	.8000		STIRLING CEA-R2838-66	
	2.306	.610	.736	37.0000	2.1000		COOL PR103,1082-56	S
	2.313	.613	.740	44.1400	.4800		BIZARD,PL31B,481-70	
	2.318	.616	.743	45.2900	1.7000		BRISSON NC19,210-61	
	2.318	.616	.743	44.1000	.2400		CARTER PR168,1457-68	
	2.320	.617	.744	50.0000	2.3000		DEVLIN PRL14,1031-65	
	2.326	.620	.747	47.5500	.8000		STIRLING CEA-R2838-66	
	2.344	.630	.757	44.1000	.6200		BIZARD NC44A,999-66	
	2.355	.636	.763	48.3000	2.1000		DEVLIN PRL14,1031-65	
	2.359	.638	.765	41.6200	.4500		BIZARD,PL31B,481-70	
	2.368	.643	.770	44.4700	2.2000		BRISSON NC19,210-61	
	2.374	.646	.773	41.5400	.8200		OLIVER PR147,932-66	
	2.376	.647	.774	40.3800	.2300		CARTER PR168,1457-68	
	2.381	.650	.777	39.6000	.7800		BIZARD NC44A,999-66	
	2.381	.650	.777	41.8200	.1500		FEMINO NC52,892-67	
	2.381	.650	.777	41.0400	.7000		BIZARD NC44A,999-66	

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA
S=STATISTICAL ERROR ONLY

********** PI-P **********

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 1								
TOTAL								
(CONTINUATION)	2.385	.652	.779	41.6700	.7800		DEVLIN PR125,690-62	
	2.392	.656	.783	45.3000	1.9000		DEVLIN PRL14,1031-65	
	2.400	.660	.787	42.2600	.7000		STIRLING CEA-R2838-66	
	2.405	.663	.790	38.2200	.4400		BIZARD,PL31B,481-70	
	2.409	.665	.792	39.1600	1.4000		BRISSON NC19,210-61	
	2.418	.670	.797	39.5000	3.0000		COOL PR103,1082-56	S
	2.431	.676	.804	36.6700	.2100		CARTER PR168,1457-68	
	2.431	.676	.804	42.1000	1.6000		DEVLIN PRL14,1031-65	
	2.438	.680	.808	37.0600	.6900		BIZARD NC44A,999-66	
	2.446	.684	.812	36.4800	.2100		CARTER PR168,1457-68	1
	2.451	.687	.815	35.7300	.4300		BIZARD,PL31B,481-70	
	2.457	.690	.818	36.1700	.2100		CARTER PR168,1457-68	
	2.466	.695	.823	38.7500	.7000		STIRLING CEA-R2838-66	
	2.468	.696	.824	35.8000	.2100		CARTER PR168,1457-68	
	2.468	.696	.824	39.0000	1.4000		DEVLIN PRL14,1031-65	
	2.475	.700	.828	42.0000	10.0000		LINDENB.PR100,306-55	
	2.485	.705	.833	40.2300	1.0500		DEVLIN PR125,690-62	
	2.498	.712	.840	35.6300	.4300		BIZARD,PL31B,481-70	
	2.505	.716	.844	37.2000	1.0000		LERAY PAM6310-63	
	2.507	.717	.845	36.1000	.2100		CARTER PR168,1457-68	
	2.511	.719	.847	34.9000	1.5000		BRISSON NC19,210-61	
	2.513	.720	.848	37.2000	.4000		WALLE NC53A,745-68	
	2.513	.720	.848	37.8000	.7000		STIRLING CEA-R2838-66	
	2.525	.727	.855	40.6600	.5800		DEVLIN PR125,690-62	
	2.540	.735	.863	37.1000	1.2000		DEVLIN PRL14,1031-65	
	2.544	.737	.865	36.6600	.4300		BIZARD,PL31B,481-70	
	2.559	.745	.873	38.4500	.2000		CARTER PR168,1457-68	
	2.559	.745	.873	36.7000	1.0000		DEVLIN PRL14,1031-65	
	2.566	.748	.877	37.4300	1.6000		BRISSON NC19,210-61	
	2.577	.754	.883	40.2300	.1900		CARTER PR168,1457-68	
	2.579	.755	.884	42.0900	.8800		DEVLIN PR125,690-62	
	2.588	.760	.889	39.4200	.6500		STIRLING CEA-R2838-66	
	2.588	.760	.889	39.1000	.6000		STIRLING CEA-R2838-66	
	2.590	.761	.890	39.9400	.4300		BIZARD,PL31B,481-70	
	2.605	.769	.898	37.3800	2.0000		BRISSON NC19,210-61	
	2.609	.771	.900	41.3600	.0400		GIACOMELLI PC-67	
	2.616	.775	.904	39.0000	1.6000		BERTANZA NC44A,712-66	
	2.618	.776	.905	41.6000	.9000		DEVLIN PRL14,1031-65	
	2.622	.778	.907	44.4100	.1900		CARTER PR168,1457-68	
	2.637	.786	.915	44.2100	.4700		BIZARD,PL31B,481-70	
	2.644	.790	.919	46.1000	3.4000		COOL PR103,1082-56	S
	2.650	.793	.922	39.0000	1.5000		BERTANZA PRL8,332-62	
	2.653	.795	.924	46.6200	1.0000		STIRLING CEA-R2838-66	
	2.653	.795	.924	43.9000	.9000		DEVLIN PRL14,1031-65	
	2.657	.797	.926	40.2000	1.2200		BRISSON NC19,210-61	
	2.663	.800	.929	44.7100	.7600		DEVLIN PR125,690-62	
	2.666	.802	.931	49.5800	.1900		CARTER PR168,1457-68	1
	2.679	.809	.938	49.0000	.6000		STIRLING CEA-R2838-66	
	2.681	.810	.939	53.3000	2.4000		BAGGETT UCRL8302-58	
	2.681	.810	.939	51.5800	.1900		CARTER PR168,1457-68	1
	2.683	.811	.940	50.2900	.5100		BIZARD,PL31B,481-70	
	2.690	.815	.944	48.5000	1.0000		DEVLIN PRL14,1031-65	
	2.692	.816	.945	46.3700	1.5000		BRISSON NC19,210-61	
	2.698	.819	.948	48.2000	1.9000		BRISSON NC19,210-61	
	2.702	.821	.950	52.6500	.0400		GIACOMELLI PC-67	
	2.716	.829	.958	50.0000	3.0000		BERTANZA PRL8,332-62	
	2.728	.834	.964	54.8000	1.3000		LERAY PAM6310-63	
	2.729	.835	.965	55.5600	.5600		BIZARD,PL31B,481-70	
	2.731	.836	.966	48.1300	1.5000		BRISSON NC19,210-61	
	2.731	.836	.966	55.2000	1.0000		DEVLIN PRL14,1031-65	
	2.739	.840	.970	55.1300	2.1000		BRISSON NC19,210-61	
	2.739	.840	.970	47.0000	5.0000		SHAPIRO PR92,1073-53	1
	2.739	.840	.970	55.9400	1.0500		STIRLING CEA-R2838-66	
	2.741	.841	.971	57.7800	.1700		CARTER PR168,1457-68	1
	2.761	.852	.982	52.7400	.6300		DEVLIN PR125,690-62	
	2.767	.855	.985	60.1000	1.0000		DEVLIN PRL14,1031-65	
	2.768	.856	.986	53.3200	1.7200		BRISSON NC19,210-61	
	2.772	.858	.988	59.8800	.1700		CARTER PR168,1457-68	1
	2.774	.859	.989	59.0000	.8000		STIRLING CEA-R2838-66	
	2.776	.860	.990	58.4000	1.0700		STIRLING CEA-R2838-66	
	2.776	.860	.990	58.5400	.5800		BIZARD,PL31B,481-70	
	2.776	.860	.990	47.7000	2.7000		COOL PR103,1082-56	S
	2.783	.864	.994	62.3000	1.5000		LERAY PAM6310-63	
	2.787	.866	.996	60.0900	.1800		CARTER PR168,1457-68	
	2.787	.866	.996	54.2000	1.7900		BRISSON NC19,210-61	
	2.791	.868	.998	59.2200	2.4000		BRISSON NC19,210-61	
	2.795	.870	1.000	61.2000	.0600		GIACOMELLI PC-67	
	2.796	.871	1.001	56.0000	4.0000		BERTANZA PRL8,332-62	
	2.798	.872	1.002	60.5800	.1800		CARTER PR168,1457-68	1
	2.800	.873	1.003	55.9700	.7100		DEVLIN PR125,690-62	
	2.804	.875	1.005	61.2000	1.0000		DEVLIN PRL14,1031-65	
	2.821	.884	1.014	60.9500	.8000		STIRLING CEA-R2838-66	
	2.822	.885	1.015	58.0900	.5700		BIZARD,PL31B,481-70	
	2.822	.885	1.015	61.4100	1.1000		STIRLING CEA-R2838-66	
	2.824	.886	1.016	59.7500	.1800		CRB RPP/H/32-67	
	2.824	.886	1.016	59.7500	.1800		CARTER PR168,1457-68	1
	2.830	.889	1.019	61.1000	1.4000		LERAY PAM6310-63	
	2.832	.890	1.020	58.4600	2.2000		BRISSON NC19,210-61	
	2.841	.895	1.025	60.5000	.9000		DEVLIN PRL14,1031-65	
	2.843	.896	1.026	57.8200	.8400		DEVLIN PR125,690-62	
	2.845	.897	1.027	57.8000	.1800		CARTER PR168,1457-68	
	2.848	.899	1.029	59.5000	.7500		STIRLING CEA-R2838-66	
	2.850	.900	1.030	44.4000	2.3000		COOL PR103,1082-56	S
	2.869	.910	1.040	55.1800	.5600		BIZARD,PL31B,481-70	
	2.876	.914	1.044	59.3000	1.0000		DEVLIN PRL14,1031-65	
	2.878	.915	1.045	55.1700	1.7900		BRISSON NC19,210-61	
	2.884	.918	1.048	55.0200	2.4000		BRISSON NC19,210-61	
	2.887	.920	1.050	56.9500	.8600		DEVLIN PR125,690-62	
	2.887	.920	1.050	53.8000	.1800		CARTER PR168,1457-68	
	2.887	.920	1.050	57.8500	.0600		GIACOMELLI PC-67	
	2.887	.920	1.050	59.1200	1.1000		STIRLING CEA-R2838-66	
	2.887	.920	1.050	55.0000	.7500		STIRLING CEA-R2838-66	
	2.887	.920	1.050	55.0000	.7500		STIRLING CEA-R2838-66	
	2.914	.934	1.064	54.4000	.9000		DEVLIN PRL14,1031-65	
	2.915	.935	1.065	50.2200	.5400		BIZARD,PL31B,481-70	

FOOTNOTES

S=STATISTICAL ERROR ONLY
1=AVERAGE VALUE OVER A BAND OF MOMENTA

********** PI-P **********

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 1								
TOTAL								
(CONTINUATION)	2.932	.943	1.074	50.6700	2.6000		BRISSON NC19,210-61	
	2.934	.944	1.075	49.7500	.1800		CARTER PR168,1457-68	
	2.936	.945	1.076	48.8200	1.6300		BRISSON NC19,210-61	
	2.954	.955	1.086	51.8000	.8000		DEVLIN PRL14,1031-65	
	2.960	.958	1.089	46.6900	.1900		CARTER PR168,1457-68	1
	2.962	.959	1.090	45.6300	.5100		BIZARD,PL31B,481-70	
	2.964	.960	1.091	51.4200	.9500		STIRLING CEA-R2838-66	
	2.967	.962	1.093	51.7500	.8500		DEVLIN PR125,690-62	
	2.971	.964	1.095	48.1000	1.1000		LERAY PAM5310-63	
	2.973	.965	1.096	45.7000	1.6200		BRISSON NC19,210-61	
	2.981	.969	1.100	47.2000	.0600		GIACOMELLI PC-67	
	2.982	.970	1.101	44.4100	.1900		CARTER PR168,1457-68	1
	2.982	.970	1.101	45.1000	2.7000		COOL PR103,1082-56	S
	2.986	.972	1.103	44.8400	2.2000		BRISSON NC19,210-61	
	2.992	.975	1.106	48.9000	.9000		DEVLIN PRL14,1031-65	
	3.008	.984	1.115	41.4100	.4900		BIZARD,PL31B,481-70	
	3.010	.985	1.116	41.5200	1.5300		BRISSON NC19,210-61	
	3.025	.993	1.124	46.6600	.6400		DEVLIN PR125,690-62	
	3.031	.996	1.127	41.0200	.1900		CARTER PR168,1457-68	1
	3.038	1.000	1.131	46.0000	3.0000		COOL PR103,1082-56	S
	3.038	1.000	1.131	47.2000	3.5000		DERADO PR11B,309-60	
	3.055	1.009	1.140	39.3500	.4700		BIZARD,PL31B,481-70	
	3.064	1.014	1.145	42.8000	.7000		DEVLIN PRL14,1031-65	
	3.064	1.014	1.145	39.5400	2.0000		BRISSON NC19,210-61	
	3.074	1.019	1.150	39.9200	.0600		GIACOMELLI PC-67	
	3.075	1.020	1.151	39.2900	.1900		CARTER PR168,1457-68	
	3.075	1.020	1.151	41.9800	.8000		STIRLING CEA-R2838-66	
	3.079	1.022	1.153	42.3700	.6200		DEVLIN PR125,690-62	
	3.102	1.034	1.165	37.9700	.4700		BIZARD,PL31B,481-70	
	3.103	1.035	1.166	38.1500	.1900		CARTER PR168,1457-68	1
	3.122	1.045	1.176	41.1700	.5900		DEVLIN PR125,690-62	
	3.122	1.045	1.176	38.1400	.1900		CARTER PR168,1457-68	
	3.139	1.054	1.185	38.3000	.4000		DEVLIN PRL14,1031-65	
	3.146	1.058	1.189	37.3000	.5500		STIRLING CEA-R2838-66	
	3.148	1.059	1.190	37.2600	.4700		BIZARD,PL31B,481-70	
	3.157	1.064	1.195	37.1900	.1900		CARTER PR168,1457-68	1
	3.159	1.065	1.196	36.6600	1.3000		BRISSON NC19,210-61	
	3.167	1.069	1.200	37.1000	.0600		GIACOMELLI PC 67	
	3.169	1.070	1.201	37.1800	.1900		CARTER PR168,1457-68	
	3.169	1.070	1.201	38.1000	.7000		STIRLING CEA-R2838-66	
	3.178	1.074	1.206	37.6000	.4000		DEVLIN PRL14,1031-65	
	3.182	1.076	1.208	35.7700	2.0000		BRISSON NC19,210-61	
	3.189	1.080	1.212	36.3000	2.6000		COOL PR103,1082-56	S
	3.195	1.083	1.215	36.3800	.4700		BIZARD,PL31B,481-70	
	3.215	1.094	1.226	36.7600	.1900		CARTER PR168,1457-68	
	3.226	1.100	1.232	34.8000	1.4000		PICKUP PR132,1819-63	
	3.226	1.100	1.232	37.1800	.6100		DEVLIN PR125,690-62	
	3.241	1.108	1.240	36.1200	.4700		BIZARD,PL31B,481-70	
	3.253	1.114	1.246	36.5000	.5000		DEVLIN PRL14,1031-65	
	3.260	1.118	1.250	36.0000	.0600		GIACOMELLI PC 67	
	3.262	1.119	1.251	36.5700	.1900		CARTER PR168,1457-68	
	3.288	1.133	1.265	36.1900	.4700		BIZARD,PL31B,481-70	
	3.307	1.143	1.275	36.4500	.1900		CARTER PR168,1457-68	1
	3.318	1.149	1.281	36.4200	.1900		CARTER PR168,1457-68	
	3.320	1.150	1.282	35.5200	2.0000		BRISSON NC19,210-61	
	3.320	1.150	1.282	36.5500	.7100		DEVLIN PR125,690-62	
	3.327	1.154	1.286	36.0000	.4000		DEVLIN PRL14,1031-65	
	3.333	1.157	1.289	36.1000	.5500		STIRLING CEA-R2838-66	
	3.335	1.158	1.290	36.1600	.4700		BIZARD,PL31B,481-70	
	3.346	1.164	1.296	34.4500	1.3200		BRISSON NC19,210-61	
	3.353	1.168	1.300	35.7700	.0600		GIACOMELLI PC 67	
	3.357	1.170	1.302	37.7300	.7000		STIRLING CEA-R2838-66	
	3.376	1.180	1.312	36.5600	.1900		CARTER PR168,1457-68	
	3.381	1.183	1.315	36.2300	.4700		BIZARD,PL31B,481-70	
	3.400	1.193	1.325	35.6000	.4000		DEVLIN PRL14,1031-65	
	3.404	1.195	1.327	35.8400	1.2200		DEVLIN PR125,690-62	
	3.413	1.200	1.332	36.6300	.1900		CARTER PR168,1457-68	1
	3.426	1.207	1.339	36.3000	.5500		STIRLING CEA-R2838-66	
	3.428	1.208	1.340	36.5700	.4700		BIZARD,PL31B,481-70	
	3.445	1.217	1.349	36.6400	.1900		CARTER PR168,1457-68	
	3.447	1.218	1.350	35.9500	.0600		GIACOMELLI PC 67	
	3.456	1.223	1.355	36.6100	.1900		CARTER PR168,1457-68	
	3.475	1.233	1.365	36.3900	.4700		BIZARD,PL31B,481-70	
	3.490	1.240	1.373	35.2200	1.6000		DEVLIN PR125,690-62	
	3.503	1.247	1.380	36.6800	.1900		CARTER PR168,1457-68	
	3.508	1.250	1.383	29.2000	3.7000		COOL PR103,1082-56	S
	3.521	1.257	1.390	36.1300	.4700		BIZARD,PL31B,481-70	
	3.527	1.260	1.393	35.7000	.4000		DEVLIN PRL14,1031-65	
	3.532	1.263	1.396	35.7200	1.3500		BRISSON NC19,210-61	
	3.538	1.266	1.399	36.6500	.1900		CARTER PR168,1457-68	1
	3.540	1.267	1.400	35.9800	.0600		GIACOMELLI PC 67	
	3.546	1.270	1.403	37.9300	.7000		STIRLING CEA-R2838-66	
	3.557	1.276	1.409	36.6200	.1800		CARTER PR168,1457-68	
	3.566	1.281	1.414	36.7500	.5500		STIRLING CEA-R2838-66	
	3.568	1.282	1.415	35.8800	.4700		BIZARD,PL31B,481-70	
	3.587	1.292	1.425	35.9000	.4000		DEVLIN PRL14,1031-65	
	3.602	1.300	1.433	35.7200	.9300		DEVLIN PR125,690-62	
	3.602	1.300	1.433	29.3000	3.1000	3.0000	DAHL UCRL16978-67	1
	3.602	1.300	1.433	36.5400	.1800		CARTER PR168,1457-68	1
	3.615	1.307	1.440	36.1100	.4700		BIZARD,PL31B,481-70	
	3.633	1.317	1.450	35.8800	.0600		GIACOMELLI PC 67	
	3.635	1.318	1.451	36.4900	.1800		CARTER PR168,1457-68	
	3.661	1.332	1.465	35.6300	.4700		BIZARD,PL31B,481-70	
	3.682	1.343	1.476	36.0700	.1800		CARTER PR168,1457-68	1
	3.689	1.347	1.480	35.4100	.4600		DEVLIN PR125,690-62	
	3.695	1.350	1.483	30.1000	2.8000		COOL PR103,1082-56	S
	3.706	1.356	1.489	35.9000	.5000		STIRLING CEA-R2838-66	
	3.708	1.357	1.490	35.8200	.4700		BIZARD,PL31B,481-70	
	3.716	1.361	1.494	36.0600	.1800		CARTER PR168,1457-68	
	3.719	1.363	1.496	33.4800	1.4100		BRISSON NC19,210-61	
	3.727	1.367	1.500	38.0000	ERROR NOT GIVEN		JONES,591,CERN62	
	3.727	1.367	1.500	35.3000	.0500		GIACOMELLI PC 67	
	3.732	1.370	1.503	35.7800	.8000		STIRLING CEA-R2838-66	
	3.736	1.372	1.505	35.5000	.4000		DEVLIN PRL14,1031-65	
	3.751	1.380	1.513	30.8000	2.8000		COOL PR103,1082-56	S

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA
S=STATISTICAL ERROR ONLY

********** PI-P **********

S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 1							
TOTAL							
(CONTINUATION)							
3.755	1.382	1.515	35.0600	.4700		BIZARD,PL31B,481-70	
3.773	1.392	1.525	35.3000	.4000		DEVLIN PRL14,1031-65	
3.785	1.398	1.531	35.5400	.1800		CARTER PR168,1457-68	
3.801	1.407	1.540	34.6300	.4700		BIZARD,PL31B,481-70	
3.811	1.412	1.545	34.5000	.4000		DEVLIN PRL14,1031-65	
3.818	1.416	1.549	34.5100	.5400		DEVLIN PR125,690-62	
3.820	1.417	1.550	34.8100	.0500		GIACOMELLI PC 67	
3.848	1.432	1.565	34.3900	.4700		BIZARD,PL31B,481-70	
3.861	1.439	1.572	35.0800	.1800		CARTER PR168,1457-68	1
3.886	1.452	1.585	34.7000	.4000		DEVLIN PRL14,1031-65	
3.895	1.457	1.590	34.0000	.4700		BIZARD,PL31B,481-70	
3.895	1.457	1.590	34.6200	.5800		DEVLIN PR125,690-62	
3.895	1.457	1.590	32.5000	.6000		ALITTI NC29,515-63	
3.904	1.462	1.595	31.8100	1.5000		BRISSON NC19,210-61	
3.914	1.466	1.600	34.4100	.0500		GIACOMELLI PC 67	
3.921	1.470	1.604	31.4000	1.8000		COOL PR103,1082-56	S
3.921	1.470	1.604	34.7500	.1900		CARTER PR168,1457-68	1
3.955	1.488	1.622	34.6200	.1900		CARTER PR168,1457-68	1
3.962	1.492	1.626	34.7000	.4000		DEVLIN PRL14,1031-65	
3.977	1.500	1.634	30.0000	2.0000		COOL PR103,1082-56	S
3.996	1.510	1.644	34.0600	.3600		DIDDENS PRL10,262-63	
4.007	1.516	1.650	34.1500	.0500		GIACOMELLI PC 67	
4.015	1.520	1.654	33.8100	.7300		DEVLIN PR125,690-62	
4.048	1.538	1.672	34.6400	.2000		CARTER PR168,1457-68	
4.067	1.548	1.682	33.9000	.4600		DEVLIN PR125,690-62	
4.074	1.552	1.686	34.3000	.4000		DEVLIN PRL14,1031-65	
4.080	1.555	1.689	34.3000	.5000		STIRLING CEA-R2838-66	
4.101	1.566	1.700	34.0500	.0500		GIACOMELLI PC 67	
4.134	1.584	1.718	33.4000	.4600		DEVLIN PR125,690-62	
4.136	1.585	1.719	34.7000	.2000		CARTER PR168,1457-68	
4.145	1.590	1.724	34.6700	.4700		DIDDENS PRL10,262-63	
4.194	1.616	1.750	34.1900	.0500		GIACOMELLI PC 67	
4.220	1.630	1.764	34.3000	.4000		DEVLIN PRL14,1031-65	
4.237	1.639	1.773	35.0800	.2100		CARTER PR168,1457-68	
4.258	1.650	1.784	27.0800	.9600		DEVLIN PR125,690-62	
4.260	1.651	1.785	35.1100	.2200		CARTER PR168,1457-68	
4.267	1.655	1.789	34.6000	.5000		STIRLING CEA-R2838-66	
4.288	1.666	1.800	34.6500	.0500		GIACOMELLI PC 67	
4.295	1.670	1.804	31.4000	3.9000		COOL PR103,1082-56	S
4.327	1.687	1.821	35.5100	.2300		CARTER PR168,1457-68	
4.333	1.690	1.824	34.3800	.4000		DIDDENS PRL10,262-63	
4.334	1.691	1.825	34.0000	.4000		DEVLIN PRL14,1031-65	
4.381	1.716	1.850	35.0600	.0500		GIACOMELLI PC 67	
4.383	1.717	1.851	35.4900	.2600		CARTER PR168,1457-68	1
4.417	1.735	1.869	35.5800	.2600		CARTER PR168,1457-68	
4.443	1.749	1.883	34.8000	.3000		DEVLIN PRL14,1031-65	
4.475	1.766	1.900	35.3900	.0500		GIACOMELLI PC 67	
4.505	1.781	1.916	36.0300	.2400		CARTER PR168,1457-68	
4.522	1.790	1.925	35.2000	.4000		DEVLIN PRL14,1031-65	
4.540	1.800	1.935	35.3800	.4200		DIDDENS PRL10,262-63	
4.568	1.815	1.950	35.5400	.0500		GIACOMELLI PC 67	
4.570	1.816	1.951	36.0800	.2500		CARTER PR168,1457-68	
4.600	1.832	1.967	36.1800	.2500		CARTER PR168,1457-68	
4.662	1.865	2.000	35.8000	.0400		GIACOMELLI PC 67	
4.662	1.865	2.000	35.7000	.8000		LONGO PRL9,466-62	
4.662	1.865	2.000	28.3000	ERROR NOT GIVEN		JONES,591,CERN62	
4.692	1.881	2.016	36.3800	.2700		CARTER PR168,1457-68	
4.727	1.900	2.035	35.9400	.3700		DIDDENS PRL10,262-63	
4.727	1.900	2.035	31.3000	1.6000		COOL PR103,1082-56	S
4.756	1.915	2.050	36.4200	.3000		CARTER PR168,1457-68	1
4.787	1.932	2.067	36.3400	.3000		CARTER PR168,1457-68	
4.849	1.965	2.100	35.8600	.0400		GIACOMELLI PC 67	
4.853	1.967	2.102	36.1000	.3000		CARTER PR168,1457-68	1
4.894	1.989	2.124	35.4000	.3000		DEVLIN PRL14,1031-65	
4.915	2.000	2.135	35.7300	.2500		DIDDENS PRL10,262-63	
4.924	2.005	2.140	35.7000	.2500		HAGOPI. PR152,1183-66	
4.977	2.033	2.168	36.0600	.3000		CARTER PR168,1457-68	
5.036	2.065	2.200	35.6800	.0400		GIACOMELLI PC 67	
5.068	2.082	2.217	35.7700	.3900		CARTER PR168,1457-68	
5.121	2.110	2.245	36.6300	.2300		DIDDENS PRL10,262-63	
5.149	2.125	2.260	35.4800	.2500		REYNOL. PR184,1424-69	
5.162	2.132	2.267	35.4400	.4000		CARTER PR168,1457-68	
5.224	2.165	2.300	35.2000	.0400		GIACOMELLI PC 67	
5.310	2.211	2.346	34.6300	.2900		DIDDENS PRL10,262-63	
5.347	2.231	2.366	34.6300	.4000		CARTER PR168,1457-68	
5.411	2.264	2.400	34.7300	.0400		GIACOMELLI PC 67	
5.437	2.278	2.414	34.3500	.4500		CARTER PR168,1457-68	
5.516	2.320	2.456	34.0100	.3700		DIDDENS PRL10,262-63	
5.542	2.334	2.470	33.8000	.8000		CARTER PR168,1457-68	
5.598	2.364	2.500	29.2000	ERROR NOT GIVEN		JONES,591,CERN62	
5.636	2.384	2.520	34.0550	.0200		CITRON PR144,1101-66	
5.640	2.386	2.522	33.5300	.8500		CARTER PR168,1457-68	1
5.726	2.432	2.568	33.3200	.7000		CARTER PR168,1457-68	
5.786	2.464	2.600	33.3200	.1400		BAKER,634,SIENNA63	
5.812	2.478	2.614	32.9500	.7000		CARTER PR168,1457-68	
5.823	2.484	2.620	33.4680	.0200		CITRON PR144,1101-66	
5.891	2.520	2.656	33.3700	.3200		DIDDENS PRL10,262-63	
5.908	2.529	2.665	32.8900	.8000		CARTER PR168,1457-68	
6.011	2.584	2.720	33.0170	.0200		CITRON PR144,1101-66	
6.067	2.614	2.750	32.5000	.1000		BATON NC35,713-65	
6.067	2.614	2.750	32.5000	.1000		ALITTI NC35,1-65	
6.198	2.684	2.820	32.7580	.0200		CITRON PR144,1101-66	
6.286	2.731	2.867	32.8500	.3200		DIDDENS PRL10,262-63	
6.385	2.784	2.920	32.5460	.0200		CITRON PR144,1101-66	
6.535	2.864	3.000	31.9400	.1600		BAKER,634,SIENNA63	
6.535	2.864	3.000	29.5000	ERROR NOT GIVEN		JONES,591,CERN62	
6.573	2.884	3.020	32.4110	.0200		CITRON PR144,1101-66	
6.659	2.930	3.066	32.2900	.2800		DIDDENS PRL10,262-63	
6.723	2.964	3.100	30.9000	.9000		LONGO PRL9,466-62	
6.760	2.984	3.120	32.2990	.0150		CITRON PR144,1101-66	
6.910	3.063	3.200	31.5900	.1600		BAKER,634,SIENNA63	
6.948	3.083	3.220	32.1740	.0150		CITRON PR144,1101-66	
7.055	3.140	3.277	31.9000	.1900		DIDDENS PRL10,262-63	
7.135	3.183	3.320	31.9730	.0150		CITRON PR144,1101-66	
7.285	3.263	3.400	31.4000	.7000		VOVENKO JETP15,498-62	

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA
S=STATISTICAL ERROR ONLY

PI-P

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 1								
TOTAL								
(CONTINUATION)	7.285	3.263	3.400	31.1700	.1600		BAKER,634,SIENNA63	
	7.323	3.283	3.420	31.7460	.0150		CITRON PR144,1101-66	
	7.510	3.383	3.520	31.5690	.0150		CITRON PR144,1101-66	
	7.660	3.463	3.600	30.6400	.1400		BAKER,634,SIENNA63	
	7.698	3.483	3.620	31.3340	.0150		CITRON PR144,1101-66	
	7.823	3.550	3.687	31.3500	.2200		DIDDENS PRL10,262-63	
	7.885	3.583	3.720	31.0640	.0150		CITRON PR144,1101-66	
	8.035	3.663	3.800	30.4500	.1400		BAKER,634,SIENNA63	
	8.073	3.683	3.820	30.9010	.0100		CITRON PR144,1101-66	
	8.223	3.763	3.900	30.0600	.2000		BAKER,634,SIENNA63	
	8.223	3.763	3.900	30.0000	.5000		VOVENKO JETP15,498-62	
	8.279	3.793	3.930	30.7390	.0100		CITRON PR144,1101-66	
	8.410	3.863	4.000	29.8900	.1600		BAKER,634,SIENNA63	
	8.410	3.863	4.000	27.8000	ERROR NOT GIVEN		JONES,591,CERN62	
	8.467	3.893	4.030	30.5190	.0100		CITRON PR144,1101-66	
	8.598	3.963	4.100	29.7000	.1600		BAKER,634,SIENNA63	
	8.598	3.963	4.100	30.8000	1.0000		LONGO PRL9,466-62	
	8.611	3.970	4.107	30.2700	.2200		DIDDENS PRL10,262-63	
	8.654	3.993	4.130	30.3630	.0100		CITRON PR144,1101-66	
	8.786	4.063	4.200	29.4000	.1400		BAKER,634,SIENNA63	
	8.842	4.093	4.230	30.1700	.0100		CITRON PR144,1101-66	
	9.029	4.193	4.330	30.0580	.0100		CITRON PR144,1101-66	
	9.161	4.263	4.400	29.4300	.2000		BAKER,634,SIENNA63	
	9.217	4.293	4.430	29.9020	.0100		CITRON PR144,1101-66	
	9.348	4.363	4.500	30.2000	.4000		V. DARDEL PRL7,127-61	
	9.401	4.391	4.528	29.9200	.2200		DIDDENS PRL10,262-63	
	9.404	4.393	4.530	29.7440	.0100		CITRON PR144,1101-66	
	9.418	4.400	4.537	30.0000	5.0000		BANDTEL PR99,673A-55	
	9.536	4.463	4.600	29.3900	.2400		BAKER,634,SIENNA63	
	9.592	4.493	4.630	29.6000	.0100		CITRON PR144,1101-66	
	9.780	4.592	4.730	29.4870	.0100		CITRON PR144,1101-66	
	9.967	4.692	4.830	29.3600	.0100		CITRON PR144,1101-66	
	10.098	4.762	4.900	29.6000	.6000		VOVENKO JETP15,498-62	
	10.098	4.762	4.900	28.7000	1.0000		LONGO PRL9,466-62	
	10.155	4.792	4.930	29.2370	.0100		CITRON PR144,1101-66	
	10.286	4.862	5.000	28.5800	.2000		BAKER,634,SIENNA63	
	10.286	4.862	5.000	27.0000	ERROR NOT GIVEN		JONES,591,CERN62	
	10.342	4.892	5.030	29.1200	.0100		CITRON PR144,1101-66	
	10.530	4.992	5.130	28.9880	.0100		CITRON PR144,1101-66	
	10.717	5.092	5.230	28.8810	.0100		CITRON PR144,1101-66	
	10.905	5.192	5.330	28.7660	.0100		CITRON PR144,1101-66	
	11.036	5.262	5.400	28.0500	.1800		BAKER,634,SIENNA63	
	11.111	5.302	5.440	28.6800	.0100		CITRON PR144,1101-66	
	11.299	5.402	5.540	28.5860	.0100		CITRON PR144,1101-66	
	11.487	5.502	5.640	28.4500	.0250		CITRON PR144,1101-66	
	11.674	5.602	5.740	28.3550	.0250		CITRON PR144,1101-66	
	11.693	5.612	5.750	29.1000	.4000		V. DARDEL PRL7,127-61	
	11.862	5.702	5.840	28.2560	.0250		CITRON PR144,1101-66	
	12.027	5.790	5.928	28.1600	.2100		DIDDENS PRL10,262-63	
	12.049	5.802	5.940	28.1490	.0250		CITRON PR144,1101-66	
	12.162	5.862	6.000	28.5000	.3000		GALBR.PR138B,913-65	
	12.237	5.902	6.040	28.0720	.0250		CITRON PR144,1101-66	
	12.612	6.102	6.240	27.8840	.0250		CITRON PR144,1101-66	
	12.987	6.302	6.440	27.7040	.0250		CITRON PR144,1101-66	
	13.363	6.502	6.640	27.5180	.0250		CITRON PR144,1101-66	
	13.663	6.662	6.800	30.0000	5.0000		CHANG JETP11,313-60	
	13.738	6.702	6.840	27.3560	.0250		CITRON PR144,1101-66	
	13.925	6.802	6.940	27.2360	.0250		CITRON PR144,1101-66	
	14.038	6.862	7.000	27.8000	.8000		VOVENKO JETP15,498-62	
	14.038	6.862	7.000	28.4000	.4000		V. DARDEL PRL7,127-61	
	14.672	7.200	7.338	31.0000	3.1000		AINUTD.JETP15,1038-62	
	14.751	7.242	7.380	27.7550	.0890		FOLEY PRL19,330-67	
	15.164	7.462	7.600	27.6710	.0880		FOLEY PRL19,330-67	
	15.914	7.862	8.000	28.3000	1.8000		BARISH PR184,1375-69	
	15.914	7.862	8.000	27.5000	.3000		GALBR.PR138B,913-65	
	18.166	9.061	9.200	25.0000	4.0000		VOVENKO JETP15,498-62	
	19.254	9.641	9.780	26.8710	.0840		FOLEY PRL19,330-67	
	19.667	9.861	10.000	26.5000	.3500		VONDARDEL PRL8,173-62	
	19.667	9.861	10.000	26.5000	.3000		GALBR.PR138B,913-65	
	22.294	11.261	11.400	25.3000	1.5000		FERBEL NC28,1214-63	
	22.481	11.361	11.500	26.3000	.5000		LINDENBA. PRL7,185-61	
	23.419	11.861	12.000	26.0000	.2500		VONDARDEL PRL8,173-62	
	23.419	11.861	12.000	25.9000	.3000		GALBR.PR138B,913-65	
	23.438	11.871	12.010	26.2730	.0830		FOLEY PRL19,330-67	
	25.296	12.861	13.000	26.2800	.7900		BRANDE. NPB16,287-70	
	27.172	13.861	14.000	26.0000	.2000		VONDARDEL PRL8,173-62	
	27.172	13.861	14.000	25.4000	.3000		GALBR.PR138B,913-65	
	27.416	13.991	14.130	25.9150	.0810		FOLEY PRL19,330-67	
	29.443	15.071	15.210	25.7990	.0820		FOLEY PRL19,330-67	
	30.925	15.861	16.000	25.1000	.3000		GALBR.PR138B,913-65	
	30.925	15.861	16.000	26.8000	1.7000		BARTKE NC24,876-62	
	30.925	15.861	16.000	25.4000	1.6000		GOLDSACK NC23,941-62	
	31.507	16.171	16.310	25.6420	.0810		FOLEY PRL19,330-67	
	32.802	16.861	17.000	25.7000	.2000		VONDARDEL PRL8,173-62	
	33.402	17.181	17.320	25.5090	.0810		FOLEY PRL19,330-67	
	34.678	17.861	18.000	25.0000	.3000		GALBR.PR138B,913-65	
	35.354	18.221	18.360	25.3270	.0840		FOLEY PRL19,330-67	
	35.954	18.541	18.680	25.3440	.0810		FOLEY PRL19,330-67	
	36.967	19.081	19.220	25.3080	.0810		FOLEY PRL19,330-67	
	38.431	19.861	20.000	25.6400	.7800		BRANDE. NPB16,287-70	
	38.431	19.861	20.000	24.8000	.3000		GALBR.PR138B,913-65	
	38.431	19.861	20.000	25.3800	.3000		ALLABY PL30B,500-69	
	38.431	19.861	20.000	25.6000	.5000		VONDARDEL PRL8,173-62	
	38.750	20.031	20.170	25.1500	.0820		FOLEY PRL19,330-67	
	40.307	20.861	21.000	25.2200	.0800		DENISOV,PL36B,528-71	S4
	42.353	21.951	22.090	25.0640	.0790		FOLEY PRL19,330-67	
	44.060	22.861	23.000	24.9400	.0800		DENISOV,PL36B,528-71	S4
	46.444	24.131	24.270	24.9550	.0820		FOLEY PRL19,330-67	
	47.813	24.861	25.000	24.8500	.2500		ALLABY PL30B,500-69	
	47.813	24.861	25.000	24.7900	.0700		DENISOV,PL36B,528-71	S4
	50.046	26.051	26.190	24.8220	.0790		FOLEY PRL19,330-67	
	52.505	27.361	27.500	24.8400	.0700		DENISOV,PL36B,528-71	S4
	54.719	28.541	28.680	24.7740	.0830		FOLEY PRL19,330-67	
	57.196	29.861	30.000	24.7800	.0800		DENISOV,PL36B,528-71	S4
	59.448	31.061	31.200	24.5600	.1100		DENISOV,PL36B,528-71	S4

FOOTNOTES

S4=SYSTEMATIC ERROR IS 0.4 PER CENT

PI-P

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 1								
TOTAL	63.764	33.361	33.500	24.4100	.0700		DENISOV,PL36B,528-71	S4
(CONTINUATION)	66.954	35.061	35.200	24.4000	.0700		DENISOV,PL36B,528-71	S4
	71.269	37.361	37.500	24.2800	.0700		DENISOV,PL36B,528-71	S4
	75.961	39.861	40.000	24.3600	.0700		DENISOV,PL36B,528-71	S4
	80.652	42.361	42.500	24.2300	.0700		DENISOV,PL36B,528-71	S4
	85.343	44.861	45.000	24.3700	.0700		DENISOV,PL36B,528-71	S4
	90.035	47.361	47.500	24.3100	.0700		DENISOV,PL36B,528-71	S4
	94.726	49.861	50.000	24.3000	.0800		DENISOV,PL36B,528-71	S4
	99.417	52.361	52.500	24.2300	.0700		DENISOV,PL36B,528-71	S4
	104.108	54.861	55.000	24.2900	.0700		DENISOV,PL36B,528-71	S4
	108.800	57.361	57.500	24.2000	.0700		DENISOV,PL36B,528-71	S4
	113.491	59.861	60.000	24.2000	.0700		DENISOV,PL36B,528-71	S4
	118.182	62.361	62.500	24.3300	.0700		DENISOV,PL36B,528-71	S4
	122.873	64.861	65.000	24.2600	.0700		DENISOV,PL36B,528-71	S4
THRESHOLD	1.16	0.00	0.00				644 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

52 DATA POINTS USED ABOVE 10.0 GEV/C , PROB. = .60
K = 28.93 +- .21 N = -.05 +- .00
30 DATA POINTS USED ABOVE 20.0 GEV/C , PROB. = .93
K = 27.65 +- .33 N = -.03 +- .00

..... REACTION 2								
PI-P	1.220	.031	.098	1.8470	.0800		KNAPP PR131,1822-63	
	1.284	.065	.150	2.9000	.5000		BODANSKY PR93,1367-54	
	1.345	.098	.192	6.1500	.2200		EDWARDS PPS73,856-59	
	1.387	.120	.219	11.3000	1.6000		ANDERSON PR91,155-53	
	1.403	.129	.229	12.8000	1.0000		BUDAGOV,JETP11,531-60	
	1.432	.144	.247	17.0000	2.4000		ANDERSON PR91,155-53	
	1.444	.150	.254	20.0000	ERROR NOT GIVEN		ASHKIN PR101,1149-56	
	1.447	.152	.256	18.9000	ERROR NOT GIVEN		KRUSE PR116,1008-59	
	1.449	.153	.257	20.1000	.5000		KELLMAN PR129,365-63	
	1.465	.162	.267	21.4000	1.2000		BUDAGOV JETP11,531-60	
	1.467	.163	.268	21.4000	1.2000		BUDAGOV,JETP11,531-60	
	1.472	.165	.271	22.5000	1.5000		ANDERSON PR100,268-55	
	1.479	.169	.275	21.2000	2.0000		FERMI PR92,161-53	
	1.512	.187	.295	22.5000	1.3000		GLICKSM. PR95,1054-54	
	1.526	.194	.303	26.4000	2.7000		FERMI PR92,161-53	
	1.557	.210	.321	28.7000	3.1000		FERMI PR92,161-53	
	1.569	.217	.328	18.2000	2.3000		GLICKSM. PR94,1335-54	
	1.576	.221	.332	19.5000	.6000		ASHKIN PR105,724-57	
	1.576	.221	.332	16.0000	.8000		DEAHL PR124,1987-61	
	1.583	.224	.336	16.0000	.8000		DEAHL PR124,1987-61	
	1.586	.226	.338	17.4000	.3000		KELLMAN PR129,365-63	
	1.595	.231	.343	20.8000	.4000		GOODWIN PR122,655-61	
	1.612	.240	.353	15.1000	.8000		ZINOV JETP11,794-60	
	1.668	.270	.385	12.4000	.6000		ZINOV JETP11,794-60	
	1.707	.291	.407	13.8000	.3000		GOODWIN PR122,655-61	
	1.737	.307	.424	11.4000	.8000		ZINOV JETP11,794-60	
	1.786	.333	.451	10.3000	.6000		ZINOV JETP11,794-60	
	1.856	.370	.490	10.8000	.2000		GOODWIN PRL3,522-59	
	1.856	.370	.490	10.4200	.1700		OGDEN PR137B,1115-65	
	1.858	.371	.491	10.9000	.2000		GOODWIN PR122,655-61	
	1.932	.410	.532	11.4000	.1600		OGDEN PR137B,1115-65	
	1.963	.427	.549	13.0000	.3400		GOODWIN PRL3,522-59	
	1.965	.428	.550	13.0000	.4000		GOODWIN PR122,655-61	
	2.006	.450	.573	12.1900	.2600		OGDEN PR137B,1115-65	
	2.023	.459	.582	16.2000	1.4000		POIRIER PR148,1311-66	
	2.081	.490	.614	13.7100	.3500		OGDEN PR137B,1115-65	
	2.131	.516	.641	14.8000	1.3000		GRARD NC22,193-61	
	2.162	.533	.658	16.2000	.5000		HELLA. PR134,B1079-64	
	2.193	.550	.675	16.9800	.3700		OGDEN PR137B,1115-65	
	2.208	.558	.683	18.9000	1.0000		BURNST.PR137B,1044-65	
	2.252	.581	.707	19.9500	.5400		HELLA. PR134B,1079-64	
	2.287	.600	.726	19.8700	.3400		OGDEN PR137B,1115-65	
	2.296	.605	.731	18.9000	1.3000		VITTIT.PR135B,232-64	
	2.318	.616	.743	19.4000	1.4000		GRARD NC22,193-61	
	2.322	.618	.745	20.0000	3.0000		GAILL.CRAS249,1497-56	
	2.374	.646	.773	19.2000	.6000		OLIVER BAPS9,80-64	
	2.374	.646	.773	17.5600	.4300		OLIVER PR147,932-66	
	2.381	.650	.777	17.1900	.4500		OGDEN PR137B,1115-65	
	2.381	.650	.777	17.8200	.7000		FEMINO NC52A,892-67	
	2.472	.698	.826	15.7500	.2800		HELLA. PR134B,1079-64	
	2.494	.710	.838	14.9000	1.3000		GRARD NC22,193-61	
	2.513	.720	.848	13.2000	.5000		WALLE NC53A,745-68	
	2.616	.775	.904	14.8000	.7000		BERTANZA NC44A,712-66	
	2.644	.790	.919	14.1000	.9000		CASON PR150,1134-66	
	2.665	.801	.930	14.4000	1.5000		GENSOLLEN,84,SIE63	
	2.681	.810	.939	21.0000	1.1000		BAGGETT UCRL8302-58	
	2.703	.822	.951	18.0000	1.0000		CASON PR150,1134-66	
	2.795	.870	1.000	22.2000	1.4000		CASON PR150,1134-66	
	2.800	.873	1.003	26.5800	.6100		HELLA. PR134B,1079-64	
	2.826	.887	1.017	27.3000	1.7000		GRARD NC22,193-61	
	2.850	.900	1.030	24.5000	.2000		GENSOLLEN,84,SIE63	
	2.860	.905	1.035	25.1000	3.0000		PICKUP PR132,1819-63	
	2.943	.949	1.080	25.1000	3.0000		BACON PR157,1263-67	
	2.945	.950	1.081	19.1000	1.6000		ERWIN PR109,1364-58	
	3.020	.990	1.121	19.8200	.2400		HELLA. PR134B,1079-64	
	3.038	1.000	1.131	22.0000	3.1000		DERADO PR118,309-60	
	3.198	1.085	1.217	14.1000	1.0000		GRARD NC22,193-61	
	3.223	1.098	1.230	14.6000	.8000		BACON PR157,1263-67	
	3.226	1.100	1.232	14.6000	.8000		PICKUP PR132,1819-63	
	3.503	1.247	1.380	15.0000	.2000		BACON PR157,1263-67	
	3.602	1.300	1.433	9.1000	1.2000		DAHL UCRL16978-67	1
	3.727	1.367	1.500	10.4000	1.5000		COOK PR130,762-63	
	3.895	1.457	1.590	9.6500	.3000		ALITTI NC29,515-63	
	4.119	1.576	1.710	10.4000	.6000		BACON PR157,1263-67	
	4.381	1.716	1.850	8.6000	ERROR NOT GIVEN		ERWIN PC63	
	4.662	1.865	2.000	8.0000	1.5000		COOK PR130,762-63	
	4.681	1.875	2.010	7.9400	.9000		DAMOUTH PRL11,287-63	
	4.699	1.885	2.020	9.1000	2.0000	1.3000	DAMOUTH PRL11,287-63	

FOOTNOTES

S4=SYSTEMATIC ERROR IS 0.4 PER CENT
1=AVERAGE VALUE OVER A BAND OF MOMENTA

********** PI-P **********

	S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 2									
PI-P									
(CONTINUATION)	4.849	1.965	2.100	9.6900		.2000		WEST PR149,1089-66	
	4.924	2.005	2.140	9.3000		.4000		HAGOPI. PR152,1183-66	
	5.149	2.125	2.260	8.9100		.2400		REYNOL. PR184,1424-69	
	5.598	2.364	2.500	7.3000		1.1000		COOK PR130,762-63	
	5.973	2.564	2.700	7.7000		.3000		MILLER PR153,1423-67	
	6.067	2.614	2.750	7.2000		.1000		BATON NC35,713-65	
	6.104	2.634	2.770	7.2000		.1000		BATON,NPB21,551-70	
	6.535	2.864	3.000	6.8000		ERROR NOT GIVEN		ZDANIS PRL14,721-65	
	6.535	2.864	3.000	6.7000		1.3000	.7000	JONES,591,CERN62	
	6.817	3.014	3.150	6.4000		.8000		PERL PR132,1252-63	
	8.410	3.863	4.000	6.4000		1.3000	.7000	JONES,591,CERN62	
	8.410	3.863	4.000	6.6200		.2200		BONDAR NC31,729-64	
	8.410	3.863	4.000	5.9000		.5000		DALKHAZ.JETP20,8-65	
	8.654	3.993	4.130	6.3000		.8000		PERL PR132,1252-63	
	8.710	4.023	4.160	5.7700		.1300		EISNER PR164,1699-67	
	10.192	4.812	4.950	6.5000		.8000		PERL PR132,1252-63	
	10.286	4.862	5.000	6.5000		1.3000	.7000	JONES,591,CERN62	
	14.038	6.862	7.000	5.3700		.1400		FOLEY PRL11,425-63	
	14.672	7.200	7.338	3.9000		.5400		AINUTD.JETP15,1038-62	
	15.914	7.862	8.000	4.7000		.1000		ANDERSON,PRL25,699-70	
	16.852	8.362	8.500	4.7700		.3800		HARTING NC38,60-65	
	17.603	8.762	8.900	4.8200		.0900		FOLEY PRL11,425-63	
	19.667	9.861	10.000	4.5900		.1600		BRANDT PRL10,413-63	
	21.168	10.661	10.800	4.7700		.1000		FOLEY PRL11,425-63	
	21.543	10.861	11.000	4.2000		.2000		DAUDIN PC-66	
	24.170	12.261	12.400	4.3300		.3800		HARTING NC38,60-65	
	25.296	12.861	13.000	4.7200		.1200		FOLEY PRL11,425-63	
	29.049	14.861	15.000	4.6200		.1500		FOLEY PRL11,425-63	
	30.925	15.861	16.000	4.0800		.1200		ANDERSON,PRL25,699-70	
	30.925	15.861	16.000	4.3600		.1500		HONECKER,NPB13,571-69	
	30.925	15.861	16.000	4.0000		1.0000		BARTKE NC24,876-62	
	30.925	15.861	16.000	3.5000		.5000		GOLDSACK NC23,941-62	
	32.802	16.861	17.000	4.1100		.1400		FOLEY PRL11,425-63	
	35.429	18.261	18.400	4.2500		.4000		HARTING NC38,60-65	
	36.367	18.761	18.900	4.3900		.3200		FOLEY PRL11,425-63	
	47.813	24.861	25.000	4.0000		.5000		ERWIN BAPS13,33-68	
THRESHOLD	1.16	0.00	0.00					114 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

26 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .99

K = 8.15 +- .63 N = -.23 +- .03

..... REACTION 3									
PPI- (BACKWARD)	15.914	7.862	8.000	1.4000	MICROB	.1000		ANDERS. PRL20,1529-68	
	30.925	15.861	16.000	.2000	MICROB	ERROR NOT GIVEN		ANDERS. PRL20,1529-68	
THRESHOLD	1.16	0.00	0.00					2 DATA POINTS LISTED	
..... REACTION 4									
NEUTRALS	1.332	.091	.183	16.0300		.1800		BUGG,NPB26,588-71	
	1.378	.115	.213	25.7200		.2300		BUGG,NPB26,588-71	
	1.431	.143	.246	40.8900		.2700		BUGG,NPB26,588-71	
	1.468	.163	.269	48.6000		.3200		BUGG,NPB26,588-71	
	1.477	.168	.274	49.1400		.3500		BUGG,NPB25,588-71	
	1.494	.177	.284	48.8100		.3000		BUGG,NPB25,588-71	
	1.522	.192	.301	45.4800		.4500		BUGG,NPB26,588-71	
	1.565	.215	.326	37.1600		.2200		BUGG,NPB26,588-71	
	1.607	.237	.350	29.7700		.2000		BUGG,NPB25,588-71	
	1.651	.261	.375	23.9400		.2100		BUGG,NPB25,588-71	
	1.681	.277	.392	19.8500		2.3000		TURLAY CEA2136-62	
	1.709	.292	.408	18.4000		.1700		BUGG,NPB26,588-71	
	1.771	.325	.443	15.7600		1.1200		TURLAY CEA2136-62	
	1.847	.365	.485	15.5000		.5000		KIRZ PR130,2481-63	S
	1.861	.373	.493	13.6100		.6500		TURLAY CEA2136-62	
	1.952	.421	.543	12.5500		.5700		TURLAY CEA2136-62	
	1.977	.435	.557	12.9000		.5000		KIRZ PR130,2481-63	S
	2.036	.466	.589	12.9000		.5000		KIRZ PR130,2481-63	S
	2.043	.470	.593	11.5900		.4900		TURLAY CEA2136-62	
	2.063	.480	.604	11.3000		.5000		KIRZ PR130,2481-63	S
	2.100	.500	.624	12.1600		.6700		CHIU PR155,1415-67	
	2.136	.519	.644	11.8500		.4600		TURLAY CEA2136-62	
	2.155	.529	.654	10.9200		ERROR NOT GIVEN		BULOS,PR187,1827-69	
	2.162	.533	.658	11.8600		.6500		CHIU PR156,1415-67	
	2.180	.543	.668	12.4800		.4700		TURLAY CEA2136-62	
	2.208	.558	.683	15.5000		1.9000		BURNST.PR137B,1044-65	
	2.213	.560	.686	14.4000		.7000		KIRZ PR130,2481-63	S
	2.221	.564	.690	11.9800		.2100		BIZARD,PL31B,481-70	
	2.228	.568	.694	13.2300		.5000		TURLAY CEA2136-62	
	2.228	.568	.694	11.1800		ERROR NOT GIVEN		BULOS,PR187,1827-69	
	2.267	.589	.715	12.4600		.1100		BIZARD,PL31B,481-70	
	2.272	.592	.718	11.8900		.6500		CHIU PR156,1415-67	
	2.272	.592	.718	13.0800		.4700		TURLAY CEA2136-62	
	2.293	.603	.729	12.0800		ERROR NOT GIVEN		BULOS,PR187,1827-69	
	2.296	.605	.731	14.0000		1.0000		VITTIT.PR135B,232-64	
	2.307	.611	.737	12.9000		.6000		KIRZ PR130,2481-63	S
	2.313	.613	.740	11.4400		.2000		BIZARD,PL31B,481-70	
	2.315	.614	.741	11.2700		.6200		CHIU PR156,1415-67	
	2.320	.617	.744	12.7600		.4900		TURLAY CEA2136-62	
	2.341	.628	.755	11.5100		ERROR NOT GIVEN		BULOS,PR187,1827-69	
	2.359	.638	.765	10.8200		.1100		BIZARD,PL31B,481-70	
	2.365	.641	.768	11.3300		.6900		TURLAY CEA2136-62	
	2.374	.646	.773	11.7800		.4300		OLIVER PR147,932-66	
	2.381	.650	.777	11.3500		.5400		FEMINO NC52A,892-67	
	2.390	.655	.782	9.6900		.5300		CHIU PR156,1415-67	
	2.405	.663	.790	9.4400		.1900		BIZARD,PL31B,481-70	
	2.411	.666	.793	10.2100		.4300		TURLAY CEA2136-62	
	2.418	.670	.797	9.7200		.5300		CHIU PR155,1415-67	
	2.435	.678	.806	12.3000		.7000		KIRZ PR130,2481-63	S
	2.444	.683	.811	8.8000		ERROR NOT GIVEN		BULOS,PR187,1827-69	

FOOTNOTES

S=STATISTICAL ERROR ONLY

********** PI-P **********

		S	K.ENERGY	PLAB		CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 4										
NEUTRALS		2.451	.687	.815		8.9100	.1000		BIZARD,PL31B,481-70	
(CONTINUATION)		2.459	.691	.819		9.6700	.3500		TURLAY CEA2136-62	
		2.483	.704	.832		9.5400	.5200		CHIU PR156,1415-67	
		2.498	.712	.840		8.6700	.1600		BIZARD,PL31B,481-70	
		2.503	.715	.843		9.4200	.3600		TURLAY CEA2136-62	
		2.513	.720	.848		9.9000	.7000		WALLE NC53A,745-68	
		2.524	.726	.854		8.5900	.4700		CHIU PR156,1415-67	
		2.538	.734	.862		9.2900	ERROR NOT GIVEN		BULOS,PR187,1827-69	
		2.544	.737	.865		8.5900	.1000		BIZARD,PL31B,481-70	
		2.590	.761	.890		9.2600	.1700		BIZARD,PL31B,481-70	
		2.598	.765	.894		8.9000	.4900		CHIU PR155,1415-67	
		2.598	.765	.894		10.1100	.3900		TURLAY CEA2136-62	
		2.616	.775	.904		9.0000	.5000		BERTANZA NC44A,712-66	
		2.637	.786	.915		9.2500	.5100		CHIU PR156,1415-67	
		2.637	.786	.915		10.1700	.1000		BIZARD,PL31B,481-70	
		2.661	.799	.928		11.0800	ERROR NOT GIVEN		BULOS,PR187,1827-69	
		2.672	.805	.934		10.1600	.5600		CHIU PR156,1415-67	
		2.681	.810	.939		9.4000	.3000		BAGGETT UCRL8302-58	
		2.683	.811	.940		10.4700	.1700		BIZARD,PL31B,481-70	
		2.689	.814	.943		12.0200	.4900		TURLAY CEA2136-62	
		2.729	.835	.965		12.1900	.1000		BIZARD,PL31B,481-70	
		2.733	.837	.967		11.3700	.6300		CHIU PR156,1415-67	
		2.754	.848	.978		12.5900	ERROR NOT GIVEN		BULOS,PR187,1827-69	
		2.776	.860	.990		12.1400	.1800		BIZARD,PL31B,481-70	
		2.783	.864	.994		12.6400	.4600		TURLAY CEA2136-62	
		2.804	.875	1.005		11.3500	.6200		CHIU PR155,1415-67	
		2.822	.885	1.015		11.5100	.1000		BIZARD,PL31B,481-70	
		2.839	.894	1.024		11.0500	ERROR NOT GIVEN		BULOS,PR187,1827-69	
		2.869	.910	1.040		10.5900	.1700		BIZARD,PL31B,481-70	
		2.874	.913	1.043		11.4900	.4400		TURLAY CEA2136-62	
		2.876	.914	1.044		9.2900	.5600		CHIU PR155,1415-67	
		2.915	.935	1.065		9.2200	.0900		BIZARD,PL31B,481-70	
		2.923	.938	1.069		9.7200	.4000		TURLAY CEA2136-62	
		2.954	.955	1.086		7.4000	.4800		CHIU PR156,1415-67	
		2.962	.959	1.090		8.1400	.1400		BIZARD,PL31B,481-70	
		2.969	.963	1.094		8.7800	.3500		TURLAY CEA2136-62	
		2.979	.968	1.099		7.0300	ERROR NOT GIVEN		BULOS,PR187,1827-69	
		2.992	.975	1.106		6.5800	.4400		CHIU PR155,1415-67	
		3.008	.984	1.115		6.7700	.0800		BIZARD,PL31B,481-70	
		3.038	1.000	1.131		6.4000	1.0000		DERADO PR118,309-60	
		3.055	1.009	1.140		6.1400	.1300		BIZARD,PL31B,481-70	
		3.061	1.012	1.143		6.5500	.2900		TURLAY CEA2136-62	
		3.102	1.034	1.165		5.7200	.0800		BIZARD,PL31B,481-70	
		3.148	1.059	1.190		5.4000	.1300		BIZARD,PL31B,481-70	
		3.154	1.062	1.193		5.8100	.2700		TURLAY CEA2136-62	
		3.195	1.083	1.215		5.1200	.0800		BIZARD,PL31B,481-70	
		3.241	1.108	1.240		5.2200	.0800		BIZARD,PL31B,481-70	
		3.249	1.112	1.244		5.5100	.1900		TURLAY CEA2136-62	
		3.254	1.115	1.247		5.0000	ERROR NOT GIVEN		BULOS,PR187,1827-69	
		3.258	1.117	1.249		5.0800	.4200		CHIU PR155,1415-67	
		3.288	1.133	1.265		5.2000	.0700		BIZARD,PL31B,481-70	
		3.335	1.158	1.290		5.1100	.1000		BIZARD,PL31B,481-70	
		3.340	1.161	1.293		5.5700	.2100		TURLAY CEA2136-62	
		3.381	1.183	1.315		5.1100	.0700		BIZARD,PL31B,481-70	
		3.387	1.186	1.318		5.6700	.2600		TURLAY CEA2136-62	
		3.428	1.208	1.340		5.3000	.0700		BIZARD,PL31B,481-70	
		3.434	1.211	1.343		5.5700	.2800		TURLAY CEA2136-62	
		3.475	1.233	1.365		5.1400	.0700		BIZARD,PL31B,481-70	
		3.529	1.261	1.394		5.6400	.3000		TURLAY CEA2136-62	
		3.568	1.282	1.415		4.9400	.0700		BIZARD,PL31B,481-70	
		3.602	1.300	1.433		4.6200	.3900		CHIU PR156,1415-67	
		3.615	1.307	1.440		4.9200	.0700		BIZARD,PL31B,481-70	
		3.622	1.311	1.444		5.5500	.3000		TURLAY CEA2136-62	
		3.661	1.332	1.465		4.8900	.0700		BIZARD,PL31B,481-70	
		3.708	1.357	1.490		4.9800	.0700		BIZARD,PL31B,481-70	
		3.755	1.382	1.515		5.1100	.0700		BIZARD,PL31B,481-70	
		3.801	1.407	1.540		5.1100	.0700		BIZARD,PL31B,481-70	
		3.807	1.410	1.543		5.1900	.2700		TURLAY CEA2136-62	
		3.848	1.432	1.565		4.9200	.0700		BIZARD,PL31B,481-70	
		3.895	1.457	1.590		4.4300	.1100		BIZARD,PL31B,481-70	
		3.996	1.510	1.644		4.3900	.2400		TURLAY CEA2136-62	
		4.119	1.576	1.710		2.9500	.0700		CAROLL PR177.2047-68	
		4.183	1.610	1.744		4.3800	.2700		TURLAY CEA2136-62	
		4.456	1.756	1.890		2.7400	.0700		CAROLL PR177.2047-68	
		4.793	1.935	2.070		2.7700	.0700		CAROLL PR177.2047-68	
		5.149	2.125	2.260		3.9400	.1300		REYNOL. PR184,1424-69	
		5.168	2.135	2.270		2.3000	.0600		CAROLL PR177.2047-68	
		5.523	2.324	2.460		2.3000	.0500		CAROLL PR177.2047-68	
		6.161	2.664	2.800		2.2000	.3000		SHALAM. JETP12,859-61	
		9.911	4.662	4.800		1.3000	.2000		AZIMOV JETPL3,216-66	
		19.667	9.861	10.000		.6000	ERROR NOT GIVEN		SOSNOW.WARSAW511/6-64	
		22.294	11.261	11.400		1.3000	.4000		FERBEL NC28,1214-63	C
		30.925	15.861	16.000		.4500	.2000		GOLDSACK NC23,941-62	
		47.813	24.861	25.000		.1440	.0210		ELBERT,NPB19,85-70	C
		47.813	24.861	25.000		.1670	.0200		ELBERT NPB19,85-70	
	THRESHOLD	1.16	0.00	0.00					135 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

8 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. = .00

K = 6.64 +- .56 N = -1.13 +- .09

..... REACTION 5										
MPI		2.208	.558	.683		.0400	ERROR NOT GIVEN		BURNST.PR137B,1044-65	
		2.296	.605	.731	U	.2000			VITTIT.PR135B,232-64	
		6.910	3.063	3.200		6.1300	.2400		CHUNG PR165,1491-68	
		8.786	4.063	4.200		8.0100	.3900		CHUNG PR165,1491-68	
	THRESHOLD	1.16	0.00	0.00					4 DATA POINTS LISTED	
..... REACTION 6										
V0		25.296	12.861	13.000		1.6000	.3000		BRANDE. NPB16,287-70	
		30.925	15.861	16.000		1.6000	.3000		BALLAM SLAC334-67	A
		38.431	19.861	20.000		1.4000	.3000		BRANDE. NPB16,287-70	
	THRESHOLD	2.59	.76	.89					3 DATA POINTS LISTED	

FOOTNOTES

C=CROSS SECTION CORRECTED FOR UNSEEN KO DECAYS
U=UPPER LIMIT
A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES

PI-P

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR + -	REFERENCE	FOOT-NOTES
..... REACTION 7							
0 PRONGS,NON STRANGE	2.394	.657	.784	9.5200	.2900	FELDMAN NC50A,89-67	
	2.485	.705	.833	8.8400	.2800	FELDMAN NC50A,89-67	
	2.666	.802	.931	10.3100	.3000	FELDMAN NC50A,89-67	
	2.757	.850	.980	12.8500	.3900	FELDMAN NC50A,89-67	
	2.860	.905	1.035	11.9000	1.1000	PICKUP PR132,1819-63	
	2.895	.924	1.054	11.4400	.3400	FELDMAN NC50A,89-67	
	3.213	1.093	1.225	5.6700	.1800	FELDMAN NC50A,89-67	
	3.226	1.100	1.232	5.4000	.3000	PICKUP PR132,1819-63	
	3.305	1.142	1.274	5.4000	.1500	FELDMAN NC50A,89-67	
	3.396	1.191	1.323	5.7300	.1800	FELDMAN NC50A,89-67	
	3.762	1.386	1.519	5.1900	.1600	FELDMAN NC50A,89-67	
	3.895	1.457	1.590	4.9200	.3300	ALITTI NC29,515-63	
	3.945	1.483	1.617	4.5500	.1400	FELDMAN NC50A,89-67	
	4.220	1.630	1.764	4.1900	.1400	FELDMAN NC50A,89-67	
	4.587	1.825	1.960	3.9800	.1000	FELDMAN NC50A,89-67	
	5.505	2.314	2.450	2.9400	.1000	FELDMAN NC50A,89-67	
	6.147	2.657	2.793	2.5700	.0900	FELDMAN NC50A,89-67	
	6.423	2.804	2.940	2.3900	.0800	FELDMAN NC50A,89-67	
	6.790	3.000	3.136	2.2500	.0800	FELDMAN NC50A,89-67	
	7.342	3.293	3.430	2.0700	.0800	FELDMAN NC50A,89-67	
	8.260	3.783	3.920	1.8200	.0600	FELDMAN NC50A,89-67	
	8.996	4.175	4.312	1.6300	.0600	FELDMAN NC50A,89-67	
	9.363	4.371	4.508	1.6200	.0600	FELDMAN NC50A,89-67	
	10.098	4.762	4.900	1.4200	.0400	FELDMAN NC50A,89-67	
	10.830	5.152	5.290	1.2700	.0400	FELDMAN NC50A,89-67	
THRESHOLD	1.17	.00	.03			25 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C		
					10 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. =1.00		
					K = 7.54 +- .85 N = -1.05 +- .08		
..... REACTION 8							
2 PRONGS	2.208	.558	.683	30.5000	2.1000	BURNST.PR137B,1044-65	
	2.296	.605	.731	45.9000	1.9000	VITTIT.PR135B,232-64	
	2.644	.790	.919	30.8000	1.3000	CASON PR150,1134-66	
	2.681	.810	.939	43.4000	1.3000	BAGGETT UCRL8302-58	
	2.718	.830	.959	36.8000	1.4000	CASON PR150,1134-66	
	2.795	.870	1.000	41.7000	1.8000	CASON PR150,1134-66	
	2.945	.950	1.081	35.4000	6.0000	ERWIN PR109,1364-58	
	4.924	2.005	2.140	28.7000	.7000	HAGOPI. PR152,1183-66	
	5.149	2.125	2.260	26.7500	.5600	REYNOL. PR184,1424-69	
	5.973	2.564	2.700	22.8000	.3000	MILLER PR153,1423-67	
	7.473	3.363	3.500	19.9000	.3000	AINUTD.JETP20,69-65	
	8.410	3.863	4.000	20.2300	.3000	BONDAR NC31,729-64	
	8.710	4.023	4.160	19.1100	.4000	EISNER PR164,1699-67	
	15.989	7.902	8.040	13.0500	.0500	DZIERBA,PR2,2544-70	
	19.667	9.861	10.000	11.7000	.3000	FLEURY,597,CERN62	
	19.667	9.861	10.000	12.1600	.2300	BARDADIN INR511/6-64	
	22.294	11.261	11.400	10.2000	.8000	FERBEL NC28,1214-63	
	25.296	12.861	13.000	9.6500	.3000	BRANDE. NPB16,287-70	
	25.296	12.861	13.000	10.2000	.6000	HARVARD 67	
	30.925	15.861	16.000	8.9500	2.4300	GOLDSACK NC23,941-62	
	38.431	19.861	20.000	8.1000	.2500	BRANDE. NPB16,287-70	
	47.813	24.861	25.000	7.4100	.2500	ELBERT NPB19,85-70	
	47.813	24.861	25.000	6.9700	.4000	ELBERT,NPB19,85-70	C
THRESHOLD	1.17	.00	.03			23 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C		
					15 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. = .60		
					K = 40.61 +- 1.14 N = -.54 +- .01		
..... REACTION 9							
2 PRONGS INELASTIC	2.644	.790	.919	16.7000	1.0000	CASON PR150,1134-66	
	2.718	.830	.959	18.7000	1.1000	CASON PR150,1134-66	
	2.795	.870	1.000	19.5000	1.1000	CASON PR150,1134-66	
	2.943	.949	1.080	16.3000	1.4000	ERWIN PR109,1364-58	
	30.925	15.861	16.000	5.4500	.7000	GOLDSACK NC23,941-62	
	30.925	15.861	16.000	5.4200	.3000	HONECKER,NPB13,571-69	
	47.813	24.861	25.000	2.8400	.4200	ELBERT,NPB19,85-70	C
	47.813	24.861	25.000	3.2800	.2800	ELBERT NPB19,85-70	
THRESHOLD	1.46	.16	.27			8 DATA POINTS LISTED	
..... REACTION 10							
2 PRONGS,STRANGE PART.	5.149	2.125	2.260	.7500	.0400	REYNOL. PR184,1424-69	
THRESHOLD	3.69	1.35	1.48				
..... REACTION 11							
2 PRONGS,Z0	3.038	1.000	1.131	2.5000	.7000	DERADO PR118,309-60	
THRESHOLD	1.85	.37	.49				
..... REACTION 12							
4 PRONGS	2.665	.801	.930	.4000	ERROR NOT GIVEN	GENSOLLEN,84,SIE63	
	2.681	.810	.939	.4000	.0010	BAGGETT UCRL8302-58	
	2.850	.900	1.030	.6000	ERROR NOT GIVEN	GENSOLLEN,84,SIE63	
	2.860	.905	1.035	.6000	.1000	PICKUP PR132,1819-63	
	2.945	.950	1.081	.9850	.2200	ERWIN PR109,1364-58	
	3.038	1.000	1.131	.6000	.3000	DERADO PR118,309-60	
	3.226	1.100	1.232	.7000	.1000	PICKUP PR132,1819-63	
	4.456	1.756	1.890	2.4400	.2400	WALKER PR143,1105-66	
	4.849	1.965	2.100	3.1800	.0900	SATTERB.PR134,B207-64	
	5.149	2.125	2.260	4.0400	.1300	REYNOL. PR184,1424-69	
	5.973	2.564	2.700	5.0100	.1200	KLEIN PR150,1123-66	
	7.473	3.363	3.500	8.0000	.2000	AINUTD.JETP20,69-65	
	8.410	3.863	4.000	7.4400	.1700	BONDAR NC31,485-64	
	15.989	7.902	8.040	9.9600	.0700	DZIERBA,PR2,2544-70	
	19.667	9.861	10.000	10.5000	.3000	FLEURY,597,CERN62	
	19.667	9.861	10.000	9.8700	.2000	BARDADIN INR511/6-64	
	21.543	10.861	11.000	10.2000	.4000	CASO NC47,675-67	
	22.294	11.261	11.400	9.8000	.8000	FERBEL NC28,1214-63	

FOOTNOTES

C=CROSS SECTION CORRECTED FOR UNSEEN KO DECAYS

********** PI-P **********

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 12								
4 PRONGS	25.296	12.861	13.000	9.4300	.3000		BRANDE. NPB16,287-70	
(CONTINUATION)	30.925	15.861	16.000	9.9000	.9000		GOLDSACK NC23,941-62	
	30.925	15.861	16.000	8.8000	.7000		BALLAM,PR3,2606-71	
	30.925	15.861	16.000	9.0200	.2200		HONECKER,NPB13,571-69	
	38.431	19.861	20.000	8.5200	.2600		BRANDE. NPB16,287-70	
	47.813	24.861	25.000	7.6500	.1700		ELBERT NPB19,85-70	
	47.813	24.861	25.000	6.7600	.2000		ELBERT,NPB19,85-70	C
THRESHOLD	1.84	.36	.48				25 DATA POINTS LISTED	
				FIT OF SIGMA AGAINST PLAB GEV/C				
				10 DATA POINTS USED ABOVE 10.0 GEV/C , PROB. =1.00				
				K = 20.22 +- 3.04 N = -.30 +- .06				
..... REACTION 13								
4 PRONGS (NON STRANGE)	20.136	10.111	10.250	8.3300	.3500		BISWAS PR134,8901-64	
	21.543	10.861	11.000	9.5000	.4000		CASO NC47,675-67	
THRESHOLD	1.82	.35	.47				2 DATA POINTS LISTED	
..... REACTION 14								
4 PRONGS,ZO	5.973	2.564	2.700	.9800	.0030		KLEIN PR150,1123-66	
THRESHOLD	2.68	.81	.94					
..... REACTION 15								
6 PRONGS	6.910	3.063	3.200	.1580	.0170		ALLEN BAPS13,589-68	
	7.473	3.363	3.500	.1700	.0300		AINUTD.JETP20,69-65	
	8.786	4.063	4.200	.4800	.0600		LUKE BAPS13,589-68	
	11.224	5.362	5.500	1.1600	.1400		BOMSE PR152,1328-67	
	12.106	5.832	5.970	1.3600	.0600		SUEN PR1,54-70	
	14.038	6.862	7.000	2.4000	.1500		CAMPBELL NPB12,549-69	
	19.667	9.861	10.000	3.3300	.0900		BARDADIN INR511/6-64	
	19.667	9.861	10.000	3.8000	.2000		FLEURY,597,CERN62	
	21.543	10.861	11.000	3.5000	.3000		CERN 68-7	
	25.296	12.861	13.000	4.3000	.1400		BRANDE. NPB16,287-70	
	30.925	15.861	16.000	4.6000	.6000		BALLAM SLAC334-67	
	30.925	15.861	16.000	4.7500	.6000		GOLDSACK NC23,941-62	
	30.925	15.861	16.000	4.8500	.1300		HONECKER,NPB13,571-69	
	38.431	19.861	20.000	5.2100	.1700		BRANDE. NPB16,287-70	
	47.813	24.861	25.000	4.5200	.1500		ELBERT,NPB19,85-70	C
	47.813	24.861	25.000	5.3100	.1200		ELBERT NPB19,85-70	
THRESHOLD	2.68	.81	.94				16 DATA POINTS LISTED	
..... REACTION 16								
6 PRONGS (NON-STRANGE)	21.543	10.861	11.000	3.5000	.3000		DARON.226,CERN68	
THRESHOLD	2.68	.81	.94					
..... REACTION 17								
6 PRONGS,STRANGE PART.	19.667	9.861	10.000	.2500	ERROR NOT GIVEN		BARDADIN INR511/6-64	
THRESHOLD	5.50	2.31	2.45					
..... REACTION 18								
6 PRONGS,AND HIGHER	22.294	11.261	11.400	5.0000	.5000		FERBEL NC28,1214-63	
THRESHOLD	2.68	.81	.94					
..... REACTION 19								
6 PRONGS,ZO	11.224	5.362	5.500	.4900	.0400		BOMSE PR152,1328-67	
	12.106	5.832	5.970	.6200	.1200		SUEN PR1,54-70	
	30.925	15.861	16.000	3.3000	.4000		BOCK.INR837/6/PH-67	
THRESHOLD	3.68	1.34	1.47				3 DATA POINTS LISTED	
..... REACTION 20								
8 PRONGS	11.186	5.342	5.480	.0640	.0070		BOMSE PR152,1328-67	
	12.106	5.832	5.970	.0600	.0100		SUEN PR1,54-70	
	14.038	6.862	7.000	.1300	ERROR NOT GIVEN		CAMPBELL BAPS13,32-68	
	19.667	9.861	10.000	.5300	.0600		FLEURY,597,CERN62	
	19.667	9.861	10.000	.5000	.0300		BARDADIN INR511/6-64	
	25.296	12.861	13.000	.9600	.0400		BRANDE. NPB16,287-70	
	30.925	15.861	16.000	1.3700	.0700		HONECKER,NPB13,571-69	
	30.925	15.861	16.000	1.3500	.3000		GOLDSACK NC23,941-62	
	30.925	15.861	16.000	1.5000	.3000		BALLAM HEID67	
	38.431	19.861	20.000	1.8400	.0600		BRANDE. NPB16,287-70	
	47.813	24.861	25.000	1.8700	.0800		ELBERT,NPB19,85-70	C
	47.813	24.861	25.000	2.2000	.0500		ELBERT NPB19,85-70	
THRESHOLD	3.68	1.34	1.47				12 DATA POINTS LISTED	
..... REACTION 21								
8 PRONGS AND HIGHER	25.296	12.861	13.000	.1300	.0300		BRANDE. ,NPB16,287-70	
	38.431	19.861	20.000	.4100	.0800		BRANDE. ,NPB16,287-70	
THRESHOLD	3.68	1.34	1.47				2 DATA POINTS LISTED	

FOOTNOTES

C=CROSS SECTION CORRECTED FOR UNSEEN KO DECAYS

PI-P

	S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 22										
10 PRONGS	12.106	5.832	5.970	U	2.0000	MICROB			SUEN PR1,54-70	
	19.667	9.861	10.000		.0400		.0090		BARDADIN INR511/6-64	
	19.667	9.861	10.000		.0350		.0150		FLEURY,597,CERN62	
	30.925	15.861	16.000		.2000		.1000		BALLAM SLAC334-67	A
	30.925	15.861	16.000		.2000		.0200		HONECKER,NPB13,571-69	
	47.813	24.861	25.000		.5650		.0190		ELBERT NPB19,85-70	
	47.813	24.861	25.000		.5230		.0250		ELBERT,NPB19,85-70	C
THRESHOLD	4.83	1.96	2.09						7 DATA POINTS LISTED	
..... REACTION 23										
10 PRONGS AND HIGHER	25.296	12.861	13.000		.0700		.1000		HARVARD 67	
	25.296	12.861	13.000		.1300		.0300		BRANDE. NPB16,287-70	
	38.431	19.861	20.000		.4100		.0800		BRANDE. NPB16,287-70	
THRESHOLD	4.83	1.96	2.09						3 DATA POINTS LISTED	
..... REACTION 24										
12 PRONGS	30.925	15.861	16.000		.0200		.0100		HONECKER,NPB13,571-69	
	47.813	24.861	25.000		.0940		.0060		ELBERT NPB19,85-70	
	47.813	24.861	25.000		.0940		.0060		ELBERT,NPB19,85-70	C
THRESHOLD	6.14	2.65	2.79						3 DATA POINTS LISTED	
..... REACTION 25										
14 PRONGS	30.925	15.861	16.000	U	1.0000	MICROB			HONECKER,NPB13,571-69	
	47.813	24.861	25.000		.0120		.0020		ELBERT,NPB19,85-70	C
	47.813	24.861	25.000		.0120		.0020		ELBERT NPB19,85-70	
THRESHOLD	7.61	3.43	3.57						3 DATA POINTS LISTED	
..... REACTION 26										
16 PRONGS	30.925	15.861	16.000	U	1.0000	MICROB			HONECKER,NPB13,571-69	
	47.813	24.861	25.000		2.7000	MICROB	1.0000		ELBERT,NPB19,85-70	C
	47.813	24.861	25.000		2.1000	MICROB	1.0000		ELBERT NPB19,85-70	
THRESHOLD	9.23	4.30	4.44						3 DATA POINTS LISTED	
..... REACTION 27										
18 PRONGS	30.925	15.861	16.000	U	1.0000	MICROB			HONECKER,NPB13,571-69	
THRESHOLD	11.01	5.25	5.39							
..... REACTION 28										
INELASTIC	2.131	.516	.641		12.0000		1.3000		GRARD NC22,193-61	
	2.318	.616	.743		16.0000		1.2000		GRARD NC22,193-61	
	2.494	.710	.838		14.1000		1.1000		GRARD NC22,193-61	
	2.826	.887	1.017		21.5000		1.7000		GRARD NC22,193-61	
	2.945	.950	1.081		25.9000		2.1000		ERWIN PR109,1364-58	
	3.198	1.085	1.217		20.4000		1.4000		GRARD NC22,193-61	
THRESHOLD	1.48	.17	.28						6 DATA POINTS LISTED	
..... REACTION 29										
CHARGED INELASTIC	1.595	.231	.343		.3000		.3000		GOODWIN UCRL9119-60	
	1.707	.291	.407		2.4000		.8000		GOODWIN UCRL9119-60	
	1.858	.371	.491		3.1000		.8000		GOODWIN UCRL9119-60	
	1.965	.428	.550		3.7000		1.0000		PERKINS PR118,1364-60	
	2.131	.516	.641		7.9000		1.1000		GRARD NC22,193-61	
	2.318	.616	.743		12.5000		1.0000		GRARD NC22,193-61	
	2.374	.646	.773		12.2000		.5800		OLIVER PR147,932-66	
	2.494	.710	.838		10.4000		1.0000		GRARD NC22,193-61	
	2.826	.887	1.017		17.9000		1.5000		GRARD NC22,193-61	
	3.198	1.085	1.217		15.8500		1.3000		GRARD NC22,193-61	
THRESHOLD	1.48	.17	.28						10 DATA POINTS LISTED	
..... REACTION 30										
NONSTRANGE PARTICLES	3.038	1.000	1.131		47.2000		3.5000		DERADO PR118,309-60	
THRESHOLD	1.16	0.00	0.00							
..... REACTION 31										
STRANGE PARTICLES	2.860	.905	1.035		.1000		ERROR NOT GIVEN		STEINB.PR132,1819-63	
	2.964	.960	1.091		1.0200		.2000		LEIPUN. PR109,1358-58	
	3.226	1.100	1.232		.7000		.1000		STEINB.PR132,181963	
	3.895	1.457	1.590		1.0500		.0300		GOUSSU NC42A,606-66	A
	5.973	2.564	2.700		1.4900		.0700		MILLER PR140B,360-65	
	6.067	2.614	2.750		1.5600		.1000		GOUSSU NC47A,383-67	
	6.535	2.864	3.000		1.6800		.2000		WANGLER PR137B9,14-65	
	8.410	3.863	4.000		2.4000		.3000		BARTSCH NC43A,1010-66	
	13.475	6.562	6.700		3.0000		ERROR NOT GIVEN		DICKINS.BAPS13,612-68	O
	13.663	6.662	6.800		2.0000		.3500		CHANG JETP13,323-61	
	14.038	6.862	7.000		2.0000		.3500		SOLOVIEV,388,ROCH60	A
	14.038	6.862	7.000		2.8800		.2000	.3000	PEEKNA,NPB27,605-71	
	19.667	9.861	10.000		3.3000		1.0000		BIGI,247,CERN62	
	30.925	15.861	16.000		3.5300		.8000		BARTKE NC24,876-62	
	47.813	24.861	25.000		4.0000		.3000		WATERS NP B17,445-70	
THRESHOLD	2.59	.76	.89						15 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

6 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .93

K = 1.54 +- .52 N =+ .30 +- .13

..... REACTION 32										
2 PI PRODUCTION	2.513	.720	.848		1.0300		.1300		WALLE NC53A,745-68	
THRESHOLD	1.84	.36	.48							
..... REACTION 33										
Z*+1300K-	15.914	7.862	8.000		.2000	MICROB	.3000	.1000	ANDERSON PL29B,136-69	
THRESHOLD	3.24	1.11	1.24							

FOOTNOTES

U=UPPER LIMIT
A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES
C=CROSS SECTION CORRECTED FOR UNSEEN KO DECAYS
O=ORDER OF MAGNITUDE

********** PI-P **********

	S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 34									
Z*+2000K-	15.914	7.862	8.000	1.4000	MICROB	1.9000	.5000	ANDERSON PL29B,136-69	
THRESHOLD	6.22	2.70	2.83						
..... REACTION 35									
DEAP	8.410	3.863	4.000	.0290		.0150	.0100	JONES,591,CERN62	
	8.654	3.993	4.130	.0160		.0100		PERL PR132,1273-63	
	10.192	4.812	4.950	8.0000	MICROB	12.0000	8.0000	PERL PR132,1273-63	
	10.286	4.862	5.000	.0210		.0100		JONES,591,CERN62	
THRESHOLD	7.92	3.60	3.74					4 DATA POINTS LISTED	
..... REACTION 36									
(P/PI+)PI+PI-PI-ZO	6.910	3.063	3.200	1.4600		.0700		CHUNG PR165,1491-68	
	8.786	4.063	4.200	2.7500		.1400		CHUNG PR165,1491-68	
	21.543	10.861	11.000	7.0500		.5000		CASO NC47A,675-67	
THRESHOLD	2.68	.81	.94					3 DATA POINTS LISTED	
..... REACTION 37									
(P/PI+)PI-ZO	2.665	.801	.930	1.1000		ERROR NOT GIVEN		GENSOLLEN,84,SIE63	
	2.850	.900	1.030	1.7000		ERROR NOT GIVEN		GENSOLLEN,84,SIE63	
THRESHOLD	1.84	.36	.48					2 DATA POINTS LISTED	
..... REACTION 38									
(P/PI+)2PI+3PI-ZO	11.186	5.342	5.480	.4900		.0400		BOMSE PR162,1328-67	
	21.543	10.861	11.000	2.2000		.3500		CERN 68-7	
	30.925	15.861	16.000	3.1300		.1800		JUNKMANN NPB8,471-68	
THRESHOLD	3.68	1.34	1.47					3 DATA POINTS LISTED	
..... REACTION 39									
(P/PI+)KSKSPI+PI-PI-ZO	14.038	6.862	7.000	0.0000	MICROB	.7000		PEEKNA,NP827,605-71	$
THRESHOLD	4.56	1.81	1.94						
..... REACTION 40									
(P/PI+)KSKSPI-ZO	14.038	6.862	7.000	.0176		.0037		PEEKNA,NP827,605-71	
THRESHOLD	3.44	1.21	1.35						
..... REACTION 41									
PNAP	15.914	7.862	8.000	.0970		.0260		ANDREWS PR163,1502-67	
THRESHOLD	7.93	3.61	3.74						
..... REACTION 42									
PPI+PI-PI-	2.368	.643	.770	.0800		.0200		OLIVER PR147,932-66	
	2.381	.650	.777	.0500		.0200		FEMINO NC52A,892-67	
	2.513	.720	.848	.1900		.0600		WALLE NC53A,745-68	
	2.683	.811	.940	.2600		.1400		KENNEY,PR124,1568,61	
	2.796	.871	1.001	.3000		.0300		FICKINGER NC32,18-64	
	2.841	.895	1.025	.3300		.0400		COLLEY PR130,357-63	
	2.982	.970	1.101	.3200		.2100		KENNEY,PR124,1568,61	
	3.226	1.100	1.232	.5400		.3200		KENNEY,PR124,1568,61	
	3.602	1.300	1.433	.7000		.4000	.2000	DAHL UCRL16978-67	1
	3.895	1.457	1.590	.8800		.0400		ALITTI NC29,515-63	
	4.456	1.756	1.890	1.5800		.3000		CHRIST.PR143,1105-66	
	4.718	1.895	2.030	1.6400		.1500		CARMONY,44,CERN62	
	4.849	1.965	2.100	1.6700		.0800		BOYD PR165,1458-68	
	5.973	2.564	2.700	1.8300		.0500		KLEIN PR150,1123-66	
	6.067	2.614	2.750	1.8100		.0500		ALITTI NC35,1-65	
	6.910	3.063	3.200	1.9100		.0800		CHUNG PR165,1491-68	
	7.717	3.493	3.630	1.6800		.1700	.0900	LEE PR159,1156-67	
	7.848	3.563	3.700	1.6700		.0900		MOEBS PR165,1491-68	
	8.204	3.753	3.890	1.9200		.0100		WOHLMUT NPB18,505-70	
	8.410	3.863	4.000	1.9100		.0800		BONDAR NC31,485-64	
	8.786	4.063	4.200	1.9200		.1000		CHUNG PR155,1491-68	
	12.106	5.832	5.970	1.3900		.1500		GALLOWAY,PR1,3077-70	
	12.162	5.862	6.000	1.1300		.1200		ALYEA VIENNA261-68	
	12.162	5.862	6.000	1.3900		.1500		MOTT,NPB16,102-70	
	13.475	6.562	6.700	1.3000		.2000		MIYASHITA PR1,771-70	
	14.038	6.862	7.000	1.7000		.2000		CASON PR148,1282-66	
	15.989	7.902	8.040	1.2700		.0700		DZIERBA,PR2,2544-70	
	20.136	10.111	10.250	1.0100		.2100		BISWAS PR134B,901-64	
	21.543	10.861	11.000	1.1400		.1100		CASO NC57A,699-68	
	25.296	12.861	13.000	1.0120		.0630	.0930	BRANDE. NPB16,287-70	
	25.296	12.861	13.000	1.0300		.0500		SALZBE. BAPS14,573-69	
	30.925	15.861	16.000	1.1300		.0500		KITTEL,NPB30,333-71	
	30.925	15.861	16.000	1.0800		.1200		BALLAM PRL21,934-68	
	38.431	19.861	20.000	.8800		.0620	.0890	BRANDE. NPB16,287-70	
	47.813	24.861	25.000	.9000		.2000		ERWIN BAPS13,33-68	
THRESHOLD	1.84	.36	.48					35 DATA POINTS LISTED	
				FIT OF SIGMA AGAINST PLAB GEV/C					
				16 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .96					
				K = 3.39 +- .47 N = -.44 +- .06					
..... REACTION 43									
PPI+PI-PI- (NON RESONANT)	8.204	3.753	3.890	.6340		ERROR NOT GIVEN		WOHLMUT NPB18,505-70	
	15.914	7.862	8.000	.3000		.0700		LAMSA PR156,1395-68	
THRESHOLD	1.84	.36	.48					2 DATA POINTS LISTED	

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FOOTNOTES

$=DATA POINT NOT USED IN FITTING OR PLOTTING
1=AVERAGE VALUE OVER A BAND OF MOMENTA

PI-P

		S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 44											
PPI+PI-PI-P10		3.895	1.457	1.590		.1800		.0200		ALITTI NC29,515-63	
		4.456	1.756	1.890		.5200		.1400		CHRIST.PR143,1105-66	
		4.718	1.895	2.030		.7400		.0800		CARMONY,44,CERN62	
		4.849	1.965	2.100		1.1700		.0600		BOYD PR166,1458-68	
		5.973	2.564	2.700		1.5300		.0400		KLEIN PR150,1123-66	
		6.067	2.614	2.750		1.4300		.0500		ALITTI PL21,354-66	
		6.535	2.864	3.000		1.5000		.2000		HAGOP.PR165,1491-68	
		6.910	3.063	3.200		1.8600		.0800		CHUNG PR165,1491-68	
		7.717	3.493	3.630		1.9100		.1400		LEE PR159,1156-67	
		7.848	3.563	3.700		2.1000		.1000		MOEBS PR165,1491-68	
		8.410	3.863	4.000		2.1100		.0900		BONDAR NC31,485-64	
		8.786	4.063	4.200		2.1800		.1100		CHUNG PR165,1491-68	
		12.162	5.862	6.000		1.3300		.1400		ALYEA VIENNA261-68	
		13.475	6.562	6.700		1.7200		.2000		MIYASHITA PR1,771-70	
		14.038	6.862	7.000		1.6000		.1200		MILGRAM,NPB18,1-70	
		15.989	7.902	8.040		1.3900		.0900		DZIERBA,PR2,2544-70	
		20.136	10.111	10.250		1.7700		.3500		BISWAS PR134B,901-64	
		21.543	10.861	11.000		1.2300		.1100		CASO VIENNA326-68	
		21.543	10.861	11.000		1.2400		.1100		KITTEL,NPB30,333-71	
		25.296	12.861	13.000		.8400		.0800		BRANDENB,NPB22,157-70	
		30.925	15.861	16.000		.8200		.1000		KITTEL,NPB30,333-71	
		30.925	15.861	16.000		1.2400		.1500		BALLAM,PR3,2606-71	
		38.431	19.861	20.000		.7800		.1000		BRANDENB,NPB22,157-70	
		47.813	24.861	25.000		.7000		.3000		ERWIN BAPS13,33-68	
	THRESHOLD	2.24	.58	.70						24 DATA POINTS LISTED	
						FIT OF SIGMA AGAINST PLAB GEV/C					
						14 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .98					
						K = 5.00 +- .84 N = -.61 +- .09					
..... REACTION 45											
PPI+PI-PI-PIO(NON RESON.)		6.067	2.614	2.750		.8200		.0200		ALITTI PL21,354-66	
	THRESHOLD	2.24	.58	.70							
..... REACTION 46											
(PPIO/NPI+)PI+PI-PI-		7.717	3.493	3.630		.2500		.0300		LEE PR159,1156-67	
	THRESHOLD	2.24	.58	.70							
..... REACTION 47											
PPI+PI-PI-Z0		5.973	2.564	2.700		.4400		.0200		KLEIN PR150,1123-66	
		6.067	2.614	2.750		.3500		.0200		ALITTI NC35,1-65	
		8.410	3.863	4.000		.8500		.0600		BONDAR NC31,485-64	
		20.136	10.111	10.250		2.2200		.5600		BISWAS PR134B,901-64	
		21.543	10.861	11.000		1.8000		.0800		DAUDIN PC-66	
		30.925	15.861	16.000		2.9400		.1600		HONECKER,NPB13,571-69	
	THRESHOLD	2.68	.81	.94						6 DATA POINTS LISTED	
..... REACTION 48											
PPI-GAM		1.800	.340	.459		.0900		.0300	.0600	BLOKHINT.JETP17,80-63	
	THRESHOLD	1.16	.00	.01							
... REACTION 49											
PPI-PIO		1.583	.224	.336		0.0000	MICROB	ERROR NOT GIVEN		DEAHL PR124,1987-61	$
		1.681	.277	.392		.0800		.0800		BLOKHI. JETP17,340-63	
		1.707	.291	.407	U	.2000		.1000		BATUS. JETP13,1070-61	
		1.795	.337	.456		.1700		.0500		SAXSON,PR2,1790-70	
		1.800	.340	.459		.1300		.0600	.0400	BLOKHINT.JETP17,80-63	
		1.838	.360	.480		.3100		ERROR NOT GIVEN		BARISH PR135B,2400-64	
		1.872	.379	.499		.3200		.0500		SAXSON,PR2,1790-70	
		1.874	.380	.500		.3100		.0700	.0400	BARISH PR135B,416-64	
		1.968	.430	.552		.8700		.0500		SAXSON,PR2,1790-70	
		2.023	.459	.582		1.2200		.1300		POIRIER PR148,1311-66	
		2.208	.558	.683		3.9900		.5000		BURNST.PR137B,1044-65	
		2.294	.604	.730		4.9800		.5400		SHEPHARD,244,ATHENS65	
		2.374	.646	.773		4.6500		.1700		OLIVER PR147,932-66	
		2.381	.650	.777		4.7900		.2600		FEMINO NC52A,892-67	
		2.513	.720	.848		5.2500		.3000		WALLE NC53A,745-68	
		2.616	.775	.904		4.8000		.3000		BERTANZA NC44A,712-66	
		2.644	.790	.919		5.6000		.5000		CASON PR150,1134-66	
		2.665	.801	.930		3.9000		.5000		GENSOLLEN,84,SIE63	
		2.681	.810	.939		6.4000		ERROR NOT GIVEN		BAGGETT UCRL8302-58	
		2.718	.830	.959		5.7000		.5000		CASON PR150,1134-66	
		2.795	.870	1.000		5.4000		.5000		CASON PR150,1134-66	
		2.850	.900	1.030		5.7000		.6000		GENSOLLEN,84,SIE63	
		2.860	.905	1.035		6.5000		.5000		PICKUP PR132,1819-63	
		2.943	.949	1.080		6.5000		.5000		BACON PR157,1263-67	
		2.990	.974	1.105		4.3000		.3000		PICKUP PR132,1819-63	
		3.038	1.000	1.131		5.3000		1.2000		DERADO PR118,309-60	
		3.226	1.100	1.232		4.3000		.3000		PICKUP PR132,1819-63	
		3.503	1.247	1.380		4.3000		.2000		BACON PR157,1263-67	
		3.602	1.300	1.433		5.4000		.8000		DAHL UCRL16978-67	1
		3.895	1.457	1.590		4.4800		.1500		ALITTI NC29,515-63	
		4.101	1.566	1.700		5.4100		.5400		ALLEN NC58A,701-68	
		4.119	1.576	1.710		5.8000		.4000		BACON PR157,1263-67	
		4.849	1.965	2.100		3.3300		.0600		WEST PR149,1089-66	
		4.924	2.005	2.140		3.7000		.2000		HAGOPI. PR152,1183-66	
		5.149	2.125	2.260		3.7700		.1300		REYNOL. PR184,1424-69	
		5.973	2.564	2.700		2.4000		.2000		MILLER PR153,1423-67	
		6.104	2.634	2.770		2.8000		.1000		BATON,NPB21,551-70	
		6.161	2.664	2.800		2.3000		.4000		SHALAM. JETP15,770-62	
		6.535	2.864	3.000		2.7500		.2500		SELOVE PRL9,272-62	
		7.717	3.493	3.630		2.2300		.1800		LEE PR159,1156-67	
		8.410	3.863	4.000		2.2100		.1000		BONDAR NC31,729-64	
		8.710	4.023	4.160		1.8800		.0500		EISNER PR164,1699-67	
		10.286	4.862	5.000		1.5200		.0900		CARMONY VIENNA427-68	

FOOTNOTES

$=DATA POINT NOT USED IN FITTING OR PLOTTING
U=UPPER LIMIT
1=AVERAGE VALUE OVER A BAND OF MOMENTA

PI-P

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 49								
PPI-PIO	12.162	5.862	6.000	.8900	.1300		CRENNELL PL28B,136-68	
(CONTINUATION)	14.038	6.862	7.000	.8500	.1000		OH,PR1,2495-70	
	15.989	7.902	8.040	.4800	.0400		DZIERBA,PR2,2544-70	
	19.667	9.861	10.000	.4700	.0900		FLEURY,597,CERN62	
	21.543	10.861	11.000	.6600	.1000		CASO,NC66A,11-70	
	30.925	15.861	16.000	.3000	.1000		HONECKER,NPB13,571-69	
	30.925	15.861	16.000	.4300	.0800		BALLAM,PR3,2606-71	
	47.813	24.861	25.000	.3000	.1000		ERWIN BAPS13,33-68	
THRESHOLD	1.48	.17	.28				51 DATA POINTS LISTED	
				FIT OF SIGMA AGAINST PLAB GEV/C				
				13 DATA POINTS USED ABOVE 3.0 GEV/C , PROB. = .34				
				K = 14.83 +- 2.91 N = -1.45 +- .13				
..... REACTION 50								
PPI-(PIO/GAM)	1.748	.313	.430	.1300	.0600		BARISH PR135B,416-64	
	1.874	.380	.500	.4000	.0300		BARISH PR135B,416-64	
THRESHOLD	1.16	0.00	0.00				2 DATA POINTS LISTED	
..... REACTION 51								
(PPIO/NPI+)PI-	21.543	10.861	11.000	.0900	.0200		DAUDIN PC	
	34.678	17.861	18.000	1.0000	ERROR NOT GIVEN		FERRERO NC27,1066-63	O
THRESHOLD	1.48	.17	.28				2 DATA POINTS LISTED	
..... REACTION 52								
(PPIO/NPI+)PI-PIO	34.678	17.861	18.000	1.5000	ERROR NOT GIVEN		FERRERO NC27,1066-63	O
THRESHOLD	1.84	.36	.48					
..... REACTION 53								
(P/NPI+)PI-ZO	21.543	10.861	11.000	1.2000	.0600		DAUDIN PC-66	
THRESHOLD	1.84	.36	.48					
..... REACTION 54								
PPI-PIOPIO	2.513	.720	.848	.0500	.0300		WALLE NC53A,745-68	
	6.161	2.664	2.800	1.0000	.3000		SHALAM. JETP15,770-62	
THRESHOLD	1.84	.36	.48				2 DATA POINTS LISTED	
..... REACTION 55								
PPI-ZO	2.381	.650	.777	.0500	.0200		FEMINO NC52A,892-67	
	2.860	.905	1.035	.2000	.1000		PICKUP PR132,1819-63	
	2.943	.949	1.080	.2000	.1000		BACON PR157,1263-67	
	3.226	1.100	1.232	.8000	.1000		PICKUP PR132,1819-63	
	3.503	1.247	1.380	1.0000	.1000		BACON PR157,1263-67	
	3.895	1.457	1.590	.8000	.0600		ALITTI NC29,515-63	
	4.101	1.566	1.700	.3600	.0400		ALLEN NC58A,701-68	
	4.119	1.576	1.710	1.3000	.2000		BACON PR157,1263-67	
	4.849	1.965	2.100	1.9300	.0400		WEST PR143,1089-66	
	4.924	2.005	2.140	2.9000	.2000		HAGOPI. PR152,1183-66	
	5.149	2.125	2.260	1.7100	.0700		REYNOL. PR184,1424-69	
	5.973	2.564	2.700	2.0000	.2000		MILLER PR153,1423-67	
	6.067	2.614	2.750	2.0000	ERROR NOT GIVEN		ALITTI PL15,69-65	
	6.104	2.634	2.770	2.0000	.1000		BATON,NPB21,551-70	
	8.410	3.863	4.000	2.6700	.1200		BONDAR NC31,729-64	
	8.710	4.023	4.160	2.5100	.0600		EISNER PR164,1699-67	
	21.543	10.861	11.000	1.4300	.0600		DAUDIN PC-66	
	30.925	15.861	16.000	1.5800	.0900		HONECKER,NPB13,571-69	
THRESHOLD	1.84	.36	.48				18 DATA POINTS LISTED	
..... REACTION 56								
P2PI+3PI-	8.223	3.763	3.900	.1150	.0110		ABE,PR2,91-70	
	11.186	5.342	5.480	.2100	.0200		BOMSE J.HOPKINS UN-67	
	12.106	5.832	5.970	.2500	.0200		SUEN PR1,54-70	
	12.162	5.862	6.000	.2200	.0200		SUEN VIENNA260-68	
	14.038	6.862	7.000	.2600	.0300		CAMPBELL NPB12,549-69	
	19.667	9.861	10.000	.4200	.0500		BARDADIN INR511/6-64	
	21.543	10.861	11.000	.2900	.0300		CASO,NC66A,11-70	
	30.925	15.861	16.000	.2500	.0200		HONECKER,NPB13,571-69	
THRESHOLD	2.68	.81	.94				8 DATA POINTS LISTED	
..... REACTION 57								
P2PI+3PI-PIO	11.186	5.342	5.480	.3400	.0300		BOMSE PR162,1328-67	
	12.106	5.832	5.970	.3500	.0400		SUEN PR1,54-70	
	12.162	5.862	6.000	.3000	.0300		SUEN VIENNA260-68	
	14.038	6.862	7.000	.6300	.0900		CAMPBELL NPB12,549-69	
	21.543	10.861	11.000	.7100	.0700		CASO,NC66A,11-70	
	30.925	15.861	16.000	.5500	.0300		HONECKER,NPB13,571-69	
THRESHOLD	3.16	1.07	1.20				6 DATA POINTS LISTED	
..... REACTION 58								
P2PI+3PI-ZO	11.186	5.342	5.480	.4900	.0400		BOMSE PR162,1328-67	
	30.925	15.861	16.000	2.0000	.1100		HONECKER,NPB13,571-69	
THRESHOLD	3.68	1.34	1.47				2 DATA POINTS LISTED	

FOOTNOTES

O=ORDER OF MAGNITUDE

********** PI-P **********

		S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 59											
P3PI+4PI-		30.925	15.861	16.000		.0940		.0230		HONECKER,NPB13,571-69	
	THRESHOLD	3.68	1.34	1.47							
..... REACTION 60											
P3PI+4PI-PI0		30.925	15.861	16.000		.1260		.0240		HONECKER,NPB13,571-69	
	THRESHOLD	4.24	1.64	1.77							
..... REACTION 61											
P3PI+4PI-Z0		30.925	15.861	16.000		.5230		.0630		HONECKER,NPB13,571-69	
	THRESHOLD	4.83	1.96	2.09							
..... REACTION 62											
P4PI+5PI-		30.925	15.861	16.000		9.0000	MICROB	6.0000		HONECKER,NPB13,571-69	
	THRESHOLD	4.83	1.96	2.09							
..... REACTION 63											
P4PI+5PI-PI0		30.925	15.861	16.000		.0650		.0170		HONECKER,NPB13,571-69	
	THRESHOLD	5.47	2.29	2.43							
..... REACTION 64											
P4PI+5PI-Z0		30.925	15.861	16.000		.0750		.0220		HONECKER,NPB13,571-69	
	THRESHOLD	6.14	2.65	2.79							
..... REACTION 65											
P5PI+6PI-		30.925	15.861	16.000	U	6.0000	MICROB			HONECKER,NPB13,571-69	
	THRESHOLD	6.14	2.65	2.79							
..... REACTION 66											
P5PI+6PI-PI0		30.925	15.861	16.000	U	3.0000	MICROB	3.0000		HONECKER,NPB13,571-69	
	THRESHOLD	6.85	3.03	3.17							
..... REACTION 67											
P5PI+6PI-Z0		30.925	15.861	16.000	U	8.0000	MICROB	6.0000		HONECKER,NPB13,571-69	
	THRESHOLD	7.61	3.43	3.57							
..... REACTION 68											
PK+K-PI-		5.805	2.474	2.610		3.0000	MICROB	2.6000		DAHL PR163,1377-67	
		5.973	2.564	2.700		.0120		.0090		MILLER PR140B,360-65	
		6.273	2.724	2.860		.0210		.0130		DAHL PR163,1377-67	
		6.535	2.864	3.000		.0280		.0200		WANGLER PR137B,414-65	
		6.554	2.874	3.010		.0250		.0130		DAHL PR163,1377-67	
		6.779	2.994	3.130		.0270		.0100		DAHL PR163,1377-67	
		6.929	3.073	3.210		.0380		.0100		DAHL PR163,1377-67	
		8.204	3.753	3.890		.0630		.0200		DAHL PR163,1377-67	
		8.410	3.863	4.000		.1050		.0520		BARTSCH NC43A,1010-66	
		8.710	4.023	4.160		.0770		.0200		DAHL PR163,1377-67	
		9.630	4.513	4.650		.0500		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	4.27	1.66	1.79						11 DATA POINTS LISTED	
..... REACTION 69											
PK+K-PI-PI0		8.410	3.863	4.000		.0760		.0540		BARTSCH NC43A,1010-66	
	THRESHOLD	4.87	1.97	2.11							
..... REACTION 70											
PK+K0PI-PI-		6.723	2.964	3.100		2.0000	MICROB	.8000		DAHL PR163,1377-67	1
		8.410	3.863	4.000		9.7000	MICROB	2.6000		DAHL PR163,1377-67	1
		8.410	3.863	4.000		.0120		.0080		BARTSCH NC43A,1010-66	
	THRESHOLD	4.87	1.97	2.11						3 DATA POINTS LISTED	
..... REACTION 71											
PK-K0		3.895	1.457	1.590		2.0000	MICROB	2.0000		GOUSSU NC42A,606-66	
		3.942	1.481	1.615		1.6000	MICROB	1.6000		DAHL PR163,1377-67	
		4.082	1.556	1.690		.0118		.0053		SCHWARTZ UCRL11360-64	
		4.381	1.716	1.850		.0420		.0100		SCHWARTZ UCRL11360-64	
		4.550	1.805	1.940		.0300		.0060		DAHL PR163,1377-67	
		4.568	1.815	1.950		.0380		.0090		SCHWARTZ UCRL11360-64	
		4.625	1.845	1.980		.0310		.0080		DAHL PR163,1377-67	
		4.756	1.915	2.050		.0350		.0060		DAHL PR163,1377-67	
		4.756	1.915	2.050		.0400		.0130		SCHWARTZ UCRL11360-64	
		4.924	2.005	2.140		.0300		.0120		DAHL PR163,1377-67	
		4.943	2.015	2.150		.0330		.0080		SCHWARTZ UCRL11360-64	
		5.130	2.115	2.250		.0700		.0110		SCHWARTZ UCRL11360-64	
		5.317	2.215	2.350		.0770		.0160		SCHWARTZ UCRL11360-64	
		5.587	2.358	2.494		.0430		.0130		HANFT COO-94-67	
		5.805	2.474	2.610		.0520		.0090		DAHL PR163,1377-67	
		5.973	2.564	2.700		.0810		.0130		MILLER.PR140B,360-65	
		6.067	2.614	2.750		.0780		.0160		GOUSSU NC47A,383-67	
		6.273	2.724	2.860		.0900		.0200		DAHL PR163,1377-67	
		6.535	2.864	3.000		.0660		.0160		WANGLER PR137B,414-65	
		6.554	2.874	3.010		.0850		.0140		DAHL PR163,1377-67	
		6.779	2.994	3.130		.0540		.0080		DAHL PR163,1377-67	
		6.910	3.063	3.200		.0651		.0053		CHUNG PRL18,100-67	
		6.929	3.073	3.210		.0630		.0070		DAHL PR163,1377-67	
		8.204	3.753	3.890		.0800		.0130		DAHL PR163,1377-67	
		8.410	3.863	4.000		.0980		.0250		BARTSCH NC43A,1010-66	
		8.710	4.023	4.160		.0540		.0090		DAHL PR163,1377-67	
		8.786	4.063	4.200		.0657		.0079		CHUNG PRL18,100-67	
		9.630	4.513	4.650		.0200		ERROR NOT GIVEN		BERTANZA PR130,786-63	
		14.038	6.862	7.000		.0318		.0083		PEEKNA,NPB27,605-71	
	THRESHOLD	3.71	1.36	1.49						29 DATA POINTS LISTED	

FOOTNOTES

U=UPPER LIMIT
1=AVERAGE VALUE OVER A BAND OF MOMENTA

PI-P

		S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 72										
PK-K0PI+PI-		6.723	2.964	3.100	2.3000	MICROB	.8000		DAHL PR163,1377-67	1
		8.410	3.863	4.000	.0158		.0034		DAHL PR163,1377-67	1
		9.630	4.513	4.650	.0200		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	4.87	1.97	2.11					3 DATA POINTS LISTED	
..... REACTION 73										
PK-K0PI+PI-PI0		9.630	4.513	4.650	.0400		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	5.50	2.31	2.45						
..... REACTION 74										
PK-K0PI0		4.756	1.915	2.050	1.5000	MICROB	1.1000		DAHL PR163,1377-67	
		4.924	2.005	2.140	4.6000	MICROB	4.6000		DAHL PR163,1377-67	
		5.587	2.358	2.494	.0130		.0070		HANFT COO-94-67	
		5.805	2.474	2.610	5.2000	MICROB	2.6000		DAHL PR163,1377-67	
		5.973	2.564	2.700	.0120		.0050		MILLER PR140B,360-65	
		6.067	2.614	2.750	.0300		.0100		GOUSSU NC47A,383-67	
		6.273	2.724	2.860	.0250		.0100		DAHL PR163,1377-67	
		6.535	2.864	3.000	.0320		.0110		WANGLER PR137B,414-65	
		6.554	2.874	3.010	.0280		.0070		DAHL PR163,1377-67	
		6.779	2.994	3.130	.0230		.0050		DAHL PR163,1377-67	
		6.929	3.073	3.210	.0350		.0050		DAHL PR163,1377-67	
		8.204	3.753	3.890	.0350		.0080		DAHL PR163,1377-67	
		8.410	3.863	4.000	.0640		.0210		BARTSCH NC43A,1010-66	
		8.710	4.023	4.160	.0750		.0200		DAHL PR163,1377-67	
		9.630	4.513	4.650	.0900		ERROR NOT GIVEN		BERTANZA PR130,786-63	
		14.038	6.862	7.000	.0362		.0116		PEEKNA,NPB27,605-71	
	THRESHOLD	4.27	1.66	1.79					16 DATA POINTS LISTED	
..... REACTION 75										
PK-K0Z0		5.973	2.564	2.700	2.0000	MICROB	2.0000		MILLER PR140B,360-65	
	THRESHOLD	4.87	1.97	2.11						
..... REACTION 76										
PK-KS		12.162	5.862	6.000	.0100		ERROR NOT GIVEN		CRENNELL PL28B,136-68	R
	THRESHOLD	3.72	1.36	1.50						
..... REACTION 77										
PK0K0PI+PI-PI-		9.630	4.513	4.650	.0300		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	5.50	2.31	2.45						
..... REACTION 78										
PK0K0PI-		6.067	2.614	2.750	.0160		.0060		GOUSSU NC47A,383-67	
		8.410	3.863	4.000	.0510		.0140		BARTSCH NC43A,1010-66	
		9.630	4.513	4.650	.0200		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	4.27	1.66	1.79					3 DATA POINTS LISTED	
..... REACTION 79										
PK0K(0,-)PI(-,0)		21.543	10.861	11.000	.1200		.0200		PELOSI BAPS14,561-69	
	THRESHOLD	4.27	1.66	1.79						
..... REACTION 80										
PK0K0PI-PI0		8.410	3.863	4.000	.0200		.0200		BARTSCH NC43A,1010-66	
	THRESHOLD	4.87	1.97	2.11						
..... REACTION 81										
PKSKSPI+PI-PI-		14.038	6.862	7.000	2.9000	MICROB	1.4000		PEEKNA,NPB27,605-71	
	THRESHOLD	5.53	2.33	2.46						
..... REACTION 82										
PKSKSPI+PI-PI-PI0		14.038	6.862	7.000	3.5000	MICROB	1.6000		PEEKNA,NPB27,605-71	
	THRESHOLD	6.21	2.69	2.83						
..... REACTION 83										
PKSKSPI-		5.805	2.474	2.610	2.1000	MICROB	1.6000		DAHL PR163,1377-67	
		5.973	2.564	2.700	4.0000	MICROB	2.0000		MILLER PR140B,360-65	
		6.535	2.864	3.000	.0100		.0050		WANGLER PR137B,414-65	
		6.554	2.874	3.010	6.1000	MICROB	2.8000		DAHL PR163,1377-67	
		6.779	2.994	3.130	3.9000	MICROB	2.0000		DAHL PR163,1377-67	
		6.929	3.073	3.210	8.6000	MICROB	2.1000		DAHL PR163,1377-67	
		8.204	3.753	3.890	.0120		.0040		DAHL PR163,1377-67	
		8.410	3.863	4.000	.0160		.0090		BARTSCH NC43A,1010-66	
		8.710	4.023	4.160	.0180		.0050		DAHL PR163,1377-67	
		14.038	6.862	7.000	9.7000	MICROB	3.0000		PEEKNA,NPB27,605-71	
	THRESHOLD	4.29	1.67	1.80					10 DATA POINTS LISTED	
..... REACTION 84										
PKSKSPI-PI0		6.535	2.864	3.000	3.0000	MICROB	3.0000		WANGLER PR137B,414-65	
		6.723	2.964	3.100	1.0000	MICROB	.6000		DAHL PR163,1377-67	1
		8.410	3.863	4.000	5.0000	MICROB	2.3000		DAHL PR163,1377-67	1
		14.038	6.862	7.000	6.7000	MICROB	2.3000		PEEKNA,NPB27,605-71	
	THRESHOLD	4.89	1.99	2.12					4 DATA POINTS LISTED	

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA
R=CROSS SECTION FOR FINAL STATES OBSERVED IN THE BUBBLE CHAMBER

********** PI-P **********

	S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 85										
PKSKLPI-	4.924	2.005	2.140		2.5000	MICROB	2.5000		DAHL PR163,1377-67	
	5.805	2.474	2.610		3.1000	MICROB	1.4000		DAHL PR163,1377-67	
	5.973	2.564	2.700		2.0000	MICROB	2.0000		MILLER PR140B,360-65	
	6.273	2.724	2.860		9.0000	MICROB	5.0000		DAHL PR163,1377-67	
	6.535	2.864	3.000		9.0000	MICROB	4.0000		DAHL PR163,1377-67	
	6.554	2.874	3.010		.0134		.0038		DAHL PR163,1377-67	
	6.779	2.994	3.130		.0210		.0040		DAHL PR163,1377-67	
	6.929	3.073	3.210		.0142		.0027		DAHL PR163,1377-67	
	8.204	3.753	3.890		.0320		.0060		DAHL PR163,1377-67	
	8.410	3.863	4.000		.0200		.0100		BARTSCH NC43A,1010-66	
	8.710	4.023	4.160		.0140		.0050		DAHL PR163,1377-67	
	14.038	6.862	7.000		.0133		.0063		PEEKNA,NPB27,605-71	
THRESHOLD	4.30	1.67	1.81						12 DATA POINTS LISTED	
..... REACTION 86										
PETPI+PI-PI-	6.910	3.063	3.200		7.8000	MICROB	3.9000		CHUNG PR165,1491-68	*
	8.410	3.863	4.000		.0350		.0160		BONDAR NC31,485-64	
	8.786	4.063	4.200		.0340		.0130		CHUNG PR165,1491-68	*
	15.989	7.902	8.040		.0240		.0130		DZIERBA PR2,2544-70	*
	30.925	15.861	16.000		.0900		.0170		JUNKMANN NPB8,471-68	
THRESHOLD	3.64	1.32	1.45						5 DATA POINTS LISTED	
..... REACTION 88										
PETPI+2PI-=P2PI+3PI-PI0	30.925	15.861	16.000		.0260		.0050		JUNKMANN NPB8,471-68	
THRESHOLD	3.64	1.32	1.45							
..... REACTION 87										
PETPI+PI-PI-=PPI+PI-PI-Z0	6.910	3.063	3.200		6.0000	MICROB	3.0000		CHUNG PR155,1491-68	
	8.786	4.063	4.200		.0260		.0100		CHUNG PR165,1491-68	
	15.989	7.902	8.040		.0190		.0100		DZIERBA,PR2,2544-70	
THRESHOLD	3.64	1.32	1.45						3 DATA POINTS LISTED	
..... REACTION 89										
PETPI-	3.111	1.039	1.170		.0688		.0082		GROSSM. PR178,2109-69	
	3.508	1.250	1.383		.0866		.0390		PICKUP PRL8,329-62	
	4.456	1.756	1.890		.1720		.0430		CHRIST.PR143,1105-6	
	4.718	1.895	2.030		.1340		.0430		CARMONY 44 CERN-62	
	4.849	1.965	2.100		.5630		.2160		BOYD PR166,1458-68	
	5.973	2.564	2.700		.1300		.0870		KLEIN PR150,1123-66	
	6.067	2.614	2.750		.0400		.0060		ALITTI PL21,354-66	
	6.910	3.063	3.200		.1340		.0390		CHUNG PR165,1491-68	
	8.410	3.863	4.000		.1100		.0400		BONDAR NC31,729-64	
	8.786	4.063	4.200		.0900		.0300		CHUNG PR165,1491-68	
	15.989	7.902	8.040		.0650		.0170		DZIERBA,PR2,2544-70	
	21.543	10.861	11.000		.0870		ERROR NOT GIVEN		CASO NC47A,675-67	
	30.925	15.861	16.000		.0250		.0065		ABBCH VIENNA-68	
THRESHOLD	2.65	.79	.92						13 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C					
					5 DATA POINTS USED ABOVE 3.0 GEV/C , PROB. = .98					
					K = .43 +- .36 N = -1.00 +- .43					
..... REACTION 90										
PETPI-=PPI+PI-PI-PI0	3.111	1.039	1.170		.0159		.0019		GROSSM. PR178,2109-69	
	3.508	1.250	1.383		.0200		.0090		PICKUP,PRL8,329,62	
	4.456	1.756	1.890		.0470		.0170		CHRIST.PR143,1105-6	
	4.718	1.895	2.030		.0310		.0100		CARMONY,44,CERN62	
	4.849	1.965	2.100		.1300		.0500		BOYD PR165,1458-68	
	5.973	2.564	2.700		.0300		.0200		KLEIN PR150,1123-66	
	6.910	3.063	3.200		.0310		.0090		CHUNG PR165,1491-68	
	8.786	4.063	4.200		.0210		.0070		CHUNG PR165,1491-68	
	15.989	7.902	8.040		.0150		.0040		DZIERBA,PR2,2544-70	
	21.543	10.861	11.000		.0200		ERROR NOT GIVEN		CASO NC47A,675-67	
	30.925	15.861	16.000		5.7000	MICROB	1.5000		ABBCH VIENNA68	
THRESHOLD	2.65	.79	.92						11 DATA POINTS LISTED	
..... REACTION 91										
PETPI-=PPI-Z0	3.508	1.250	1.383		.0830		.0250		PICKUP,PRL8,329,62	
	15.989	7.902	8.040		.0490		.0130		DZIERBA,PR2,2544-70	
THRESHOLD	2.65	.79	.92						2 DATA POINTS LISTED	
..... REACTION 92										
PRH+PI+PI-PI-PI-	12.106	5.832	5.970	U	.0250				SUEN PR1,54-70	
THRESHOLD	5.10	2.10	2.23							
..... REACTION 93										
PRH+PI-PI-	15.914	7.862	8.000		.1000		.0200		CASON PR1,851-70	
THRESHOLD	3.91	1.47	1.60							
..... REACTION 94										
PRH-	4.101	1.566	1.700		2.0600		.2100		ALLEN NC58A,701-68	
	4.849	1.965	2.100		1.7000		ERROR NOT GIVEN		WEST PR149,1089-66	O
	5.149	2.125	2.260		2.1900		.0900		REYNOL. PR184,1424-69	
	5.973	2.564	2.700		1.3000		.2000		MILLER PR153,1423-67	
	6.067	2.614	2.750		.7500		.1000		BATON NC35,713-65	S
	6.535	2.864	3.000		.7000		ERROR NOT GIVEN		ZDANIS PRL14,721-65	
	7.717	3.493	3.630		.3500		ERROR NOT GIVEN		LEE PR159,1156-67	
	8.410	3.863	4.000		.4500		.0800		BONDAR NC31,729-64	
	8.710	4.023	4.160		.5850		.0320		EISNER PR164,1699-67	
	14.413	7.062	7.200		1.0000		ERROR NOT GIVEN		AINUTD.JETP15,979-62	
	21.543	10.861	11.000		.0900		.0200		DAUDIN PC-66	

FOOTNOTES
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*=CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS
U=UPPER LIMIT
O=ORDER OF MAGNITUDE
S=STATISTICAL ERROR ONLY

PI-P

	S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 94									
PRH-	30.925	15.861	16.000	.0400		.0200	.0100	ABBCH VIENNA68	
(CONTINUATION)	47.813	24.861	25.000	.2500		.1000		ELBERT,NPB18,85-70	
THRESHOLD	2.88	.92	1.05					13 DATA POINTS LISTED	
FIT OF SIGMA AGAINST PLAB GEV/C									
5 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .06									
K = 3.78 +- 1.70 N = -1.34 +- .29									
..... REACTION 95									
PRH- (BACKWARD)	6.104	2.634	2.770	.0830		.0040		BATON,NPB21,551-70	
	15.914	7.862	8.000	1.9000	MICROB	.2000		ANDERSON PRL22,102-69	
	30.925	15.861	16.000	.3000	MICROB	ERROR NOT GIVEN		ANDERSON PRL22,102-69	
THRESHOLD	2.88	.92	1.05					3 DATA POINTS LISTED	
..... REACTION 96									
PRH-PI+PI-	13.475	6.562	6.700	.3050		.0600		MIYASHITA,PR1,771-70	
	15.914	7.862	8.000	.2700		.0400		CASON PR1,851-70	
	21.543	10.861	11.000	.2000		.1000		CASO NC47A,675-67	
THRESHOLD	3.91	1.47	1.60					3 DATA POINTS LISTED	
..... REACTION 97									
PRH-2PI+2PI-	12.106	5.832	5.970	.0720		.0250		SUEN PR1,54-70	
	30.925	15.861	16.000	.0660		.0200		JUNKMANN NPB8,471-68	
THRESHOLD	5.10	2.10	2.23					2 DATA POINTS LISTED	
..... REACTION 98									
PRHOPI+PI-PI-	8.223	3.763	3.900	3.0000	MICROB	9.0000		ABE,PR2,91-70	
	12.106	5.832	5.970	.1490		.0200		SUEN PR1,54-70	
	14.038	6.862	7.000	.1000		.0300		CAMPBELL NPB12,549-69	
	21.543	10.861	11.000	.1200		ERROR NOT GIVEN		CERN 68-7	
	21.543	10.861	11.000	.1200		ERROR NOT GIVEN		DARON.226,CERN68	
	30.925	15.861	16.000	.2240		.0250		JUNKMANN NPB8,471-68	
THRESHOLD	4.49	1.77	1.91					6 DATA POINTS LISTED	
..... REACTION 99									
PRHOPI+PI-PI-PI0	30.925	15.861	16.000	.1240		.0200		JUNKMANN NPB8,471-68	
THRESHOLD	5.10	2.10	2.23						
..... REACTION 100									
PRHOPI-	4.849	1.965	2.100	.0450		.1500		SATTER.PR134B,207-64	
	5.973	2.564	2.700	.7000		.1600		KLEIN PR150,1123-66	
	6.067	2.614	2.750	.3600		ERROR NOT GIVEN		ALITTI NC35,1-65	
	6.910	3.063	3.200	.4800		.0700		CHUNG PR165,149168	
	7.717	3.493	3.630	.4300		ERROR NOT GIVEN		LEE,PR159,1156,67	
	7.848	3.563	3.700	.5000		.1500		GOLDHABER,474,DUB64	
	8.786	4.063	4.200	.5200		.0700		CHUNG PR165,1491-68	
	12.106	5.832	5.970	.6000		.0800		GALLOWAY,PR1,3077-70	
	12.162	5.862	6.000	.5980		.0950		MOTT,NPB16,102-70	
	13.475	6.562	6.700	.5710		.1440		MIYASHITA PR1,771-70	
	14.038	6.862	7.000	.3800		.1000		CASON PR148,1282-66	
	15.914	7.862	8.000	.5600		.0400		LAMSA PR166,1395-68	
	20.136	10.111	10.250	.7000		.1000		BISWAS PR134B,901-64	
	21.543	10.861	11.000	.3500		.0400		CASO,NC66A,11-70	
	25.296	12.861	13.000	.5620		.0620		BRANDE. NPB16,287-70	
	30.925	15.861	16.000	.3600		.0300	.0400	ABBCH VIENNA68	
	38.431	19.861	20.000	.4600		.0600		BRANDE. NPB16,287-70	
	47.813	24.861	25.000	.2100		.0700		ERWIN BAPS12,487-67	
THRESHOLD	3.38	1.18	1.31					18 DATA POINTS LISTED	
FIT OF SIGMA AGAINST PLAB GEV/C									
12 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .68									
K = .95 +- .36 N = -.29 +- .17									
..... REACTION 101									
PRHOPI-PI0	13.475	6.562	6.700	.2600		.0670		MIYASHITA PR1,771-70	
	15.914	7.862	8.000	.3000		.0400		CASON PR1,851-70	
	20.136	10.111	10.250	.2700		.1200		BISWAS PR134B,901-64	
	21.543	10.861	11.000	.1500		.0800		CASO NC47A,675-67	
THRESHOLD	3.91	1.47	1.60					4 DATA POINTS LISTED	
..... REACTION 102									
POMPI+2PI-	11.186	5.342	5.480	.1160		.0240		BOMSE PR162,1328-67	
	21.543	10.861	11.000	.1200		ERROR NOT GIVEN		DARON.226,CERN68	
	30.925	15.861	16.000	.0700		.0100		JUNKMANN NPB8,471-68	
THRESHOLD	4.58	1.82	1.96					3 DATA POINTS LISTED	
..... REACTION 103									
POMPI+2PI-=PPI+2PI-Z0	15.989	7.902	8.040	.0160		.0110		DZIERBA,PR2,2544-70	
THRESHOLD	4.58	1.82	1.96						
..... REACTION 104									
POMPI+2PI-=P2PI+3PI-PI0	12.106	5.832	5.970	.1240		.0250		SUEN PR1,54-70	
	30.925	15.861	16.000	.0630		.0090		JUNKMANN NPB8,471-68	
THRESHOLD	4.58	1.82	1.96					2 DATA POINTS LISTED	

PI-P

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 105								
POMPI-	4.456	1.756	1.890	.0850	.0280		CHRIST.PR143,1105-66	
	4.718	1.895	2.030	.1420	.0310		CARMONY,44,CERN62	
	4.849	1.965	2.100	.2600	.0350		SATTER.PR134B,207-64	
	5.973	2.564	2.700	.4900	.0600		KLEIN PR150,1123-66	
	6.067	2.614	2.750	.3000	.0200		ALITTI PL21,354-66	
	6.910	3.063	3.200	.2300	.0300		CHUNG PR165,1491-68	
	7.717	3.493	3.630	.2800	ERROR NOT GIVEN		LEE PR159,1156-67	
	8.410	3.863	4.000	.2600	.0400		BONDAR NC31,485-64	
	8.786	4.063	4.200	.1850	.0250		CHUNG PR165,1491-68	
	13.475	6.562	6.700	.1600	.0220		MIYASHITA,PR1,771-70	
	15.914	7.862	8.000	.2000	.0220		DZIERBA,PR2,2544-70	*
	20.136	10.111	10.250	.1200	.0500		BISWAS PR134B,901 64	
	21.543	10.861	11.000	.0700	.0300		CASO NC47A,675-67	
	30.925	15.861	16.000	.0540	.0050		ABBCH VIENNA-68	
THRESHOLD	3.46	1.23	1.36				14 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

7 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .30
K = 1.16 +- .50 N = -1.05 +- .20

..... REACTION 106								
POMPI-=PPI+PI-PI-PI0	4.456	1.756	1.890	.0730	.0240		CHRIST.PR143,1105-66	
	4.849	1.965	2.100	.2600	.0400		BOYD PR166,1458-68	
	6.910	3.063	3.200	.2300	.0300		CHUNG PR165,1491-68	
	8.786	4.063	4.200	.1850	.0250		CHUNG PR165,1491-68	
	15.989	7.902	8.040	.1800	.0200		DZIERBA,PR2,2544-70	
	30.925	15.861	16.000	.0484	.0046		ABBCH VIENNA68	
THRESHOLD	3.46	1.23	1.36				6 DATA POINTS LISTED	
..... REACTION 107								
P(K*K)-	6.723	2.964	3.100	.0220	.0080		DAHL PR163,1377-67	1
	8.410	3.863	4.000	.0200	.0090		DAHL PR163,1377-67	1
THRESHOLD	5.44	2.28	2.41				2 DATA POINTS LISTED	
..... REACTION 108								
(P/N)K*890AK=(P/N)KAKPI	8.410	3.863	4.000	.1030	.0480		BARTSCH NC43A,1010-66	
THRESHOLD	5.44	2.28	2.41					
..... REACTION 109								
(P/N)AK*890K=(P/N)KAKPI	8.410	3.863	4.000	.0850	.0360		BARTSCH NC43A,1010-66	
THRESHOLD	5.44	2.28	2.41					
..... REACTION 110								
PXOPI-	30.925	15.861	16.000	.0180	.0070		JUNKMANN NPB8,471-68	
THRESHOLD	4.21	1.63	1.76					
..... REACTION 111								
PXOPI-=PPI+PI-PI-(PI/GAM)	30.925	15.861	16.000	.0133	.0049		ABBCH VIENNA68	
THRESHOLD	4.21	1.63	1.76					
..... REACTION 112								
PXOPI-=PETPI+2PI-(ET=Z0)	15.989	7.902	8.040	.0230	.0130		DZIERBA,PR2,2544-70	
THRESHOLD	4.21	1.63	1.76					
..... REACTION 113								
PXOPI-=P2PI+3PI-PI0	30.925	15.861	16.000	2.4000 MICROB	1.0000		JUNKMANN NPB8,471-68	
THRESHOLD	4.21	1.63	1.76					
..... REACTION 114								
PA1-=PPI+PI-PI-	8.204	3.753	3.890	.2820	.0320		WOHLMUT NPB18,505-70	
	13.475	6.562	6.700	.0190	.0190		MIYASHITA PR1,771-70	
	21.543	10.861	11.000	.0830	.0180		CONTE NC51A,175-67	
	30.925	15.861	16.000	.0960	.0125		ABBCH VIENNA68	
	47.813	24.861	25.000	.0800	.0200		ERWIN BAPS12,487-67	
THRESHOLD	4.15	1.59	1.73				5 DATA POINTS LISTED	
..... REACTION 115								
PA1-=PPI-Z0	21.543	10.861	11.000	.0600	.0150		CONTE NC51A,175-67	
THRESHOLD	4.15	1.59	1.73					
..... REACTION 116								
PA1-=PRHOPI-	6.910	3.063	3.200	.1400	.0600		CHUNG PR165,1491-68	
	8.786	4.063	4.200	.1600	.0600		CHUNG PR165,1491-68	
	38.431	19.861	20.000	.1300	.0350		FERBEL VIENNA68	S
THRESHOLD	4.15	1.59	1.73				3 DATA POINTS LISTED	
..... REACTION 117								
PA1-=P(RHP1)-	6.910	3.063	3.200	.2800	.1200		CHUNG PR165,1491-68	*
	8.204	3.753	3.890	.5640	.0640		WOLMUT,NPB18,505-70	
	8.786	4.063	4.200	.3200	.1200		CHUNG PR165,1491-68	*
	13.475	6.562	6.700	.0380	.0380		MIYASHITA PR1,771-70	
	21.543	10.861	11.000	.1660	.0360		CONTE NC51A,175-67	*
	30.925	15.861	16.000	.2500	.0500		BALLAM,PRL21,934-68	
	30.925	15.861	16.000	.1920	.0500		ABBCH VIENNA68	
	38.431	19.861	20.000	.2800	.1000		BRANDEN. ATHENS67	*
	47.813	24.861	25.000	.1600	.0400		ERWIN BAPS12,487-67	*
THRESHOLD	4.15	1.59	1.73				9 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

7 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .89
K = .28 +- .35 N = -.13 +- .46

FOOTNOTES

*=CROSS SECTION REDUCED BY EDITORS FROM PUBLISHED RESULTS
1=AVERAGE VALUE OVER A BAND OF MOMENTA
S=STATISTICAL ERROR ONLY

PI-P

	S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 118									
PA1-PI+PI-	8.223	3.763	3.900	.0250		.0080		ABE,PR2,91-70	
THRESHOLD	5.37	2.24	2.38						
..... REACTION 119									
PA1-PI+PI-=PRHOPI+PI-PI-	12.106	5.832	5.970	.0510		.0090		SUEN PR1,54-70	
THRESHOLD	5.37	2.24	2.38						
..... REACTION 120									
PA1.5-=PPI+PI-PI-	13.475	6.562	6.700	.0440		.0200		MIYASHITA PR1,771-70	
	15.914	7.862	8.000	.0150		.0050		LAMSA PR166,1395-68	
	30.925	15.861	16.000	.0348		.0116		ABBCH VIENNA68	
THRESHOLD	4.41	1.73	1.87					3 DATA POINTS LISTED	
..... REACTION 121									
PB-=PPI-PI0	6.910	3.063	3.200	0.0000	MICROB	20.0000		JACOBS PRL16,481-66	$
THRESHOLD	4.70	1.89	2.02						
..... REACTION 122									
PB-=POMPI-	6.910	3.063	3.200	.1200		.0340		CHUNG PR165,1491-68	*
	7.717	3.493	3.630	.0560		ERROR NOT GIVEN		LEE PR159,1156-67	
	8.786	4.063	4.200	.0740		.0230		CHUNG PR165,1491-68	*
	13.475	6.562	6.700	.0250		.0100		MIYASHITA PR1,771-70	
	15.914	7.862	8.000	.0200		.0070		CASON PR1,851-70	*
	21.543	10.861	11.000	.0300		ERROR NOT GIVEN		CASO NC47A,675-67	
	30.925	15.861	16.000	.0440		.0170		BALLAM,PR3,2606-71	*
THRESHOLD	4.70	1.89	2.02					7 DATA POINTS LISTED	
..... REACTION 123									
PB-=POMPI-=PPI+2PI-PI0	6.910	3.063	3.200	.1080		.0300		CHUNG PR165,1491-68	
	8.786	4.063	4.200	.0670		.0200		CHUNG PR165,1491-68	
	15.914	7.862	8.000	.0180		.0060		CASON PR1,851-70	
	30.925	15.861	16.000	.0400		.0150		BALLAM,PR3,2606-71	
THRESHOLD	4.70	1.89	2.02					4 DATA POINTS LISTED	
..... REACTION 124									
PFPI+2PI-=P2PI+3PI-	30.925	15.861	16.000	.0460		.0100		JUNKMANN NPB8,471-68	
THRESHOLD	6.80	3.01	3.14						
..... REACTION 125									
PFPI-	15.989	7.902	8.040	.1320		.0270		DZIERBA,PR2,2544-70	*
	21.543	10.861	11.000	.1000		.0300		CASO NC47A,675-67	
	25.296	12.861	13.000	.0790		.0170		BRANDE. NPB16,287-70	
	30.925	15.861	16.000	.0990		.0240		ABBCH VIENNA68	*
	38.431	19.861	20.000	.1040		.0160		BRANDE. NPB16,287-70	
THRESHOLD	5.42	2.27	2.40					5 DATA POINTS LISTED	
				FIT OF SIGMA AGAINST PLAB GEV/C					
				5 DATA POINTS USED ABOVE 8.0 GEV/C , PROB. = .89					
				K = .17 +- .25 N = -.20 +- .54					
..... REACTION 126									
PFPI-=PPI+PI-PI-	15.989	7.902	8.040	.0880		.0180		DZIERBA,PR2,2544-70	
	30.925	15.861	16.000	.0660		.0160		ABBCH VIENNA68	
THRESHOLD	5.42	2.27	2.40					2 DATA POINTS LISTED	
..... REACTION 127									
PFPI-=PPI-Z0	15.989	7.902	8.040	.0390		.0700		DZIERBA,PR2,2544-70	
THRESHOLD	5.42	2.27	2.40						
..... REACTION 128									
PDOPI-=P2PI+3PI-	30.925	15.861	16.000	6.0000	MICROB	1.5000		BOESEBEC,PL34B,659-71	
THRESHOLD	5.58	2.36	2.49						
..... REACTION 129									
PA2-	7.754	3.513	3.650	.0900		.0300		BENSON PRL16,1177-66	
	14.038	6.862	7.000	.1200		.0250		JOHNSTON,NPB24,253-70	
	21.543	10.861	11.000	.0780		.0180		CASO NC54A,983-68	
	30.925	15.861	16.000	.1800		.0600		BALLAM PRL21,934-68	
THRESHOLD	5.01	2.05	2.19					4 DATA POINTS LISTED	
..... REACTION 130									
PA2-=PPI+PI-PI-	8.204	3.753	3.890	.2150		.0320		WOHLMUT NPB18,505-70	
	13.475	6.562	6.700	.0340		.0140		MIYASHITA PR1,771-70	
	15.914	7.862	8.000	.0420		.0120		LAMSA PR166,1395-68	
	21.543	10.861	11.000	.0510		.0160		CONTE NC51A,175-67	
	25.296	12.861	13.000	.0270		.0050		BRANDE. NPB16,369-70	
	30.925	15.861	16.000	.0716		.0094		ABBCH VIENNA68	
	38.431	19.861	20.000	.0150		.0040		BRANDE. NPB16,369-70	
	47.813	24.861	25.000	.0400		.0200		ERWIN BAPS12,487-67	
THRESHOLD	5.01	2.05	2.19					8 DATA POINTS LISTED	
				FIT OF SIGMA AGAINST PLAB GEV/C					
				8 DATA POINTS USED ABOVE 3.5 GEV/C , PROB. = .04					
				K = .70 +- .41 N = -1.03 +- .24					
..... REACTION 131									
PA2-=PPI-Z0	21.543	10.861	11.000	.0700		.0200		CONTE NC51A,175-67	
THRESHOLD	5.01	2.05	2.19						

FOOTNOTES

$=DATA POINT NOT USED IN FITTING OR PLOTTING
*=CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS

********** PI-P **********

		S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 132											
PA2-=PK-KO		6.723	2.964	3.100		.0182		.0040		DAHL PR163,1377-67	1
		6.910	3.063	3.200		.0180		.0040		CHUNG PRL18,100-67	
		8.410	3.863	4.000		.0171		.0047		DAHL PR163,1377-67	1
		8.786	4.063	4.200		.0170		.0050		CHUNG PRL18,100-67	
		31.300	16.061	16.200		2.0000	MICROB	1.5000		ABBCH 70	
	THRESHOLD	5.01	2.05	2.19						5 DATA POINTS LISTED	
..... REACTION 133											
PA2-=PKAK		6.910	3.063	3.200		.0200		.0050		CHUNG PRL15,325-65	
	THRESHOLD	5.01	2.05	2.19							
..... REACTION 134											
PA2-=PETPI-		5.149	2.125	2.260		.0204		.0087		WIECKOW. PL28B,199-68	
		6.910	3.063	3.200		.0410		.0240		CHUNG PR165,1491-68	*
		8.786	4.063	4.200		.0170		.0170		CHUNG PR155,1491-68	*
		21.543	10.861	11.000		.0280		ERROR NOT GIVEN		CONTE NC51A,175-67	
		31.300	16.061	16.200		.0150		.0050		ABBCH 70	
	THRESHOLD	5.01	2.05	2.19						5 DATA POINTS LISTED	
..... REACTION 135											
PA2-=PETPI-=PPI+PI-PI-PIO		6.910	3.063	3.200		.0120		.0070		CHUNG PR165,1491-68	
		8.786	4.063	4.200		5.0000	MICROB	5.0000		CHUNG PR165,1491-68	
	THRESHOLD	5.01	2.05	2.19						2 DATA POINTS LISTED	
..... REACTION 136											
PA2-=PRHOPI-		6.910	3.063	3.200		.1500		.0500		CHUNG PR155,1491-68	
		8.223	3.763	3.900		.2150		.0320		HAWAII 70	
		8.786	4.063	4.200		.1750		.0450		CHUNG PRL18,100-67	
		25.296	12.861	13.000		.0270		.0450		BRANDEN NP B16,369-70	
		31.300	16.061	16.200		.0455		.0100		ABBCH 70	
		38.431	19.861	20.000		.0150		.0480		BRANDEN NP B16,369-70	
	THRESHOLD	5.01	2.05	2.19						6 DATA POINTS LISTED	
..... REACTION 137											
PA2-=P(RHPI)-		6.910	3.063	3.200		.3000		.1000		CHUNG PR155,1491-68	*
		8.204	3.753	3.890		.4300		.0640		WOHLMUT NPB18,505-70	
		8.786	4.063	4.200		.3500		.0900		CHUNG PRL18,100-67	*
		15.914	7.862	8.000		.0840		.0240		LAMSA PR166,1395-68	*
		21.543	10.861	11.000		.1020		.0320		CONTE NC51A,175-67	*
		25.296	12.861	13.000		.0540		.0100		BRANDEN NP B16,369-70	*
		30.925	15.861	16.000		.1800		.0600		BALLAM PRL21,934-68	
		31.300	16.061	16.200		.0910		.0190		ABBCHW 70	*
		38.431	19.861	20.000		.0300		.0080		BRANDEN NP B16,369-70	*
		47.813	24.861	25.000		.0800		.0400		ERWIN BAPS12,487-67	*
	THRESHOLD	5.01	2.05	2.19						10 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

9 DATA POINTS USED ABOVE 3.5 GEV/C , PROB. = .41
K = 2.13 +- 1.16 N = -1.27 +- .24

..... REACTION 138											
PA3-		21.543	10.861	11.000		.0640		.0150		CASO NC54A,983-68	
	THRESHOLD	6.65	2.92	3.06							
..... REACTION 139											
PA3-=PPI+PI-PI-		30.925	15.861	16.000		.0685		.0200		ABBCH VIENNA68	
		38.431	19.861	20.000		.0280		.0040		FERBEL VIENNA68	S
	THRESHOLD	6.65	2.92	3.06						2 DATA POINTS LISTED	
..... REACTION 140											
PA3-=PFPI-		21.543	10.861	11.000		.0520		.0100		CASO NC54A,983-68	
		38.431	19.861	20.000		.0120		.0030		FERBEL VIENNA68	S
	THRESHOLD	6.65	2.92	3.06						2 DATA POINTS LISTED	
..... REACTION 141											
PA3-=PFPI-=PPI+PI-PI-		15.914	7.862	8.000		.0210		.0080		LAMSA PR166,1395-68	
	THRESHOLD	6.65	2.92	3.06							
..... REACTION 142											
PG-=PPI+PI-PI-PIO		21.543	10.861	11.000		.0500		ERROR NOT GIVEN		CASO NC47A,675-67	
	THRESHOLD	6.70	2.95	3.09							
..... REACTION 143											
PG-=PPI-PIO		14.038	6.862	7.000		.0180		.0040		OH BAPS13,32-68	
	THRESHOLD	6.70	2.95	3.09							
..... REACTION 144											
PG-=PKK		12.162	5.862	6.000		4.8000	MICROB	ERROR NOT GIVEN		CRENNELL PL28B,136-68	
	THRESHOLD	6.70	2.95	3.09							
..... REACTION 145											
PG-=PRH-RHO		13.475	6.562	6.700	L	.0240				MIYASHITA,PR1,771-70	
	THRESHOLD	6.70	2.95	3.09							
..... REACTION 146											
PR-1700=PPI+PI-PI-PIO		30.925	15.861	16.000		.0400		.0150		BALLAM,PR3,2606-71	
	THRESHOLD	6.96	3.09	3.23							

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA
*=CROSS SECTION REDUCED BY EDITORS FROM PUBLISHED RESULTS
S=STATISTICAL ERROR ONLY
L=LOWER LIMIT

********** PI-P **********

	S	K.ENERGY	PLAB		CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 147									
NPIO	1.201	.021	.079		5.4000	.4000		MIYAKE PR126,2188-62	
	1.220	.031	.098		6.5000	.5000		MIYAKE PR126,2188-62	
	1.225	.034	.103		5.6100	.4000		CUNDY PPS85,257-65	
	1.277	.062	.145		7.7000	.6000		YORK PR119,1096-60	
	1.284	.065	.150		12.4000	1.5000		BODANSKY PR93,1367-64	
	1.332	.091	.183		15.3600	.1900		BUGG,NPB26,588-71	
	1.341	.095	.189		13.2000	.8000		YORK PR119,1096-60	
	1.378	.115	.213		25.0100	.2400		BUGG,NPB26,588-71	
	1.401	.128	.228		25.6000	1.3000		GARWIN PR115,1295-59	
	1.431	.143	.246		40.1300	.2800		BUGG,NPB26,588-71	
	1.444	.150	.254		42.6000	1.9000		KERNAN PR119,1092-60	
	1.468	.163	.269		47.8900	.3300		BUGG,NPB26,588-71	
	1.477	.168	.274		48.4400	.3600		BUGG,NPB26,588-71	
	1.494	.177	.284		48.1300	.3100		BUGG,NPB26,588-71	
	1.522	.192	.301		44.8500	.4500		BUGG,NPB26,588-71	
	1.565	.215	.326		36.6100	.2300		BUGG,NPB26,588-71	
	1.583	.224	.336		34.4000	1.9000		DEAHL PR124,1987-61	
	1.595	.231	.343		30.4000	1.3000		CARIS PR121,893-61	
	1.607	.237	.350		29.2600	.2000		BUGG,NPB26,588-71	
	1.651	.261	.375		25.4000	1.0000		CARIS PR121,893-61	
	1.651	.261	.375		23.4500	.2100		BUGG,NPB26,588-71	
	1.707	.291	.407		18.2000	.8000		CARIS PR121,893-61	
	1.709	.292	.408		17.9100	.1700		BUGG,NPB26,588-71	
	1.750	.313	.431		15.1000	.4000		LIND PR138B,1509-65	
	1.757	.317	.435		17.6000	.8000		CARIS PR121,893-61	
	1.786	.333	.451		16.6000	1.4000		ZINOV JETP6,1006-58	
	1.858	.371	.491		11.1000	.2000		LIND PR138B,1509-65	
	1.859	.372	.492		13.6000	.6000		CARIS PR121,893-61	
	1.861	.373	.493		12.9600	.8700		BRISSON,45,AIX61	
	1.952	.421	.543		11.3000	.7100		BRISSON,45,AIX61	
	2.043	.470	.593		10.7600	.8300		BRISSON,45,AIX61	
	2.100	.500	.624		9.4800	.5700		CHIU PR156,1415-67	
	2.155	.529	.654		8.7800	.4400		BULOS,PR187,1827-69	
	2.162	.533	.658		9.4300	.5900		CHIU PR156,1415-67	
	2.184	.545	.670		7.7100	.6200		BULOS PRL13,558-64	
	2.228	.568	.694		8.3300	.4100		BULOS,PR187,1827-69	
	2.228	.568	.694		9.1800	.8700		BRISSON,45,AIX61	
	2.265	.588	.714		6.6700	.4900		BULOS PRL13,558-64	
	2.272	.592	.718		8.0900	.4800		CHIU PR156,1415-67	
	2.272	.592	.718		9.6600	.7400		BRISSON,45,AIX61	
	2.293	.603	.729		7.9700	.2900		BULOS,PR187,1827-69	
	2.324	.619	.746		6.7700	.4700		BULOS PRL13,558-64	
	2.341	.628	.755		6.8400	.2300		BULOS,PR187,1827-69	
	2.390	.655	.782		5.4200	.3200		CHIU PR156,1415-67	
	2.400	.660	.787		6.1500	.4900		BULOS PRL13,558-64	
	2.444	.683	.811		5.0300	.1700		BULOS,PR187,1827-69	
	2.459	.691	.819		6.0300	.7000		BRISSON,45,AIX61	
	2.483	.704	.832		4.8000	.2900		CHIU PR156,1415-67	
	2.538	.734	.862		5.1900	.2400		BULOS,PR187,1827-69	
	2.579	.755	.884		4.3900	.3500		BULOS PRL13,558-64	
	2.661	.799	.928		6.9200	.2300		BULOS,PR187,1827-69	
	2.715	.828	.957		5.7900	.4100		BULOS PRL13,558-64	
	2.754	.848	.978		7.5100	.2300		BULOS,PR187,1827-69	
	2.783	.864	.994		9.0600	.7000		BRISSON,45,AIX61	
	2.804	.875	1.005		6.6400	.3900		CHIU PR156,1415-67	
	2.809	.878	1.008		7.2300	.5800		BULOS PRL13,558-64	
	2.839	.894	1.024		6.7400	.2300		BULOS,PR187,1827-69	
	2.880	.916	1.046		5.1800	.3600		BULOS PRL13,558-64	
	2.979	.968	1.099		3.6000	.0800		BULOS,PR187,1827-69	
	2.992	.975	1.106		3.3500	.3300		CHIU PR156,1415-67	
	3.036	.999	1.130		3.1400	.1900		BULOS PRL13,558-64	
	3.055	1.009	1.140		6.4000	.6000		WEINBERG.PRL8,70-62	
	3.249	1.112	1.244		3.4800	.4000		BRISSON,45,AIX61	
	3.254	1.115	1.247		2.3600	.0700		BULOS,PR187,1827-69	
	3.258	1.117	1.249		2.1600	.1900		CHIU PR156,1415-67	
	3.602	1.300	1.433		2.1100	.1900		CHIU PR156,1415-67	
	3.820	1.417	1.550		1.5400	.3700		BARMIN JETP19,102-64	
	4.119	1.576	1.710		1.1580	.0680		CAROLL PR177.2047-68	
	4.456	1.756	1.890		.8400	.0550		CAROLL PR177.2047-68	
	4.793	1.935	2.070		.6730	.0470		CAROLL PR177.2047-68	
	5.168	2.135	2.270		.5650	.0410		CAROLL PR177.2047-68	
	5.523	2.324	2.460		.5380	.0340		CAROLL PR177.2047-68	
	6.161	2.664	2.800		.2000	.2500		SHALAM. JETP12,859-61	
	6.161	2.664	2.800		.3600	.0900		BARMIN JETP19,102-64	
	6.667	2.934	3.070		.2600	.0240		SONDEREGGE PL20,75-66	
	7.792	3.533	3.670		.1900	.0170		SONDEREGGE PL20,75-66	
	9.348	4.363	4.500		.1900	.1200		BARMIN JETP19,102-64	
	9.911	4.662	4.800		.1100	.0200		AZIMOV JETPL3,216-66	
	9.967	4.692	4.830		.1290	.0130		SONDEREGGE PL20,75-66	
	11.881	5.712	5.850		.0960	.0040		SONDEREGGE PL20,75-66	1
	11.974	5.762	5.900		.0870	.0040		STIRLING PRL14,763-65	
	12.162	5.862	6.000	L	.0770	.0100		WAHLIG PR168,1515-68	Q
	19.291	9.661	9.800		.0480	.0025		STIRLING PRL14,763-65	
	19.667	9.861	10.000	L	.0430	.0036		WAHLIG PR168,1515-68	Q
	25.859	13.161	13.300		.0370	.0020		SONDEREGGE PL20,75-66	
	30.925	15.861	16.000	U	.2000			GOLDSACK NC23,941-62	
	35.053	18.061	18.200		.0240	.0030		SONDEREGGE PL20,75-66	
THRESHOLD	1.17	.00	.03					87 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

8 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .97

K = .74 +- .18 N = -1.18 +- .12

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA
Q=L TRUE AND * TRUE
L=LOWER LIMIT
*=CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS
U=UPPER LIMIT

********** PI-P **********

		S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 148									
NPIOPIO		1.856	.370	.490	1.3000	.1000		BARISH PR135B,416-64	
		1.861	.373	.493	.6500	.6500		BRISSON,45,AIX61	
		1.946	.418	.540	1.5000	.1000		BARISH PR135,B416-64	
		1.952	.421	.543	1.2500	.5000		BRISSON,45,AIX61	
		2.019	.457	.580	1.6000	.2000		BARISH PR135,B416-64	
		2.043	.470	.593	.8500	.7500		BRISSON,45,AIX61	
		2.100	.500	.624	2.1200	.2100		CHIU PR156,1415-67	
		2.155	.529	.654	1.9200	.1400		BULOS,PR187,1827-69	
		2.162	.533	.658	2.3600	.2300		CHIU PR156,1415-67	
		2.228	.568	.694	1.9900	.1500		BULOS,PR187,1827-69	
		2.228	.568	.694	4.0500	.8000		BRISSON,45,AIX61	
		2.272	.592	.718	1.7900	.2400		CHIU PR156,1415-67	
		2.272	.592	.718	3.4200	.7000		BRISSON,45,AIX61	
		2.293	.603	.729	1.9200	.1900		BULOS,PR187,1827-69	
		2.341	.628	.755	2.3900	.1900		BULOS,PR187,1827-69	
		2.390	.655	.782	2.0300	.2000		CHIU PR156,1415-67	
		2.444	.683	.811	2.3000	.1600		BULOS,PR187,1827-69	
		2.459	.691	.819	3.6400	.5000		BRISSON,45,AIX61	
		2.483	.704	.832	1.9400	.3400		CHIU PR156,1415-67	
		2.538	.734	.862	2.6200	.1600		BULOS,PR187,1827-69	
		2.646	.791	.920	3.1000	ERROR NOT GIVEN		PETER.UCRL11576-64	A
		2.661	.799	.928	3.0100	.1400		BULOS,PR187,1827-69	
		2.720	.831	.960	3.1000	ERROR NOT GIVEN		PETER.UCRL11576-64	A
		2.754	.848	.978	3.7400	.1700		BULOS,PR187,1827-69	
		2.783	.864	.994	3.5800	.7000		BRISSON,45,AIX61	
		2.795	.870	1.000	3.1000	ERROR NOT GIVEN		PETER.UCRL11576-64	1
		2.804	.875	1.005	3.0600	.2800		CHIU PR156,1415-67	
		2.839	.894	1.024	3.0600	.1500		BULOS,PR187,1827-69	
		2.979	.968	1.099	1.9900	.1000		BULOS,PR187,1827-69	
		2.992	.975	1.106	1.8200	.2600		CHIU PR156,1415-67	
		3.249	1.112	1.244	2.0300	.4000		BRISSON,45,AIX61	
		3.254	1.115	1.247	1.2800	.0700		BULOS,PR187,1827-69	
		3.258	1.117	1.249	1.4500	.1800		CHIU PR156,1415-67	
		3.602	1.300	1.433	1.3300	.1600		CHIU PR156,1415-67	
		4.119	1.576	1.710	.6160	.0930		CAROLL PR177,2047-69	
		4.456	1.756	1.890	.6090	.0940		CAROLL PR177,2047-69	
		4.793	1.935	2.070	.7010	.0880		CAROLL PR177,2047-69	
		5.168	2.135	2.270	.3050	.0850		CAROLL PR177,2047-69	
		5.523	2.324	2.460	.4860	.0690		CAROLL PR177,2047-69	
		6.161	2.664	2.800	1.3000	.4000		SHALAM. JETP12,859-61	
	THRESHOLD	1.49	.17	.28				40 DATA POINTS LISTED	
..... REACTION 149									
NPIOPIOPIO		2.100	.500	.624	.3000	.1000		CHIU PR156,1415-67	
		2.155	.529	.654	.2200	.0600		BULOS,PR187,1827-69	
		2.162	.533	.658	.2000	.0700		CHIU PR156,1415-67	
		2.228	.568	.694	.4100	.0500		BULOS,PR187,1827-69	
		2.272	.592	.718	1.1600	.2100		CHIU PR156,1415-67	
		2.293	.603	.729	1.2500	.1100		BULOS,PR187,1827-69	
		2.341	.628	.755	1.2800	.1000		BULOS,PR187,1827-69	
		2.390	.655	.782	1.2800	.1800		CHIU PR156,1415-67	
		2.444	.683	.811	.5100	.0800		BULOS,PR187,1827-69	
		2.483	.704	.832	1.5100	.2900		CHIU PR156,1415-67	
		2.538	.734	.862	.7600	.0700		BULOS,PR187,1827-69	
		2.661	.799	.928	.6300	.0600		BULOS,PR187,1827-69	
		2.754	.848	.978	.7200	.0700		BULOS,PR187,1827-69	
		2.804	.875	1.005	1.1100	.1800		CHIU PR156,1415-67	
		2.839	.894	1.024	.6300	.0600		BULOS,PR187,1827-69	
		2.979	.968	1.099	.7300	.0600		BULOS,PR187,1827-69	
		2.992	.975	1.106	.9400	.2400		CHIU PR156,1415-67	
		3.254	1.115	1.247	.6700	.0400		BULOS,PR187,1827-69	
		3.258	1.117	1.249	.9200	.1500		CHIU PR156,1415-67	
		3.602	1.300	1.433	.7000	.1200		CHIU PR156,1415-67	
		6.161	2.664	2.800	.7000	.4000		SHALAM. JETP12,859-61	
	THRESHOLD	1.85	.37	.49				21 DATA POINTS LISTED	
..... REACTION 150									
NPI+PI-		1.583	.224	.336	.0300	.0200		DEAHL PR124,1987-61	
		1.612	.240	.353	.1000	ERROR NOT GIVEN		BATUS. JETP16,1422-62	
		1.623	.246	.359	.1000	.0400		BATUS. JETP12,1290-61	
		1.649	.260	.374	.1400	.1000		PERKINS PR118,1364-60	
		1.681	.277	.392	.4000	.2000	.3000	BLOKHI. JETP17,340-63	
		1.707	.291	.407	.6100	.1300		BATUS. JETP13,1070-61	
		1.757	.317	.435	.7100	.1700		PERKINS PR118,1364-60	
		1.795	.337	.456	1.0000	.2000		SAXSON,PR2,1790-70	
		1.800	.340	.459	1.2400	.1400		BLOKHINT.JETP17,80-63	
		1.838	.360	.480	2.4000	.2000		BARISH PR135B,416-64	
		1.847	.365	.485	2.0700	.0900		BARISH PRL6,297-61	
		1.847	.365	.485	1.9300	.1600		KIRZ PR130,2481-63	S
		1.856	.370	.490	2.6000	.2000		BARISH PR135B,416-64	
		1.858	.371	.491	1.9300	.3700		PERKINS PR118,1364-60	
		1.872	.379	.499	2.4000	.1600		SAXSON,PR2,1790-70	
		1.946	.418	.540	3.3000	.3000		BARISH PR135B,416-64	
		1.963	.427	.549	3.3600	.7400		PERKINS PR118,1364-60	
		1.965	.428	.550	4.0000	.2000		BARISH PR135B,416-64	
		1.968	.430	.552	3.8400	.1600		SAXSON,PR2,1790-70	
		1.972	.432	.554	3.2600	.1400		BARISH PRL6,297-61	
		1.977	.435	.557	3.7000	.3000		KIRZ PR130,2481-63	S
		2.019	.457	.580	3.8000	.4000		BARISH PR135B,416-64	
		2.023	.459	.582	3.9800	.3700		POIRIER PR148,1311-66	
		2.036	.466	.589	4.0000	.3000		KIRZ PR130,2481-63	S
		2.063	.480	.604	5.0000	.3000		KIRZ PR130,2481-63	S
		2.208	.558	.683	7.5000	.8000		BURNST.PR137B,1044-65	
		2.213	.560	.686	5.8000	.3000		KIRZ PR130,2481-63	S
		2.296	.605	.731	7.8700	.9100		VITTIT. PR13B,B232-64	
		2.307	.611	.737	6.1000	.4000		KIRZ PR130,2481-63	S
		2.374	.646	.773	7.1400	.2300		OLIVER PR147,932-66	
		2.381	.650	.777	7.0500	.3400		FEMINO NC52A,892-67	
		2.435	.678	.806	6.1000	.6000		KIRZ PR130,2481-63	S

FOOTNOTES

A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES
1=AVERAGE VALUE OVER A BAND OF MOMENTA
S=STATISTICAL ERROR ONLY

PI-P

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 150								
NPI+PI-	2.513	.720	.848	7.1700	.3500		WALLE NC53A,745-68	
(CONTINUATION)	2.616	.775	.904	9.8000	.5000		BERTANZA NC44A,712-66	
	2.644	.790	.919	10.1000	.8000		CASON PR150,1134-66	
	2.665	.801	.930	8.2000	.8000		GENSOLLEN,84,SIE63	
	2.681	.810	.939	9.9000	ERROR NOT GIVEN		BAGGETT UCRL8302-58	
	2.718	.830	.959	12.0000	.9000		CASON PR150,1134-66	
	2.795	.870	1.000	12.9000	1.0000		CASON PR150,1134-66	
	2.850	.900	1.030	10.1000	.9000		GENSOLLEN,84,SIE63	
	2.860	.905	1.035	10.7000	.6000		PICKUP PR132,1819-63	
	2.943	.949	1.080	10.6000	.6000		BACON PR157,1263-67	
	3.038	1.000	1.131	10.4000	1.8000		DERADO PR118,309-60	
	3.226	1.100	1.232	7.3000	.6000		PICKUP PR132,1819-63	
	3.503	1.247	1.380	7.4000	.2000		BACON PR157,1263-67	
	3.602	1.300	1.433	8.0000	1.2000		DAHL UCRL16978-67	1
	3.895	1.457	1.590	6.4500	.1700		ALITTI NC29,515-63	
	4.101	1.566	1.700	7.3500	.4900		FICKING.I29,ATHENS65	
	4.119	1.576	1.710	7.4000	.5000		BACON,PR157,1263,67	
	4.849	1.965	2.100	5.6700	.1000		WEST PR149,1089-66	
	4.924	2.005	2.140	5.4000	.3000		HAGCPI. PR152,1183-66	
	5.149	2.125	2.260	5.6700	.1700		REYNOL. PR184,1424-69	
	5.973	2.564	2.700	3.9000	.2000		MILLER PR153,1423-67	
	6.104	2.634	2.770	3.9000	.1000		BATON,NPB21,551-70	
	6.535	2.864	3.000	3.5000	ERROR NOT GIVEN		SELOVE PRL9,272-62	0
	7.717	3.493	3.630	3.7900	.2400		LEE PR159,1156-67	
	8.410	3.863	4.000	3.1600	.1300		BONDAR NC31,729-64	
	8.710	4.023	4.160	2.8500	.0700		EISNER PR164,1699-67	
	10.286	4.862	5.000	2.1800	.1300		CARMONY VIENNA427-68	
	12.162	5.862	6.000	1.1600	.1800		CRENNELL PL28B,136-68	
	14.038	6.862	7.000	1.3500	.1100		OH,PR1,2495-70	
	15.914	7.862	8.000	.9600	.0500		POIRIER PR163,1462-67	
	15.914	7.862	8.000	.9000	.0400		BARISH PR184,1375-69	
	15.989	7.902	8.040	.9000	.0400		DZIERBA,PR2,2544-70	
	19.667	9.861	10.000	.8500	.1200		FLEURY,597,CERN62	
	21.543	10.861	11.000	.7000	.1000		CASO,NC3A,287-71	
	30.925	15.861	16.000	.2700	.1000		HONECKER,NPB13,571-69	
	30.925	15.861	16.000	.4000	.0800		BALLAM,PL31B,489-70	
	47.813	24.861	25.000	.5000	.2000		ERWIN BAPS13,33-68	
THRESHOLD	1.49	.17	.28				69 DATA POINTS LISTED	
				FIT OF SIGMA AGAINST PLAB GEV/C				
				19 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. = .01				
				K = 15.40 +- .78 N = -1.29 +- .04				
..... REACTION 151								
NPI+PI-PIO	2.374	.646	.773	.3300	.0400		OLIVER PR147,932-66	
	2.381	.650	.777	.7100	.0800		FEMINO NC52A,892-67	
	2.513	.720	.848	.7900	.1100		WALLE NC53A,745-68	
	4.849	1.965	2.100	2.5600	.2000		BOYD PR166,1458-68	
THRESHOLD	1.85	.37	.49				4 DATA POINTS LISTED	
..... REACTION 152								
NPI+PI-PIOPIO	4.849	1.965	2.100	2.2900	.1200		BOYD PR165,1458-68	
THRESHOLD	2.25	.58	.71					
..... REACTION 153								
NPI+PI+PI-PI-	3.895	1.457	1.590	.1200	.0200		ALITTI NC29,515-63	
	4.456	1.756	1.890	.3400	.1100		CHRIST.PR143,1105-66	
	4.718	1.895	2.030	.3500	.0400		CARMONY,44,CERN62	
	4.849	1.965	2.100	.3700	.0200		SATTER.PR134B,207-64	
	5.973	2.564	2.700	.6700	.0200		KLEIN PR150,1123-66	
	6.067	2.614	2.750	.6600	.0300		ALITTI NC35,1-65	
	6.910	3.063	3.200	.8900	.0400		CHUNG PR165,1491-68	
	7.717	3.493	3.630	.9200	.0800		LEE PR159,1156-67	
	8.410	3.863	4.000	1.1000	.0600		BONDAR NC31,485-64	
	8.786	4.063	4.200	1.1600	.0600		CHUNG PR165,1491-68	
	13.475	6.562	6.700	1.1700	.1000		MIYASHITA PR1,771-70	
	14.038	6.862	7.000	1.2100	.1100		OH,PR1,2495-70	
	15.989	7.902	8.040	.5300	.0400		DZIERBA,PR2,2544-70	
	20.136	10.111	10.250	1.0300	.2400		BISWAS PR134B,901-64	
	21.543	10.861	11.000	.6800	.0500		KITTEL,NPB30,333-71	
	30.925	15.861	16.000	.6200	.1000		BALLAM SLAC334-67	
	30.925	15.861	16.000	.4500	.0500		KITTEL,NPB30,333-71	
THRESHOLD	2.25	.58	.71				17 DATA POINTS LISTED	
				FIT OF SIGMA AGAINST PLAB GEV/C				
				7 DATA POINTS USED ABOVE 6.0 GEV/C , PROB. = .02				
				K = 4.51 +- 2.46 N = -.81 +- .24				
..... REACTION 154								
NPI+PI+PI-PI-PIO	4.849	1.965	2.100	.1200	ERROR NOT GIVEN		BOYD PR166,1458-68	0
THRESHOLD	2.69	.81	.94					
..... REACTION 155								
NPI+PI+PI-PI-PIOPIO	4.849	1.965	2.100	.0160	ERROR NOT GIVEN		BOYD PR165,1458-68	0
THRESHOLD	3.17	1.07	1.20					

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA
0=ORDER OF MAGNITUDE

PI-P

		S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 156											
N3PI+3PI-		11.186	5.342	5.480		.1200		.0100		BOMSE PR162,1328-67	
		12.106	5.832	5.970		.1400		.0300		SUEN PR1,54-70	
		12.162	5.862	6.000		.1200		.0300		SUEN VIENNA260-68	
		14.038	6.862	7.000		.2900		.0400		CAMPBELL NPB12,549-69	
		21.543	10.861	11.000		.3000		.0300		CASO,NC66A,11-70	
		30.925	15.861	16.000		.1900		.0500		HONECKER,NPB13,571-69	
	THRESHOLD	3.17	1.07	1.20						6 DATA POINTS LISTED	
..... REACTION 157											
N4PI+4PI-		30.925	15.861	16.000		.1140		.0250		HONECKER,NPB13,571-69	
	THRESHOLD	4.24	1.64	1.78							
..... REACTION 158											
N5PI+5PI-		30.925	15.861	16.000		.0260		.0120		HONECKER,NPB13,571-69	
	THRESHOLD	5.48	2.30	2.43							
..... REACTION 159											
N6PI+6PI-		30.925	15.861	16.000	U	8.0000	MICROB	5.0000		HONECKER,NPB13,571-69	
	THRESHOLD	6.86	3.04	3.18							
..... REACTION 160											
NK+K-		3.895	1.457	1.590		.0110		.0060		GOUSSU NC42A,606-66	
		4.625	1.845	1.980		.0390		.0100		DAHL PR163,1377-67	
		4.849	1.965	2.100		.1390		.0140		BOYD PR166,1458-68	
		5.973	2.564	2.700		.0840		.0470		MILLER,PR140B,360-65	
		6.067	2.614	2.750		.2500		.0900		GOUSSU NC47A,383-67	
		6.535	2.864	3.000		.0560		.0290		WANGLER PR137B,414-65	
		6.779	2.994	3.130		.1950		.0600		DAHL PR163,1377-67	
		8.204	3.753	3.890		.3700		.1300		DAHL PR163,1377-67	
		8.410	3.863	4.000		.1240		.0720		BARTSCH NC43A,1010-66	
		9.630	4.513	4.650		.1100		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	3.72	1.36	1.49						10 DATA POINTS LISTED	
..... REACTION 161											
NK+K-PI+PI-		8.410	3.863	4.000		.0710		.0350		BARTSCH NC43A,1010-66	
		9.630	4.513	4.650		.0500		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	4.88	1.98	2.11						2 DATA POINTS LISTED	
..... REACTION 162											
NK+KOPI-		4.625	1.845	1.980		1.3000	MICROB	1.3000		DAHL PR163,1377-67	
		4.756	1.915	2.050		.7000	MICROB	.7000		DAHL PR163,1377-67	
		5.587	2.358	2.494		.0160		.0080		HANFT COO-94-67	
		5.805	2.474	2.610		.0166		.0048		DAHL PR163,1377-67	
		5.973	2.564	2.700		.0200		.0070		MILLER PR140B,360-65	
		6.067	2.614	2.750		.0240		.0070		GOUSSU NC47A,383-67	
		6.273	2.724	2.860		.0390		.0130		DAHL PR163,1377-67	
		6.535	2.864	3.000		7.0000	MICROB	5.0000		WANGLER PR137,B414-65	
		6.554	2.874	3.010		.0370		.0080		DAHL PR163,1377-67	
		6.779	2.994	3.130		.0310		.0060		DAHL PR163,1377-67	
		6.929	3.073	3.210		.0450		.0060		DAHL PR163,1377-67	
		8.204	3.753	3.890		.0740		.0150		DAHL PR163,1377-67	
		8.410	3.863	4.000		.0780		.0230		BARTSCH NC43A,1010-66	
		8.710	4.023	4.160		.0640		.0120		DAHL PR163,1377-67	
		9.630	4.513	4.650		.0700		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	4.28	1.66	1.79						15 DATA POINTS LISTED	
..... REACTION 163											
NK+(KPI)-ZO		8.410	3.863	4.000		.1560		.1150		BARTSCH NC43A,1010-66	
	THRESHOLD	5.35	2.23	2.37							
..... REACTION 164											
NK-KOPI+		5.587	2.358	2.494		7.0000	MICROB	5.0000		HANFT COO-94-67	
		5.805	2.474	2.610		.0140		.0044		DAHL PR163,1377-67	
		5.973	2.564	2.700		9.0000	MICROB	5.0000		MILLER PR140B,360-65	
		6.067	2.614	2.750		.0180		.0070		GOUSSU NC47A,383-67	
		6.273	2.724	2.860		.0210		.0090		DAHL PR163,1377-67	
		6.535	2.864	3.000		.0180		.0080		WANGLER PR137B,414-65	
		6.554	2.874	3.010		.0310		.0070		DAHL PR163,1377-67	
		6.779	2.994	3.130		.0230		.0050		DAHL PR163,1377-67	
		6.929	3.073	3.210		.0360		.0050		DAHL PR163,1377-67	
		8.204	3.753	3.890		.0710		.0140		DAHL PR163,1377-67	
		8.410	3.863	4.000		.1010		.0250		BARTSCH NC43A,1010-66	
		8.710	4.023	4.160		.0690		.0130		DAHL PR163,1377-67	
		9.630	4.513	4.650		.0900		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	4.28	1.66	1.79						13 DATA POINTS LISTED	
..... REACTION 165											
NKO		15.914	7.862	8.000		.0800		.0160		CERN 68-7	
	THRESHOLD	2.06	.48	.60							
..... REACTION 166											
NKOKO		3.895	1.457	1.590		.0410		.0160		GOUSSU NC42A,606-66	
		4.082	1.556	1.690		.0290		.0110		SMITH,67,ATHENS63	
		4.756	1.915	2.050		.0650		.0180		SMITH,67,ATHENS63	
		5.336	2.225	2.360		.0990		.0180		SMITH,67,ATHENS63	
		6.067	2.614	2.750		.1030		.0350		GOUSSU NC47A,383-67	
		8.410	3.863	4.000		.1760		.0620		BARTSCH NC43A,1010-66	
	THRESHOLD	3.72	1.36	1.49						6 DATA POINTS LISTED	

FOOTNOTES

U=UPPER LIMIT

PI-P

		S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOTNOTES
..... REACTION 167											
NKOKOPI+PI-		8.410	3.863	4.000		.0640		.0370		BARTSCH NC43A,1010-66	
	THRESHOLD	4.88	1.98	2.11							
..... REACTION 168											
NKOKOPIO		6.535	2.864	3.000		.0170		.0070		WANGLER PR137,B414-65	
	THRESHOLD	4.28	1.66	1.79							
..... REACTION 169											
NKSKS		3.895	1.457	1.590		.0100		.0040		GOUSSU NC42A,606-66	
		3.942	1.481	1.615		4.3000	MICROB	2.6000		DAHL PR163,1377-67	
		4.082	1.556	1.690		.0129		.0050		SCHWARTZ UCRL11360-64	
		4.381	1.716	1.850		7.1000	MICROB	3.5000		SCHWARTZ UCRL11360-64	
		4.550	1.805	1.940		.0108		.0031		DAHL PR163,1377-67	
		4.568	1.815	1.950		.0156		.0050		SCHWARTZ UCRL11360-64	
		4.625	1.845	1.980		.0210		.0060		DAHL PR163,1377-67	
		4.756	1.915	2.050		.0161		.0035		DAHL PR163,1377-67	
		4.756	1.915	2.050		.0230		.0090		SCHWARTZ UCRL11360-64	
		4.924	2.005	2.140		.0280		.0110		DAHL PR163,1377-67	
		4.943	2.015	2.150		.0210		.0050		SCHWARTZ UCRL11360-64	
		5.130	2.115	2.250		.0330		.0070		SCHWARTZ UCRL11360-64	
		5.317	2.215	2.350		.0380		.0090		SCHWARTZ UCRL11360-64	
		5.587	2.358	2.494		.0410		.0110		HANFT COO-94-67	
		5.805	2.474	2.610		.0300		.0060		DAHL PR163,1377-67	
		5.973	2.564	2.700		.0330		.0070		MILLER PR140B,360-65	
		6.067	2.614	2.750		.0270		.0090		GOUSSU NC47A,383-67	
		6.273	2.724	2.860		.0580		.0140		DAHL PR163,1377-67	
		6.535	2.864	3.000		.0520		.0130		WANGLER PR137B,414-65	
		6.554	2.874	3.010		.0400		.0080		DAHL UCRL16978-67	
		6.779	2.994	3.130		.0490		.0070		DAHL PR163,1377-67	
		6.910	3.063	3.200		.0453		.0041		CHUNG PRL18,100-67	
		6.929	3.073	3.210		.0450		.0050		DAHL PR163,1377-67	
		8.204	3.753	3.890		.0420		.0080		DAHL PR163,1377-67	
		8.410	3.863	4.000		.0440		.0150		BARTSCH NC43A,1010-66	
		8.710	4.023	4.160		.0320		.0060		DAHL PR163,1377-67	
		8.786	4.063	4.200		.0366		.0051		CHUNG PRL18,100-67	
		12.162	5.862	6.000		.0100		ERROR NOT GIVEN		CRENNELL PL28B,136-68	R
		14.038	6.862	7.000		.0136		.0037		PEEKNA,NPB27,605-71	
	THRESHOLD	3.74	1.37	1.51						29 DATA POINTS LISTED	
						FIT OF SIGMA AGAINST PLAB GEV/C					
						10 DATA POINTS USED ABOVE 3.0 GEV/C , PROB. =1.00					
						K = .19 +- .14 N = -1.24 +- .56					
..... REACTION 170											
NKSKSPI+PI-		6.535	2.864	3.000		3.0000	MICROB	3.0000		WANGLER PR137B,414-65	
		6.723	2.964	3.100		.6000	MICROB	.5000		DAHL PR163,1377-67	1
		8.410	3.863	4.000		6.0000	MICROB	2.5000		DAHL PR163,1377-67	1
		14.038	6.862	7.000		9.9000	MICROB	2.8000		PEEKNA,NPB27,605-71	
	THRESHOLD	4.90	1.99	2.13						4 DATA POINTS LISTED	
..... REACTION 171											
NKSKSPI+PI-PI-PI-		14.038	6.862	7.000		0.0000	MICROB	.7000		PEEKNA,NPB27,605-71	$
	THRESHOLD	6.22	2.70	2.83							
..... REACTION 172											
NKSKSPIO		6.535	2.864	3.000		.0170		.0070		WANGLER PR137B,414-65	
	THRESHOLD	4.30	1.67	1.81							
..... REACTION 173											
NKSKL		5.973	2.564	2.700		.0230		.0100		MILLER PR140B,360-65	
	THRESHOLD	3.74	1.38	1.51							
..... REACTION 174											
NET		2.202	.555	.680		1.7000		.4000		PETERSON,30,DUB64	
		2.387	.653	.780		2.5000		.7000		PETERSON,30,DUB64	
		2.424	.673	.800		2.7500		.3000		BASILE,NC3A,371-71	
		2.479	.702	.830		2.2800		1.0000		PETERSON,30,DUB64	
		2.513	.720	.848	U	3.0000		.4000		WALLE NC53A,745-68	
		2.795	.870	1.000		1.2500		.3000		PETERSON,30,DUB64	
		3.540	1.267	1.400		.7800		.1000		PETERSON,30,DUB64	
		4.119	1.576	1.710		.1530		.0390		CAROLL PR177.2047-68	
		4.456	1.756	1.890		.0850		.0370		CAROLL PR177.2047-68	
		4.793	1.935	2.070		.1550		.0370		CAROLL PR177,2047-69	
		4.849	1.965	2.100		.3400		.2400		BOYD PR166,1458-68	
		5.168	2.135	2.270		.1100		.0310		CAROLL PR177,2047-69	
		5.523	2.324	2.460		.0860		.0280		CAROLL PR177,2047-69	
		6.367	2.774	2.910		.1660		.0250		GUISAN PL18,200-65	
		6.535	2.864	3.000		.0500		ERROR NOT GIVEN		ZDANIS PRL14,721-65	
		7.885	3.583	3.720		.1110		.0150		GUISAN PL18,200-65	
		11.974	5.762	5.900		.0540		.0070		GUISAN PL18,200-65	
		19.291	9.661	9.800		.0250		.0035		GUISAN PL18,200-65	
		19.667	9.861	10.000	L	9.4000	MICROB	1.1000		WAHLIG PR168,1515-68	Q
		25.859	13.161	13.300		.0166		.0022		GUISAN PL18,200-65	
		35.053	18.061	18.200		.0104		.0021		GUISAN PL18,200-65	
	THRESHOLD	2.22	.56	.69						21 DATA POINTS LISTED	
						FIT OF SIGMA AGAINST PLAB GEV/C					
						5 DATA POINTS USED ABOVE 3.0 GEV/C , PROB. =1.00					
						K = .77 +- .39 N = -1.49 +- .24					
..... REACTION 175											
NET=NEUTRALS		2.272	.592	.718		1.4500		.1800		DEINET NPB11,495-69	
		2.318	.616	.743		1.8400		.2300		DEINET NPB11,495-69	
		2.355	.634	.763		1.8300		.2300		DEINET NPB11,495-69	
		2.516	.722	.850		1.7500		.2500		DEINET NPB11,495-69	
	THRESHOLD	2.22	.56	.69						4 DATA POINTS LISTED	

FOOTNOTES

R=CROSS SECTION FOR FINAL STATES OBSERVED IN THE BUBBLE CHAMBER
1=AVERAGE VALUE OVER A BAND OF MOMENTA
$=DATA POINT NOT USED IN FITTING OR PLOTTING
U=UPPER LIMIT
Q=L TRUE AND * TRUE
L=LOWER LIMIT
*=CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS

PI-P

		S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 176											
NET=NGAMGAM		2.228	.568	.694		.4500		.0700		BULOS,PR187,1827-69	
		2.247	.578	.704		.3900		.0500		BULOS PRL13,486-64	
		2.272	.592	.718		.6000		.0600		RICHAR. PRL16,1221-66	
		2.293	.603	.729		.9400		.0900		BULOS,PR187,1827-69	
		2.324	.619	.746		.9200		.0800		BULOS PRL13,486-64	
		2.341	.628	.755		1.0000		.0900		BULOS,PR187,1827-69	
		2.390	.655	.782		.9300		.0800		RICHAR. PRL16,1221-66	
		2.398	.659	.786		.9800		.0900		BULOS PRL13,486-64	
		2.444	.683	.811		.9600		.1100		BULOS,PR187,1827-69	
		2.483	.704	.832		.9300		.0800		RICHAR. PRL16,1221-66	
		2.538	.734	.862		.7200		.0700		BULOS,PR187,1827-69	
		2.579	.755	.884		.8800		.1100		BULOS PRL13,486-64	
		2.661	.799	.928		.4800		.0700		BULOS,PR187,1827-69	
		2.715	.828	.957		.6000		.1000		BULOS PRL13,486-64	
		2.754	.848	.978		.5200		.0800		BULOS,PR187,1827-69	
		2.804	.875	1.005		.4100		.0600		RICHAR. PRL16,1221-66	
		2.809	.878	1.008		.3000		.1400		BULOS PRL13,486-64	
		2.839	.894	1.024		.4400		.0700		BULOS,PR187,1827-69	
		2.880	.916	1.046		.5200		.0900		BULOS PRL13,486-64	
		2.979	.968	1.099		.5300		.0500		BULOS,PR187,1827-69	
		2.992	.975	1.106		.4600		.0600		RICHAR. PRL16,1221-66	
		3.044	1.003	1.134		.4500		.0700		BULOS PRL13,486-64	
		3.254	1.115	1.247		.5200		.0300		BULOS,PR187,1827-69	
		3.258	1.117	1.249		.4500		.0500		RICHAR. PRL16,1221-66	
		3.322	1.151	1.283		.3800		.0700		BULOS PRL13,486-64	
		3.602	1.300	1.433		.2500		.0300		RICHAR. PRL16,1221-66	
		3.820	1.417	1.550		.3200		.2200		BARMIN JETP19,102-64	
		6.161	2.664	2.800		.0800		.0700		BARMIN JETP19,102-64	
		6.367	2.774	2.910		.0640		.0080		GUISAN PL18,200-65	
		7.885	3.583	3.720		.0430		.0050		GUISAN PL18,200-65	
		9.348	4.363	4.500		.0500		.0700		BARMIN JETP19,102-64	
		11.974	5.762	5.900		.0210		.0023		GUISAN PL18,200-65	
		19.291	9.661	9.800		9.7000	MICROB	1.2000		GUISAN PL18,200-65	
		25.859	13.161	13.300		6.4000	MICROB	.7000		GUISAN PL18,200-65	
		35.053	18.061	18.200		4.0000	MICROB	.8000		GUISAN PL18,200-65	
	THRESHOLD	2.22	.56	.69						35 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

8 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. =1.00

K = .32 +- .10 N = -1.51 +- .17

..... REACTION 177											
NET=NPI+PI-PI0		4.849	1.965	2.100		.1000		.0700		BOYD PR166,1458-68	
	THRESHOLD	2.22	.56	.69							
..... REACTION 178											
N(KPI)+K-Z0		8.410	3.863	4.000		0.0000	MICROB	57.0000		BARTS. NC43A,1010-66+	$
	THRESHOLD	5.35	2.23	2.37							
..... REACTION 179											
NRH0		4.756	1.915	2.050		2.7000		.4000		JACO. UCRL16877-66,PC	
		4.849	1.965	2.100		3.5000		ERROR NOT GIVEN		WEST PR149,1089-66	0
		4.980	2.035	2.170		2.6000		.4000		JACO. UCRL16877-66,PC	
		5.149	2.125	2.260		2.8900		.1100		REYNOL. PR184,1424-69	
		5.336	2.225	2.360		2.1500		.1500		JACO. UCRL16877-66,PC	
		5.786	2.464	2.600		2.0500		.1000		JACO. UCRL16877-66,PC	
		5.973	2.564	2.700		2.3000		.2000		MILLER PR153,1423-67	
		6.067	2.614	2.750		1.1000		ERROR NOT GIVEN		BATON NC35,713-65	S
		6.273	2.724	2.860		1.6000		.1000		JACO. UCRL16877-66,PC	
		6.535	2.864	3.000		1.6000		ERROR NOT GIVEN		ZDANIS PRL14,721-65	
		6.948	3.083	3.220		1.1000		.1000		JACO. UCRL16877-66,PC	
		7.717	3.493	3.630		1.1200		ERROR NOT GIVEN		LEE PR159,1156-67	
		8.410	3.863	4.000		.7500		.1300		BONDAR NC31,729-64	
		8.710	4.023	4.160		1.1520		.0470		EISNER PR164,1699-67	
		15.914	7.862	8.000		.2340		.0210		POIRIER PR163,1462-67	
		21.543	10.861	11.000		.1100		.0140		CASO NC62A,755-69	
		21.918	11.061	11.200		.1280		.0160		HYAMS NPB7,1-68	
		30.925	15.861	16.000		.0210		.0110	.0070	ABBCH VIENNA68	
		30.925	15.861	16.000		.0520		.0130		BALLAM,PL31B,489-70	
		5.598	2.364	2.500		.0200		.0100		ELBERT, NPB19,85-70	
	THRESHOLD	2.89	.92	1.05						20 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

16 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. = .00

K = 12.98 +- 1.39 N = -1.89 +- .09

..... REACTION 180											
NRH0 (BACKWARD)		6.104	2.634	2.770		.1130		.0050		BATON,NPB21,551-70	
	THRESHOLD	2.89	.92	1.05							
..... REACTION 181											
NRH0=N2PI+2PI-		6.910	3.063	3.200	U	2.0000	MICROB			CHUNG PR165,1491-68	
		8.786	4.063	4.200	U	2.0000	MICROB			CHUNG PR165,1491-68	
	THRESHOLD	2.89	.92	1.05						2 DATA POINTS LISTED	
..... REACTION 182											
NRH0PI+PI-		6.910	3.063	3.200		.0650		ERROR NOT GIVEN		CHUNG PR165,1491-68	
		8.786	4.063	4.200		.0700		ERROR NOT GIVEN		CHUNG PR165,1491-68	
		13.475	6.562	6.700		.4100		.0930		MIYASHITA PR1,771-70	
		15.914	7.862	8.000		.2300		.0300		CASON PR1,851-70	
		20.136	10.111	10.250		.1900		.0700		BISWAS PR134B,901-64	
		21.543	10.861	11.000		.2000		ERROR NOT GIVEN		CASO HEID67	
	THRESHOLD	3.92	1.47	1.60						6 DATA POINTS LISTED	
..... REACTION 183											
NRH0PI0		4.849	1.965	2.100		.2270		.0600		SATTER.PR134B,207-64	
	THRESHOLD	3.39	1.19	1.32							

FOOTNOTES

$=DATA POINT NOT USED IN FITTING OR PLOTTING
0=ORDER OF MAGNITUDE
S=STATISTICAL ERROR ONLY
U=UPPER LIMIT

********** PI-P **********

		S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 184											
NRHO2PI+2PI-		12.162	5.862	6.000	U	.0750				SUEN,PR1,54-70	
		30.925	15.861	16.000		.0990		.0170		JUNKMANN NPB8,471-68	
	THRESHOLD	5.11	2.10	2.24						2 DATA POINTS LISTED	
..... REACTION 185											
NOM		4.849	1.965	2.100		1.4100		.1800		BOYD PR165,1458-68	
	THRESHOLD	2.97	.96	1.09							
..... REACTION 186											
NOM=NPI+PI-PIO		4.849	1.965	2.100		1.1900		.1500		BOYD PR166,1458-68	
	THRESHOLD	2.97	.96	1.09							
..... REACTION 187											
NOM=NPIOGAM		3.254	1.115	1.247		.1100		.0500		BULOS,PR187,1827-69	
	THRESHOLD	2.97	.96	1.09							
..... REACTION 188											
NK*K		6.723	2.964	3.100		.0320		.0080		DAHL PR163,1377-67	1
		8.410	3.863	4.000		.0150		.0050		DAHL PR163,1377-67	1
	THRESHOLD	5.48	2.30	2.44						2 DATA POINTS LISTED	
..... REACTION 189											
NXO		3.727	1.367	1.500		.0610		.0110		DUFEY PL25B,410-68	
		3.727	1.367	1.500	U	.0600				HYMAN NEV155-66	
		3.764	1.387	1.520		.0920		.0170		DUFEY PL26B,410-68	
		3.820	1.417	1.550	U	.0600				HYMAN PR165,1437-68	V
		3.932	1.476	1.610		.1080		.0140		BASILE,NC3A,371-71	
	THRESHOLD	3.67	1.34	1.47						5 DATA POINTS LISTED	
..... REACTION 190											
NXO=NETPI+PI-=NPI+PI-ZO		3.727	1.367	1.500		.0220		.0040		DUFEY PL26B,410-68	
		3.764	1.387	1.520		.0330		.0060		DUFEY PL26B,410-68	
	THRESHOLD	3.67	1.34	1.47						2 DATA POINTS LISTED	
..... REACTION 191											
NXO=NEUTRALS		3.932	1.476	1.610		.0200		.0035		BASILE,NC3A,371-71	
	THRESHOLD	3.67	1.34	1.47							
..... REACTION 192											
NTE=NKSKS		4.662	1.865	2.000		7.9000	MICROB	2.0000		DAHL PR163,1377-67	1
		6.723	2.964	3.100		7.5000	MICROB	2.5000		DAHL PR163,1377-67	1
		8.410	3.863	4.000		9.0000	MICROB	3.8000		DAHL PR163,1377-67	
	THRESHOLD	3.76	1.39	1.52						3 DATA POINTS LISTED	
..... REACTION 193											
NPHI		4.082	1.556	1.690		.0290		.0150		DAHL PR163,1377-67	1
		4.662	1.865	2.000		.0300		.0080		DAHL PR163,1377-67	1
		4.849	1.965	2.100		.0190		.0090	.0080	BOYD PR166,1458-68	S
		4.905	1.995	2.130		.0240		.0080		BOLLINI NC60A,541-69	
		5.805	2.474	2.610		0.0000	MICROB	9.0000		DAHL PR163,1377-67	$
		6.723	2.964	3.100		6.0000	MICROB	8.0000		DAHL PR163,1377-67	1
		8.410	3.863	4.000		.0150		.0200		DAHL PR163,1377-67	1
	THRESHOLD	3.84	1.43	1.56						7 DATA POINTS LISTED	
..... REACTION 194											
NPHI=NK+K-		4.849	1.965	2.100		9.0000	MICROB	4.5000	4.0000	BOYD PR165,1458-68	
		4.905	1.995	2.130		.0114		.0036		BOLLINI NC60A,541-69	
	THRESHOLD	3.84	1.43	1.56						2 DATA POINTS LISTED	
..... REACTION 195											
NS*=NKSKS		10.286	4.862	5.000		4.6000	MICROB	1.6000	1.0000	BEUSCH PL25B,357-67	
		12.162	5.862	6.000		1.5000	MICROB	ERROR NOT GIVEN		CRENNE. PRL16,1025-66	O
		14.038	6.862	7.000		1.8000	MICROB	.8000	.6000	BEUSCH PL25B,357-67	
		23.419	11.861	12.000		.5000	MICROB	.2000	.1000	BEUSCH PL25B,357-67	
	THRESHOLD	4.00	1.51	1.65						4 DATA POINTS LISTED	
..... REACTION 196											
NA1-PI+		13.475	6.562	6.700		.0580		.0220		MIYASHITA,PR1,771-70	
	THRESHOLD	4.75	1.91	2.05							
..... REACTION 197											
NF		5.973	2.564	2.700		.2250		.1500		MILLER PR153,1423-67	
		6.535	2.864	3.000		.3200		ERROR NOT GIVEN		ZDANIS PRL14,721-65	
		6.910	3.063	3.200		.4650		.1300		CHUNG PRL15,325-65	
		7.717	3.493	3.630		.4500		ERROR NOT GIVEN		LEE PR159,1156-67	*
		8.410	3.863	4.000		.6300		.0900		BONDAR PL5,153-63	*
		8.710	4.023	4.160		.7970		.0840		EISEN COO1428/32-67	*
		12.162	5.862	6.000		.6700		.0800		LEA PC-67	
		14.038	6.862	7.000		.3150		.0900		OH,PR1,2495-70	*
		15.914	7.862	8.000		.2100		.0750		ALLARD NC50A,106-67	*
		15.914	7.862	8.000		.2480		.0870		POIRIER PR163,1462-67	*
		19.667	9.861	10.000		.0600		.0150		WAHLIG PR147,941-66	$
		21.543	10.861	11.000		.1125		.0210		CASO NC62A,755-69	*
		30.925	15.861	16.000		.0380		.0090		BALLAM,PL31B,489-70	
		30.925	15.861	16.000		.0330		.0060		ABBCCHW KIEV-70	
	THRESHOLD	4.80	1.94	2.07						14 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

9 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .31
K = 19.56 +- 8.54 N = -2.18 +- .23

FOOTNOTES

U=UPPER LIMIT
1=AVERAGE VALUE OVER A BAND OF MOMENTA
V=1 TRUE AND U TRUE
S=STATISTICAL ERROR ONLY
$=DATA POINT NOT USED IN FITTING OR PLOTTING
O=ORDER OF MAGNITUDE
*=CROSS SECTION REDUCED BY EDITORS FROM PUBLISHED RESULTS

PI-P

		S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 198											
NF=NPI+PI+PI-PI-		6.910	3.063	3.200		0.0000	MICROB	20.0000		CHUNG PR155,1491-68	$
		8.786	4.063	4.200		.0300		.0150		CHUNG PR155,1491-68	
	THRESHOLD	4.80	1.94	2.07						2 DATA POINTS LISTED	
..... REACTION 199											
NF=NPI+PI-		5.973	2.564	2.700		.1500		.1000		MILLER PR153,1423-67	
		7.717	3.493	3.630		.3000		ERROR NOT GIVEN		LEE PR159,1156-67	
		8.410	3.863	4.000		.4200		.0600		BONDAR PL5,153-63	
		8.710	4.023	4.160		.5310		.0560		EISEN C001428/32-67	
		14.038	6.862	7.000		.2100		.0600		OH,PR1,2495-70	
		15.914	7.862	8.000		.1650		.0180		POIRIER PR163,1462-67	
		21.543	10.861	11.000		.0750		.0140		CASO NC62A,755-69	
	THRESHOLD	4.80	1.94	2.07						7 DATA POINTS LISTED	
						FIT OF SIGMA AGAINST PLAB GEV/C					
						5 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .79					
						K = 5.84 +- 3.42 N = -1.75 +- .33					
..... REACTION 200											
NF=NPIOPIO		19.667	9.861	10.000		.0200		.0050		WAHLIG PR147,941-66	$
	THRESHOLD	4.80	1.94	2.07							
..... REACTION 201											
NF=NKSKS		10.286	4.862	5.000		4.5000	MICROB	1.2000		BEUSCH PL25B,357-67	
		14.038	6.862	7.000		1.8000	MICROB	.6000		BEUSCH PL25B,357-67	
		23.419	11.861	12.000		.7000	MICROB	.2000	.3000	BEUSCH PL25B,357-67	
	THRESHOLD	4.80	1.94	2.07						3 DATA POINTS LISTED	
..... REACTION 202											
NF=NKAK		6.535	2.864	3.000		.0880		.0330		WANGLER PR137B,414-65	
	THRESHOLD	4.80	1.94	2.07							
..... REACTION 203											
NFPI+PI-		21.543	10.861	11.000	U	.0600				CASO HEID67	
	THRESHOLD	6.10	2.63	2.77							
..... REACTION 204											
NF2PI+2PI-=N3PI+3PI-		30.925	15.861	16.000		.0270		.0090		JUNKMANN NPB8,471-68	
	THRESHOLD	7.56	3.41	3.55							
..... REACTION 205											
ND=NK(+,-)KOPI(-,+)		5.720	2.429	2.565		7.5000	MICROB	4.0000		DAHL PR163,1377-67	1
		6.723	2.964	3.100		7.0000	MICROB	2.0000		DAHL PR163,1377-67	1
		8.410	3.863	4.000		.0100		.0040		DAHL PR163,1377-67	1
	THRESHOLD	4.95	2.02	2.15						3 DATA POINTS LISTED	
..... REACTION 206											
NA2-PI+		13.475	6.562	6.700		.0370		.0130		MIYASHITA,PR1,771-70	
	THRESHOLD	5.66	2.40	2.54							
..... REACTION 207											
NA2O=NKSKS		10.286	4.862	5.000		3.8000	MICROB	1.5000	1.2000	BEUSCH PL25B,357-67	
		14.038	6.862	7.000		2.0000	MICROB	.9000	.7000	BEUSCH PL25B,357-67	
		23.419	11.861	12.000		.9000	MICROB	.3000	.2000	BEUSCH PL25B,357-67	
	THRESHOLD	5.02	2.05	2.19						3 DATA POINTS LISTED	
..... REACTION 208											
NA2O=NKAK		6.723	2.964	3.100		.0362		.0100		DAHL PR163,1377-67	1
		6.910	3.063	3.200		.0360		.0100		CHUNG PRL18,100-67	
		8.410	3.863	4.000		.0176		.0090		DAHL PR163,1377-67	1
		8.786	4.063	4.200		.0180		.0090		CHUNG PRL18,100-67	
	THRESHOLD	5.02	2.05	2.19						4 DATA POINTS LISTED	
..... REACTION 209											
NE=NK(+,-)KOPI(-,+)		6.723	2.964	3.100		.0170		.0050		DAHL PR163,1377-67	1
		8.410	3.863	4.000		3.0000	MICROB	2.0000		DAHL PR163,1377-67	1
	THRESHOLD	5.57	2.35	2.48						2 DATA POINTS LISTED	
..... REACTION 210											
NGO		19.667	9.861	10.000	U	5.0000	MICROB			WAHLIG PR147,941-66	
	THRESHOLD	6.71	2.96	3.09							
..... REACTION 211											
NGO=NPI+PI-		14.038	6.862	7.000		.0320		.0050		OH BAPS13,32-68	
		15.914	7.862	8.000		.1000		.0250		GOLDBERG PL17,354-65	
		15.914	7.862	8.000		.0540		.0130		POIRIER PR163,1462-67	
		21.543	10.861	11.000		.0550		.0140		CASO NC62A,755-69	
	THRESHOLD	6.71	2.96	3.09						4 DATA POINTS LISTED	
..... REACTION 212											
NGO=NKSKS		10.286	4.862	5.000		1.1000	MICROB	.6000	.5000	BEUSCH PL25B,357-67	
		14.038	6.862	7.000		1.1000	MICROB	.3000	.3000	BEUSCH PL25B,357-67	
		23.419	11.861	12.000		.3000	MICROB	.2000	.1000	BEUSCH PL25B,357-67	
	THRESHOLD	6.71	2.96	3.09						3 DATA POINTS LISTED	
..... REACTION 213											
N***1236		30.925	15.861	16.000		.2400		.0500		BALLAM SLAC334-67	A
	THRESHOLD	1.53	.20	.30							

FOOTNOTES

$=DATA POINT NOT USED IN FITTING OR PLOTTING
U=UPPER LIMIT
1=AVERAGE VALUE OVER A BAND OF MOMENTA
A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES

PI-P

	S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 214									
N***1236PI+PI+PI-	15.914	7.862	8.000	.0900		ERROR NOT GIVEN		CASON PR1,851-70	
THRESHOLD	2.74	.84	.97						
..... REACTION 215									
N***1236PI+3PI-	8.223	3.763	3.900	4.0000	MICROB	.6000		ABE,PR2,91-70	
	11.186	5.342	5.480	.0650		.0150		BOMSE PR162,1328-67	
	12.106	5.832	5.970	.1050		.0150		SUEN PR1,54-70	
	14.038	6.862	7.000	.0600		.0200		CAMPBELL NPB12,549-69	
	21.543	10.861	11.000	.1200		ERROR NOT GIVEN		DARON.226,CERN68	
	30.925	15.861	16.000	.1020		.0120		JUNKMANN NPB8,471-68	
THRESHOLD	3.23	1.10	1.23					6 DATA POINTS LISTED	
..... REACTION 216									
N***1236PI+3PI-PI0	12.106	5.832	5.970	.0920		.0140		SUEN PR1,54-70	
	14.038	6.862	7.000	.1500		.0300		CAMPBELL NPB12,549-69	
	30.925	15.861	16.000	.1070		.0110		JUNKMANN NPB8,471-68	
THRESHOLD	3.75	1.38	1.51					3 DATA POINTS LISTED	
..... REACTION 217									
N***1236PI-PI-	4.849	1.965	2.100	.5300		.0500		SATTER PR134B,207-64	
	5.973	2.564	2.700	.7700		.0800		KLEIN PR150,1123-66	
	6.067	2.614	2.750	.6100		ERROR NOT GIVEN		ALITTI NC35,1-65	
	6.910	3.063	3.200	.5900		.0700		CHUNG PR165,1491-68	
	7.717	3.493	3.630	.5100		ERROR NOT GIVEN		LEE PR159,1156-67	
	7.848	3.563	3.700	.4400		.1100		GOLDHABER,474,DUB64	
	8.204	3.753	3.890	.3030		.0330		WOHLMUT NPB18,505-70	
	8.410	3.863	4.000	.5000		ERROR NOT GIVEN		BONDAR NC31,485-64	O
	8.786	4.063	4.200	.5900		.0700		CHUNG PR165,1491-68	
	12.106	5.832	5.970	.3900		.0600		GALLOWAY,PR1,3077-70	
	12.162	5.862	6.000	.3900		.0700		MOTT,NPB16,102-70	
	13.475	6.562	6.700	.3000		.0800		MIYASHITA PR1,771-70	
	14.038	6.862	7.000	.5500		.1100		CASON PR148,1282-66	
	15.914	7.862	8.000	.3200		.0500		LAMSA PR166,1395-68	
	20.136	10.111	10.250	.1000		.0400		BISWAS PR134B,901-64	
	21.543	10.861	11.000	.3200		.0300		CASO,NC66A,11-70	
	25.296	12.861	13.000	.2750		.0280		BRANDE. ,NPB16,287-70	
	30.925	15.861	16.000	.2400		.0500		BALLAM BAPS12,487-67	
	30.925	15.861	16.000	.1820		.0120		ABBCH VIENNA68	
	38.431	19.861	20.000	.1830		.0230		BRANDE. ,NPB16,287-70	
	47.813	24.861	25.000	.1000		.0200		ERWIN BAPS12,487-67	
THRESHOLD	2.30	.61	.73					21 DATA POINTS LISTED	
				FIT OF SIGMA AGAINST PLAB GEV/C					
				13 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .91					
				K = 1.85 +- .69 N = -.80 +- .15					
..... REACTION 218									
N***1236PI-PI-PI0	4.849	1.965	2.100	.0570		.0220		SATTER.PR134B,207-64	
	5.973	2.564	2.700	.3100		.0800		KLEIN PR150,1123-66	
	6.067	2.614	2.750	.1500		.0100		ALITTI PL21,354-66	
	6.910	3.063	3.200	.3200		.0800		CHUNG PR155,1491-68	
	8.786	4.063	4.200	.3350		.0650		CHUNG PR165,1491-68	
	13.475	6.562	6.700	.3500		.1000		MIYASHITA PR1,771-70	
	15.914	7.862	8.000	.1900		.0200		CASON PR1,851-70	
	20.136	10.111	10.250	.3600		.0800		BISWAS PR134,B901-64	
	21.543	10.861	11.000	.3000		.0500		CASO NC47A,675-67	
	30.925	15.861	16.000	.1700		.0120		ABBCH VIENNA68	
THRESHOLD	2.74	.84	.97					10 DATA POINTS LISTED	
				FIT OF SIGMA AGAINST PLAB GEV/C					
				6 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .39					
				K = .60 +- .37 N = -.44 +- .25					
..... REACTION 219									
N***1236PI-PI-Z0	15.989	7.902	8.040	.0650		.0200		DZIERBA,PR2,2544-70	
THRESHOLD	3.23	1.10	1.23						
..... REACTION 220									
N***1236RH-PI-	7.717	3.493	3.630	.2300		ERROR NOT GIVEN		LEE,PR159,1156,67	
	13.475	6.562	6.700	.0450		.0200		MIYASHITA PR1,771-70	
THRESHOLD	4.56	1.81	1.95					2 DATA POINTS LISTED	
..... REACTION 221									
N***1236RHOPI-PI-	8.223	3.763	3.900	.0230		.0120		ABE,PR2,91-70	
	12.106	5.832	5.970	.0480		.0060		SUEN PR1,54-70	
	21.543	10.861	11.000	.0600		ERROR NOT GIVEN		DARON.226,CERN68	
THRESHOLD	5.18	2.14	2.28					3 DATA POINTS LISTED	
..... REACTION 222									
N***1236OMPI-PI-	21.543	10.861	11.000	.0500		ERROR NOT GIVEN		DARON.226,CERN68	
THRESHOLD	5.29	2.20	2.33						
..... REACTION 223									
N***OM2PI-=P2PI+3PI-PI0	12.106	5.832	5.970	.0400		.0080		SUEN PR1,54-70	
THRESHOLD	5.29	2.20	2.33						
..... REACTION 224									
N***A2-PI-=P2PI+3PI-	30.925	15.861	16.000	.0170		.0050		JUNKMANN NPB8,471-68	
THRESHOLD	7.16	3.20	3.33						
..... REACTION 225									
N**1236PI+PI-PI-	15.914	7.862	8.000	.1950		ERROR NOT GIVEN		CASON PR1,851-70	O
THRESHOLD	2.74	.84	.97						

FOOTNOTES

O=ORDER OF MAGNITUDE

PI-P

	S	K.ENERGY	PLAB		CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 226									
N*+1236PI+2PI-=P3PIP10	21.543	10.861	11.000		.1200	.0400		CASO NC47A,106-67	
THRESHOLD	2.74	.84	.97						
..... REACTION 227									
N*+1236PI-	5.973	2.564	2.700		.7500	.3000		MILLER PR153,1423-67	*
	8.710	4.023	4.160		.2150	.0240		EISNER PR164,1699-67	*
	15.914	7.862	8.000		.0720	.0120		ANDERSON,PRL25,699-70	
	21.543	10.861	11.000		.0900	.0200		DAUDIN PC-66	
	30.925	15.861	16.000		.0330	.0100		ANDERSON,PRL25,699-70	
THRESHOLD	1.89	.39	.51					5 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C				
					5 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. = .56				
					K = 1.57 +- .97 N = -1.37 +- .34				
..... REACTION 228									
N*+1236PI-=PPI-P10	5.149	2.125	2.260		.2000	.0600		REYNOL. PR184,1424-69	
	5.973	2.564	2.700		.5000	.2000		MILLER PR153,1423-67	
	8.710	4.023	4.160		.1690	.0130		EISNER PR164,1699-67	
	21.543	10.861	11.000		.0800	.0200		DAUDIN PC-66	
THRESHOLD	1.89	.39	.51					4 DATA POINTS LISTED	
..... REACTION 229									
N*+1236PI-=NPI+PI-	5.149	2.125	2.260		.1000	.0700		REYNOL. PR184,1424-69	
	8.710	4.023	4.160		.0460	.0200		EISNER PR164,1699-67	
THRESHOLD	1.89	.39	.51					2 DATA POINTS LISTED	
..... REACTION 230									
N*+1236RHOPI-	13.475	6.562	6.700		.0360	.0150		MIYASHITA PR1,771-70	
THRESHOLD	4.56	1.81	1.95						
..... REACTION 231									
N*-1236PI+	8.410	3.863	4.000		.0900	.0300		BONDAR NC31,729-64	
	21.543	10.861	11.000		.0100	ERROR NOT GIVEN		DAUDIN PC-66	
THRESHOLD	1.89	.39	.51					2 DATA POINTS LISTED	
..... REACTION 232									
N*-1236PI+=NPI+P1-	5.149	2.125	2.260		.1100	.0600		REYNOL. PR184,1424-69	
THRESHOLD	1.89	.39	.51						
..... REACTION 233									
N*-1236PI+PI+PI+PI-PI-	12.106	5.832	5.970	U	.0750			SUEN PR1,54-70	
THRESHOLD	3.75	1.38	1.51						
..... REACTION 234									
N*-1236PI+PI+PI-	4.849	1.965	2.100		.0180	.0160		SATTER.PR134B,207-64	
	5.973	2.564	2.700		.4800	.0800		KLEIN PR150,1123-66	
	6.460	2.824	2.960		.4100	.1000		KEY PR166,1430-68	
	6.910	3.063	3.200		.1500	ERROR NOT GIVEN		CHUNG PR165,1491-68	
	7.717	3.493	3.630		.5000	ERROR NOT GIVEN		LEE PR159,1156-67	
	8.786	4.063	4.200		.1700	ERROR NOT GIVEN		CHUNG PR165,1491-68	
	11.186	5.342	5.480		.0390	.0160		BOMSE PR162,1328-67	
	13.475	6.562	6.700		.2450	.0800		MIYASHITA PR1,771-70	
	20.136	10.111	10.250		.1100	.0500		BISWAS PR134B,901-64	
THRESHOLD	2.74	.84	.97					9 DATA POINTS LISTED	
..... REACTION 235									
N*-1236PI+PI-PI-	15.914	7.862	8.000		.0900	ERROR NOT GIVEN		CASON PR1,851-70	O
THRESHOLD	2.74	.84	.97						
..... REACTION 236									
N*-1236RHOPI+	13.475	6.562	6.700		.0500	.0240		MIYASHITA PR1,771-70	
THRESHOLD	4.56	1.81	1.95						
..... REACTION 237									
N*01236	30.925	15.861	16.000		.0500	.0200		BALLAM SLAC334-67	A
THRESHOLD	1.53	.20	.30						
..... REACTION 238									
N*01236PI+PI-	5.973	2.564	2.700		.2700	ERROR NOT GIVEN		KLEIN,228,ATHENS65	
	21.543	10.861	11.000		.1500	.0500		CASO NC47A,675-67	
	30.925	15.861	16.000		.0500	.0200		BALLAM BAPS12,488-67	
THRESHOLD	2.30	.61	.73					3 DATA POINTS LISTED	
..... REACTION 239									
N*01236PI+PI-=PPI+PI-PI-	4.849	1.965	2.100		.1100	.0300		SATTER.PR134B,207-64	
	5.973	2.564	2.700		.1500	.1300		KLEIN PR150,1123-66	
	7.848	3.563	3.700		.6000	.2000		GOLDHABER,474,DUB64	
	12.106	5.832	5.970		.0400	.0100		GALLOWAY,PR1,3077-70	
	38.431	19.861	20.000		.0460	.0060		FERBEL VIENNA68	S
THRESHOLD	2.30	.61	.73					5 DATA POINTS LISTED	
..... REACTION 240									
N*01236PI+PI-=PPI+2PI-	25.296	12.861	13.000		.1800	.0340		BRANDE. NPB16,287-70	
	38.431	19.861	20.000		.1240	.0210		BRANDE. NPB16,287-70	
THRESHOLD	2.30	.61	.73					2 DATA POINTS LISTED	

FOOTNOTES

*=CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS
U=UPPER LIMIT
O=ORDER OF MAGNITUDE
A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES
S=STATISTICAL ERROR ONLY

PI-P

	S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 241										
N*01236PI+PI-PI0=P4PI	4.849	1.965	2.100		.0240		.0210		SATTER.PR134B,207-64	
	21.543	10.861	11.000		.1200		.0300		CASO NC47A,675-67	
THRESHOLD	2.74	.84	.97						2 DATA POINTS LISTED	
..... REACTION 242										
N*01236RH0	5.973	2.564	2.700		.1000		.2500		KLE. COO-1428-7,PC-66	
	7.848	3.563	3.700		.1000		.0300		SHEN UCRL-16170-65,PC	
	14.038	6.862	7.000		.0350		.0130		CASON PR148,1282-66	
	21.543	10.861	11.000		.0500		.0150		CASO NC47A,675-67,PC	
	30.925	15.861	16.000		.0300		.0150		BELL. BAPS12,488-67PC	
	38.431	19.861	20.000		4.0000	MICROB	2.0000		FERBEL VIENNA68	S
THRESHOLD	3.98	1.50	1.64						6 DATA POINTS LISTED	
..... REACTION 243										
N*01236RH0=PPI+PI-PI-	7.717	3.493	3.630		.0690		ERROR NOT GIVEN		LEE,PR159,1156,67	
	8.204	3.753	3.890		.2030		.0290		WOHLMUT NPB18,505-70	
	8.223	3.763	3.900		.2030		.0290		WOHLMUT,NPB18,505-70	
	15.914	7.862	8.000		.0280		.0070		LAMSA PR166,1395-68	
	38.431	19.861	20.000	U	.0300				BRANDEN. ATHENS67	
THRESHOLD	3.98	1.50	1.64						5 DATA POINTS LISTED	
..... REACTION 244										
N*01236RH0=NPI+PI-PI0	4.849	1.965	2.100		.5500		.0700		BOYD PR166,1458-68	
THRESHOLD	3.98	1.50	1.64							
..... REACTION 245										
N*01236OM	6.067	2.614	2.750		.0600		.0100		ALITTI PL21,354-66	
THRESHOLD	4.08	1.55	1.69							
..... REACTION 246										
N0(1350/1550)PI+PI-=P3PI	38.431	19.861	20.000		.0390		.0050		FERBEL VIENNA68	S
THRESHOLD	2.89	.92	1.05							
..... REACTION 247										
N0(1350/1550)RH0	38.431	19.861	20.000		8.0000	MICROB	2.0000		FERBEL VIENNA68	S
THRESHOLD	4.00	1.51	1.65							
..... REACTION 248										
N+1400PI-	8.710	4.023	4.160		.2860		.0340		EISNER PR164,1699-67	*
	15.914	7.862	8.000		.1870		.0180		ANDERSON,PRL25,699-70	
	21.543	10.861	11.000	U	.1000				CASO NC47A,675-67	
	30.925	15.861	16.000		.1770		.0210		ANDERSON,PRL25,699-70	
	38.619	19.961	20.100		.2000		.0400		FOLEY PRL19,397-67	1
THRESHOLD	2.37	.64	.77						5 DATA POINTS LISTED	
..... REACTION 249										
N+1400PI-=PPI+PI-PI-	8.204	3.753	3.890		.2820		.0320		WOHLMUT NPB18,505-70	
	15.914	7.862	8.000		.0190		.0060		LAMSA PR166,1395-68	
THRESHOLD	2.37	.64	.77						2 DATA POINTS LISTED	
..... REACTION 250										
N+1400PI-=PPI-PI0	8.710	4.023	4.160		.0830		.0120		EISNER PR164,1699-67	
THRESHOLD	2.37	.64	.77							
..... REACTION 251										
N+1400PI-=NPI+PI-	5.149	2.125	2.260		.2400		.0600		REYNOL. PR184,1424-69	
	8.710	4.023	4.160		.1030		.0180		EISNER PR164,1699-67	
	30.925	15.861	16.000		.0280		.0150	.0090	ABBCH VIENNA68	
THRESHOLD	2.37	.64	.77						3 DATA POINTS LISTED	
..... REACTION 252										
N+1400PI-=N*++1236PI-PI-	8.223	3.763	3.900		.2820		.0320		WOHLMUT,NPB18,505-70	
	38.431	19.861	20.000		8.0000	MICROB	2.0000		FERBEL VIENNA68	S
THRESHOLD	2.37	.64	.77						2 DATA POINTS LISTED	
..... REACTION 253										
N01400PI0	12.162	5.862	6.000		8.0000	MICROB	ERROR NOT GIVEN		BELL PRL20,164-68	
THRESHOLD	2.37	.64	.77							
..... REACTION 254										
N+1525PI-	15.914	7.862	8.000		.0750		.0060		ANDERSON,PRL25,699-70	
	30.925	15.861	16.000		.0620		.0050		ANDERSON,PRL25,699-70	
THRESHOLD	2.77	.86	.99						2 DATA POINTS LISTED	
..... REACTION 255										
N+1525PI-=PPI+PI-PI-	38.431	19.861	20.000		.0120		.0030		FERBEL VIENNA68	S
THRESHOLD	2.77	.86	.99							
..... REACTION 256										
N+1525PI-=N*++1236PI-PI-	38.431	19.861	20.000		8.0000	MICROB	2.0000		FERBEL VIENNA68	S
THRESHOLD	2.77	.86	.99							
..... REACTION 257										
N+15252PI+3PI-	14.038	6.862	7.000		.0400		.0090		CAMPBELL NPB12,549-69	
THRESHOLD	4.95	2.02	2.15							
..... REACTION 258										
N+1525RH-=PPI+PI-PI-PI0	7.717	3.493	3.630		.0610		ERROR NOT GIVEN		LEE PR159,1156-67	
THRESHOLD	5.22	2.16	2.30							

FOOTNOTES

S=STATISTICAL ERROR ONLY
U=UPPER LIMIT
*=CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS
1=AVERAGE VALUE OVER A BAND OF MOMENTA

PI-P

	S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 259									
N01525PI+PI-	5.973	2.564	2.700	.1100		ERROR NOT GIVEN		KLEIN,228,ATHENS65	
THRESHOLD	3.26	1.12	1.25						
..... REACTION 260									
N01525PI+PI-=PPI+PI-PI-	5.973	2.564	2.700	.0400		.0400		KLEIN PR150,1123-66	
THRESHOLD	3.26	1.12	1.25						
..... REACTION 261									
N01525RHO	5.973	2.564	2.700	.0600		ERROR NOT GIVEN		KLEIN,228,ATHENS65	
	7.848	3.563	3.700	.0750		.0250		GOLDHABER,474,DUB64	
THRESHOLD	5.22	2.16	2.30					2 DATA POINTS LISTED	
..... REACTION 262									
N01525OM	6.067	2.614	2.750	.0600		.0100		ALITTI PL21,354-66	
THRESHOLD	5.33	2.22	2.36						
..... REACTION 263									
N01570PIO=S-K+PIO	10.286	4.862	5.000	5.5000	MICROB	ERROR NOT GIVEN		WEISBACH PL25B,302-67	
THRESHOLD	2.92	.94	1.07						
..... REACTION 264									
N*+1670PI-=PPI-PIO	8.710	4.023	4.160	.0460		.0130		EISNER PR164,1699-67	
THRESHOLD	3.28	1.13	1.26						
..... REACTION 265									
N*+1670PI-=NPI+PI-	5.149	2.125	2.260	.4500		.0500		REYNOL. PR184,1424-69	
	8.710	4.023	4.160	.0710		.0150		EISNER PR164,1699-67	
THRESHOLD	3.28	1.13	1.26					2 DATA POINTS LISTED	
..... REACTION 266									
N*01570PIO=PPI-PIO	5.149	2.125	2.260	.4900		.0700		REYNOL. PR184,1424-69	
	8.710	4.023	4.160	.0620		.0130		EISNER PR164,1699-67	
THRESHOLD	3.28	1.13	1.26					2 DATA POINTS LISTED	
..... REACTION 267									
N+1688PI-	5.973	2.564	2.700	.5000		.5000		MILLER PR153,1423-67	*
	15.914	7.862	8.000	.1830		.0080		ANDERSON,PRL25,699-70	
	30.925	15.861	16.000	.1560		.0060		ANDERSON,PRL25,699-70	
	38.619	19.961	20.100	.2800		.0900		FOLEY PRL19,397-67	1
THRESHOLD	3.34	1.16	1.29					4 DATA POINTS LISTED	
..... REACTION 268									
N+1688PI-=PPI+PI-PI-	38.431	19.861	20.000	.0170		.0030		FERBEL VIENNA68	S
THRESHOLD	3.34	1.16	1.29						
..... REACTION 269									
N+1688PI-=PPI-PIO	5.973	2.564	2.700	.1000		.1000		MILLER PR153,1423-67	
THRESHOLD	3.34	1.16	1.29						
..... REACTION 270									
N+1688PI-=N*01236PI+PI-	38.431	19.861	20.000	6.0000	MICROB	2.0000		FERBEL VIENNA68	S
THRESHOLD	3.34	1.16	1.29						
..... REACTION 271									
N+1688RH-=PPI+PI-PI-PIO	7.717	3.493	3.630	.0400		ERROR NOT GIVEN		LEE PR159,1156-67	
THRESHOLD	5.99	2.57	2.71						
..... REACTION 272									
N01688PI+PI-	21.543	10.861	11.000	.0700		.0300		CASO NC47A,675-67	
THRESHOLD	3.87	1.44	1.58						
..... REACTION 273									
N01688PI+PI-=PPI+PI-PI-	38.431	19.861	20.000	.0400		.0050		FERBEL VIENNA68	S
THRESHOLD	3.87	1.44	1.58						
..... REACTION 274									
N01688RHO	7.848	3.563	3.700	.0780		.0250		GOLDHABER,474,DUB64	
	38.431	19.861	20.000	9.0000	MICROB	2.0000		FERBEL VIENNA68	S
THRESHOLD	5.99	2.57	2.71					2 DATA POINTS LISTED	
..... REACTION 275									
N+1710PI-=PPI+PI-PI-	12.162	5.862	6.000	.0410		.0070		CRENNELL PRL25,187-70	
THRESHOLD	3.42	1.20	1.34						
..... REACTION 276									
N+1710PI-=PETPI-	12.162	5.862	6.000	1.5000	MICROB	1.5000		CRENNELL PRL25,187-70	
THRESHOLD	3.42	1.20	1.34						
..... REACTION 277									
N+1710PI-=(NPIPI)PI-	12.162	5.862	6.000	.0780		.0120		CRENNELL PRL25,187-70	
THRESHOLD	3.42	1.20	1.34						
..... REACTION 278									
N+1710PI-=(NPI)PI-	12.162	5.862	6.000	2.0000	MICROB	10.0000		CRENNELL PRL25,187-70	
THRESHOLD	3.42	1.20	1.34						

FOOTNOTES

*=CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS
1=AVERAGE VALUE OVER A BAND OF MOMENTA
S=STATISTICAL ERROR ONLY

PI-P

		S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 279										
N+1710PI-=LK+PI-		12.162	5.862	6.000	2.0000	MICROB	.5000		CRENNELL PRL25,187-70	
	THRESHOLD	3.42	1.20	1.34						
..... REACTION 280										
N*+1920RH-=PPI+PI-PI-PIO		7.717	3.493	3.630	.0330		ERROR NOT GIVEN		LEE PR159,1156-67	
	THRESHOLD	7.18	3.21	3.35						
..... REACTION 281										
N+2190PI-		30.925	15.861	16.000	.0280		.0090		ANDERSON,PRL25,699-70	
	THRESHOLD	5.43	2.27	2.41						
..... REACTION 283										
Y		2.945	.950	1.081	1.0200		.2500		ERWIN PR109,1364-58	A
	THRESHOLD	2.59	.76	.89						
..... REACTION 284										
YK		9.630	4.513	4.650	1.1100		ERROR NOT GIVEN		BERTANZA PR130,786-63	A
		19.667	9.861	10.000	1.4500		.1700		BIGI NC33,1265-64	A
		30.925	15.861	16.000	1.3200		.1500		BARTKE NC24,876-62	A
	THRESHOLD	2.59	.76	.89					3 DATA POINTS LISTED	
..... REACTION 285										
YKPI		6.067	2.614	2.750	1.4000		.1000		DAHL NC49A,1-67	
	THRESHOLD	3.06	1.01	1.14						
..... REACTION 286										
YK*890=YKPI		8.410	3.863	4.000	.1080		.0280		BARTSCH NC43A,1010-66	
	THRESHOLD	4.43	1.74	1.88						
..... REACTION 287										
YK*890=YKPIPI		8.410	3.863	4.000	.1050		.0330		BARTSCH NC43A,1010-66	
	THRESHOLD	4.43	1.74	1.88						
..... REACTION 288										
YK*1320		5.973	2.564	2.700	.0200		.0100		MILLER PL15,74-65	
	THRESHOLD	5.93	2.54	2.68						
..... REACTION 289										
YAY		47.813	24.861	25.000	.0120		ERROR NOT GIVEN		WATERS BAPS12,541-67	O
	THRESHOLD	10.76	5.11	5.25						
..... REACTION 290										
YAL		19.667	9.861	10.000	5.2000	MICROB	3.2000		BIGI,247,CERN62	A
	THRESHOLD	10.76	5.11	5.25						
..... REACTION 291										
YAY(N/P)MPI		19.667	9.861	10.000	6.3000	MICROB	3.6000		BIGI NC33,1265-64	
	THRESHOLD	11.70	5.61	5.75						
..... REACTION 292										
YO		8.410	3.863	4.000	.8600		ERROR NOT GIVEN		BARTSCH NC43A,1010-66	A
		30.925	15.861	16.000	.6800		.1000		BARTKE NC24,876-62	A
	THRESHOLD	2.56	.75	.87					2 DATA POINTS LISTED	
..... REACTION 293										
YOK		19.667	9.861	10.000	.9400		.1000		BIGI NC33,1265-64	A
	THRESHOLD	2.56	.75	.87						
..... REACTION 294										
YOK+PI-PIO		21.543	10.861	11.000	.0400		.0100		PELOSI BAPS14,561-69	
	THRESHOLD	3.57	1.28	1.42						
..... REACTION 295										
YOKO		12.162	5.862	6.000	.0410		.0040		CRENNELL PRL18,86-67	A
	THRESHOLD	2.56	.75	.87						
..... REACTION 296										
YOKOPI+PI-		21.543	10.861	11.000	.1100		.0300		PELOSI BAPS14,561-69	
	THRESHOLD	3.57	1.28	1.42						
..... REACTION 297										
YOKOPIO		3.914	1.466	1.600	.1600		.0300		SOBB,375,AIX61	A
	THRESHOLD	3.06	1.01	1.14						
..... REACTION 282										
L		3.226	1.100	1.232	.2200		.0600		BROWN PR107,906-57	A
		22.294	11.261	11.400	.7400		.2800	.1800	FERBEL NC28,1214-63	A
		30.925	15.861	16.000	1.0000		ERROR NOT GIVEN		BARTKE,402,ROCH60	O
	THRESHOLD	2.59	.76	.89					3 DATA POINTS LISTED	
..... REACTION 298										
LNAL		10.286	4.862	5.000	.0800	MICROB	ERROR NOT GIVEN		BARTKE,402,ROCH60	
		14.038	6.862	7.000	.2700	MICROB	.0700		BEUSCH PL28B,211-68	
		23.419	11.861	12.000	.3200	MICROB	.0500		BEUSCH PL28B,211-68	
	THRESHOLD	10.05	4.74	4.87					3 DATA POINTS LISTED	

FOOTNOTES

A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES
O=ORDER OF MAGNITUDE

PI-P

		S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 299										
LK+PI+PI-PI-		5.973	2.564	2.700	2.0000	MICROB	1.0000		MILLER PR140B,360-65	
		6.535	2.864	3.000	5.0000	MICROB	3.0000		WANGLER PR137B,414-65	
		6.723	2.964	3.100	.0101		.0013		DAHL PR163,1377-67	1
		8.410	3.863	4.000	.0300		.0038		DAHL PR163,1377-67	1
	THRESHOLD	4.12	1.57	1.71					4 DATA POINTS LISTED	
..... REACTION 300										
LK+PI-		3.727	1.367	1.500	.0640		.0090		SCHWARTZ UCRL11360-64	
		3.895	1.457	1.590	.0750		.0100		GOUSSU NC42A,606-66	
		3.942	1.481	1.615	.0860		.0130		DAHL PR163,1377-67	
		4.082	1.556	1.690	.0760		.0080		SCHWARTZ UCRL11360-64	
		4.381	1.716	1.850	.0960		.0100		SCHWARTZ UCRL11360-64	
		4.550	1.805	1.940	.1400		.0130		DAHL PR163,1377-67	
		4.568	1.815	1.950	.1040		.0090		SCHWARTZ UCRL11360-64	
		4.625	1.845	1.980	.1430		.0230		DAHL PR163,1377-67	
		4.662	1.865	2.000	.0720		.0120		COLLEY, R128,1930-62	
		4.756	1.915	2.050	.1700		.0170		SCHWARTZ UCRL11360-64	
		4.756	1.915	2.050	.1520		.0140		DAHL PR163,1377-67	
		4.924	2.005	2.140	.1160		.0200		DAHL PR163,1377-67	
		4.943	2.015	2.150	.1180		.0090		SCHWARTZ UCRL11360-64	
		5.130	2.115	2.250	.1060		.0080		SCHWARTZ UCRL11360-64	
		5.317	2.215	2.350	.1450		.0140		SCHWARTZ UCRL11360-64	
		5.587	2.358	2.494	.1040		.0150		HANFT COO-94-67	
		5.805	2.474	2.610	.1150		.0130		DAHL PR163,1377-67	
		5.973	2.564	2.700	.0970		.0100		MILLER PR140B,360-65	
		6.067	2.614	2.750	.1170		.0200		GOUSSU NC47A,383-67	
		6.273	2.724	2.860	.1380		.0200		DAHL PR163,1377-67	
		6.554	2.874	3.010	.1140		.0140		DAHL PR163,1377-67	
		6.779	2.994	3.130	.0970		.0100		DAHL PR163,1377-67	
		6.929	3.073	3.210	.0950		.0080		DAHL PR163,1377-67	
		8.204	3.753	3.890	.0990		.0130		DAHL PR163,1377-67	
		8.710	4.023	4.160	.0880		.0110		DAHL PR163,1377-67	
		12.162	5.862	6.000	.0170		.0010		CRENNE. PRL19,1212-67	
	THRESHOLD	3.06	1.01	1.14					26 DATA POINTS LISTED	
..... REACTION 301										
LK+PI-PI0		3.942	1.481	1.615	1.4000	MICROB	1.4000		DAHL PR163,1377-67	
		4.082	1.556	1.690	.8000	MICROB	.8000		SCHWARTZ UCRL11360-64	
		4.381	1.716	1.850	7.2000	MICROB	2.6000		SCHWARTZ UCRL11360-64	
		4.550	1.805	1.940	8.0000	MICROB	2.0000		DAHL PR163,1377-67	
		4.568	1.815	1.950	7.6000	MICROB	2.4000		SCHWARTZ UCRL11360-64	
		4.625	1.845	1.980	.0101		.0029		DAHL PR163,1377-67	
		4.756	1.915	2.050	.0190		.0060		SCHWARTZ UCRL11360-64	
		4.756	1.915	2.050	.0124		.0024		DAHL PR163,1377-67	
		4.924	2.005	2.140	.0105		.0048		DAHL PR163,1377-67	
		4.943	2.015	2.150	.0210		.0040		SCHWARTZ UCRL11360-64	
		5.130	2.115	2.250	.0380		.0050		SCHWARTZ UCRL11360-64	
		5.317	2.215	2.350	.0400		.0070		SCHWARTZ UCRL11360-64	
		5.805	2.474	2.610	.0570		.0080		DAHL PR163,1377-67	
		5.973	2.564	2.700	.0770		.0090		MILLER PR140B,3 0	
		6.067	2.614	2.750	.0860		.0150		GOUSSU NC47A,383-67	
		6.273	2.724	2.860	.0650		.0110		DAHL PR163,1377-67	
		6.554	2.874	3.010	.0860		.0110		DAHL PR163,1377-67	
		6.779	2.994	3.130	.0740		.0080		DAHL PR163,1377-67	
		6.929	3.073	3.210	.0930		.0080		DAHL PR163,1377-67	
		8.204	3.753	3.890	.1030		.0130		DAHL PR163,1377-67	
		8.710	4.023	4.160	.1080		.0120		DAHL PR163,1377-67	
		14.038	6.862	7.000	.0523		.0151		PEEKNA,NP827,605-71	
	THRESHOLD	3.57	1.28	1.42					22 DATA POINTS LISTED	
..... REACTION 302										
LK+PI-Z0		5.973	2.564	2.700	.0140		.0040		MILLER PR140B,360-65	
	THRESHOLD	4.12	1.57	1.71						
..... REACTION 303										
LK0		2.616	.775	.904	.0560		.0150		BERTANZA PRL8,332-62	
		2.627	.781	.910	.1220		.0100		JONES,PRL26,860-71	S
		2.644	.790	.919	.1800		.0700		VAN DYCK PRL23,50-69	
		2.650	.793	.922	.1400		.0200		BERTANZA PRL8,332-62	
		2.657	.797	.926	.2270		.0180		JONES,PRL26,860-71	S
		2.687	.813	.942	.3000		.0100		VAN DYCK PRL23,50-69	
		2.692	.816	.945	.3360		.0400		JONES,PRL26,860-71	S
		2.716	.829	.958	.4300		.0400		BERTANZA PRL8,332-62	
		2.728	.834	.964	.4270		.0340		JONES,PRL26,860-71	S
		2.735	.838	.968	.5200		.0200		VAN DYCK PRL23,50-69	
		2.763	.853	.983	.5760		.0510		JONES,PRL26,860-71	S
		2.782	.863	.993	.5900		.0300		VAN DYCK PRL23,50-69	
		2.796	.871	1.001	.5600		.0400		BERTANZA PRL8,332-62	
		2.798	.872	1.002	.5880		.0730		JONES,PRL26,860-71	S
		2.832	.890	1.020	.6700		.0400		KEREN PR133,B457-64	
		2.834	.891	1.021	.8090		.0900		JONES,PRL26,860-71	S
		2.837	.893	1.023	.9400		.0400		VAN DYCK PRL23,50-69	
		2.860	.905	1.035	.7300		.0280		CRAWFORD,270,CERN62	
		2.869	.910	1.040	.5900		.1200		EISLER NC10,468-58	
		2.869	.910	1.040	.9260		.0310		JONES,PRL26,860-71	S
		2.874	.913	1.043	.5700		.0600		VAN DYCK PRL23,50-69	
		2.904	.929	1.059	.8990		.0580		JONES,PRL26,860-71	S
		2.940	.947	1.078	.7940		.0560		JONES,PRL26,860-71	S
		2.964	.960	1.091	.8200		.1300		EISLER NC10,468-58	
		2.964	.960	1.091	.5800		.1700		LEIPUN. PR109,1358-58	
		2.969	.963	1.094	.7000		.0600		VAN DYCK PRL23,50-69	
		2.975	.966	1.097	.7290		.0400		JONES,PRL26,860-71	S
		3.010	.985	1.116	.5750		.0340		JONES,PRL26,860-71	S
		3.035	.998	1.129	.5920		.0220		BINFORD PR183,1134-69	
		3.046	1.004	1.135	.5410		.0490		JONES,PRL26,860-71	S
		3.062	1.013	1.144	.6400		.0700		VAN DYCK PRL23,50-69	
		3.156	1.063	1.194	.5800		.0700		VAN DYCK PRL23,50-69	

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA
S=STATISTICAL ERROR ONLY

PI-P

		S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 303										
LKO		3.232	1.103	1.235	.4850		.0350		BINFORD PR183,1134-69	
(CONTINUATION)		3.310	1.145	1.277	.4470		.0280		BINFORD PR183,1134-69	
		3.402	1.194	1.326	.3670		.0330		BINFORD PR183,1134-69	
		3.413	1.200	1.332	.2900		.0500		EISLER NC10,468-58	
		3.602	1.300	1.433	.3200		.0600		EISLER NC10,468-58	
		3.727	1.367	1.500	.3340		.0190		SCHWARTZ UCRL11360-64	
		3.742	1.375	1.508	.2140		.0230		YODER PR132,1778-63	
		3.895	1.457	1.590	.2140		.0210		GOUSSU NC42A,606-66	
		3.914	1.466	1.600	.2380		.0410		SOBB,375,AIX61	
		3.942	1.481	1.615	.2080		.0250		DAHL PR163,1430-67	
		4.082	1.556	1.690	.1990		.0120		SCHWARTZ UCRL11360-64	
		4.381	1.716	1.850	.1810		.0120		SCHWARTZ UCRL11360-64	
		4.550	1.805	1.940	.1850		.0150		DAHL PR163,1430-67	
		4.568	1.815	1.950	.1820		.0110		SCHWARTZ UCRL11360-64	
		4.625	1.845	1.980	.1840		.0200		DAHL PR163,1430-67	
		4.756	1.915	2.050	.1820		.0170		SCHWAR. UCRL-11360-64	
		4.756	1.915	2.050	.1790		.0150		DAHL PR163,1430-67	
		4.924	2.005	2.140	.1620		.0200		DAHL UCRL16978-67	
		4.943	2.015	2.150	.1920		.0110		SCHWARTZ UCRL11360-64	
		5.130	2.115	2.250	.1720		.0100		SCHWARTZ UCRL11360-64	
		5.317	2.215	2.350	.1740		.0140		SCHWARTZ UCRL11360-64	
		5.587	2.358	2.494	.1600		.0200		HANFT COO-94-67	
		5.795	2.469	2.605	.1060		.0120		DAHL PR163,1430-67	
		5.973	2.564	2.700	.1200		.0110		MILLER PR140B,360-65	
		6.067	2.614	2.750	.0900		.0100		ARMENTEROS PL9,207-64	
		6.067	2.614	2.750	.0900		.0250		GOUSSU NC47A,383-67	
		6.273	2.724	2.860	.1090		.0150		DAHL PR163,1430-67	
		6.535	2.864	3.000	.0310		.0140		WANGLER PR137B,414-65	
		6.554	2.874	3.010	.0840		.0120		DAHL PR163,1430-67	
		6.770	2.989	3.125	.0940		.0120		DAHL PR163,1430-67	
		6.929	3.073	3.210	.0870		.0100		DAHL PR163,1430-67	
		8.195	3.748	3.885	.0670		.0120		DAHL PR163,1430-67	
		8.223	3.763	3.900	.0580		.0030		ABRAMOVI,NPB27,477-71	
		8.710	4.023	4.160	.0490		.0090		DAHL PR163,1430-67	
		12.162	5.862	6.000	.0235		.0040		CRENNELL PRL18,86-67	
	THRESHOLD	2.59	.76	.89					67 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C					
					20 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. =1.00					
					K = .79 +- .14 N = -1.93 +- .17					
..... REACTION 304										
LKO (BACKWARD)		8.410	3.863	4.000	2.0000		.4500		BEUSCH NP B19,546-70	
		10.286	4.862	5.000	.8300		.1600		BEUSCH,NPB19,546-70	
		12.537	6.062	6.200	.5000		.1200		BEUSCH NP B19,546-70	
		14.038	6.862	7.000	.3300		.0700		BEUSCH,NPB19,546-70	
		23.419	11.861	12.000	.0500		.0200		BEUSCH,NPB19,546-70	
	THRESHOLD	2.59	.76	.89					5 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C					
					5 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .99					
					K =168.34 +- 217.54 N = -3.23 +- .73					
..... REACTION 305										
LKO (U=UMAX)		8.410	3.863	4.000	8.3000		1.7000		BEUSCH,NPB19,546-70	
		10.286	4.862	5.000	4.3200		.7300		BEUSCH,NPB19,546-70	
		12.537	6.062	6.200	1.9900		.4200		BEUSCH,NPB19,546-70	
		14.038	6.862	7.000	1.8700		.3200		BEUSCH,NPB19,546-70	
		23.419	11.861	12.000	.1700		.0600		BEUSCH,NPB19,546-70	
	THRESHOLD	2.59	.76	.89					5 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C					
					5 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .82					
					K =837.00 +- 959.70 N = -3.26 +- .65					
..... REACTION 306										
LKO,TOTAL		2.945	.950	1.081	.5800		.1200		ERWIN PR109,1364-58	A
		22.294	11.261	11.400	.3200		.0800	.1100	FERBEL NC28,1214-63	A
	THRESHOLD	2.59	.76	.89					2 DATA POINTS LISTED	
..... REACTION 307										
LKO=NEUTRALS		2.661	.799	.928	.0400		ERROR NOT GIVEN		BULOS,PR187,1827-69	
		2.754	.848	.978	.1000		ERROR NOT GIVEN		BULOS,PR187,1827-69	
		2.839	.894	1.024	.1800		ERROR NOT GIVEN		BULOS,PR187,1827-69	
		2.979	.968	1.099	.1800		ERROR NOT GIVEN		BULOS,PR187,1827-69	
		3.254	1.115	1.247	.0600		ERROR NOT GIVEN		BULOS,PR187,1827-69	
	THRESHOLD	2.59	.76	.89					5 DATA POINTS LISTED	
..... REACTION 308										
LKOPI+PI+PI-PI-		6.535	2.864	3.000	1.0000	MICROB	1.0000		WANGLER PR137B,414-65	
		14.038	6.862	7.000	9.8000	MICROB	4.0000		PEEKNA,NPB27,605-71	
	THRESHOLD	4.70	1.89	2.02					2 DATA POINTS LISTED	
..... REACTION 309										
LKOPI+PI+PI-PI-PIO		14.038	6.862	7.000	.0163		.0051		PEEKNA,NPB27,605-71	
	THRESHOLD	5.33	2.22	2.36						
..... REACTION 310										
LKOPI+PI+PI-PI-ZO		14.038	6.862	7.000	.0123		.0045		PEEKNA,NPB27,605-71	
	THRESHOLD	6.00	2.58	2.71						

FOOTNOTES

A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES

PI-P

		S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 311										
LKOPI+PI-		3.942	1.481	1.615	1.1000	MICROB	1.1000		DAHL PR163,1377-67	
		4.082	1.556	1.690	1.7000	MICROB	1.2000		SCHWARTZ UCRL11360-64	
		4.381	1.716	1.850	5.3000	MICROB	2.2000		SCHWARTZ UCRL11360-64	
		4.550	1.805	1.940	9.9000	MICROB	2.3000		DAHL PR163,1377-67	
		4.568	1.815	1.950	.0157		.0034		SCHWARTZ UCRL11360-64	
		4.625	1.845	1.980	.0116		.0031		DAHL PR163,1377-67	
		4.756	1.915	2.050	.0220		.0030		DAHL PR163,1377-67	
		4.756	1.915	2.050	.0210		.0060		SCHWARTZ UCRL11360-64	
		4.924	2.005	2.140	9.9000	MICROB	5.1000		DAHL PR163,1377-67	
		4.943	2.015	2.150	.0480		.0050		SCHWARTZ UCRL11360-64	
		5.130	2.115	2.250	.0460		.0050		SCHWARTZ UCRL11360-64	
		5.317	2.215	2.350	.0740		.0090		SCHWARTZ UCRL11360-64	
		5.587	2.358	2.494	.0800		.0120		HANFT COO-94-67	
		5.805	2.474	2.610	.0590		.0070		DAHL PR163,1377-67	
		5.973	2.564	2.700	.0830		.0090		MILLER PR140B,360-65	
		6.067	2.614	2.750	.0970		.0150		GOUSSU NC47A,383-67	
		6.273	2.724	2.860	.0930		.0150		DAHL PR163,1377-67	
		6.535	2.864	3.000	.0720		.0170		WANGLER PR1378,414-65	
		6.554	2.874	3.010	.1130		.0120		DAHL PR163,1377-67	
		6.779	2.994	3.130	.0840		.0080		DAHL PR163,1377-67	
		6.929	3.073	3.210	.1040		.0080		DAHL PR163,1377-67	
		8.204	3.753	3.890	.1220		.0140		DAHL PR163,1377-67	
		8.710	4.023	4.160	.0960		.0100		DAHL PR163,1377-67	
	THRESHOLD	3.57	1.28	1.42					23 DATA POINTS LISTED	
..... REACTION 312										
LKOPI+PI-PIO		5.973	2.564	2.700	.0110		.0040		MILLER PR140B,360-65	
		6.723	2.964	3.100	.0380		.0050		DAHL PR163,1377-67	1
		8.410	3.863	4.000	.0700		.0110		DAHL PR163,1377-67	1
		14.038	6.862	7.000	.0791		.0123		PEEKNA,NPB27,605-71	
	THRESHOLD	4.12	1.57	1.71					4 DATA POINTS LISTED	
..... REACTION 313										
LKOPI+PI-ZO		14.038	6.862	7.000	.0778		.0117		PEEKNA,NPB27,605-71	
	THRESHOLD	4.70	1.89	2.02						
..... REACTION 314										
LKOPIO		3.727	1.367	1.500	.0560		.0160		SCHWARTZ UCRL11360-64	
		3.895	1.457	1.590	.1800		.0260		GOUSSU NC42A,606-66	
		3.942	1.481	1.615	.0910		.0220		DAHL PR163,1377-67	
		4.082	1.556	1.690	.1230		.0200		SCHWARTZ UCRL11360-64	
		4.381	1.716	1.850	.1920		.0270		SCHWARTZ UCRL11360-64	
		4.550	1.805	1.940	.1550		.0260		DAHL PR163,1377-67	
		4.568	1.815	1.950	.1710		.0230		SCHWARTZ UCRL11360-64	
		4.625	1.845	1.980	.1630		.0360		DAHL PR163,1377-67	
		4.756	1.915	2.050	.1820		.0340		SCHWARTZ UCRL11360-64	
		4.756	1.915	2.050	.1640		.0260		DAHL PR163,1377-67	
		4.924	2.005	2.140	.0880		.0280		DAHL PR163,1377-67	
		4.943	2.015	2.150	.1740		.0210		SCHWARTZ UCRL11360-64	
		5.130	2.115	2.250	.1310		.0170		SCHWARTZ UCRL11360-64	
		5.317	2.215	2.350	.1870		.0290		SCHWARTZ UCRL11360-64	
		5.587	2.358	2.494	.1260		.0280		HANFT COO-94-67	
		5.805	2.474	2.610	.0910		.0180		DAHL PR163,1377-67	
		5.973	2.564	2.700	.1320		.0180		MILLER PR140B,360-65	
		6.067	2.614	2.750	.1800		.0400		GOUSSU NC47A,383-67	
		6.273	2.724	2.860	.1280		.0320		DAHL PR163,1377-67	
		6.554	2.874	3.010	.1210		.0240		DAHL PR163,1377-67	
		6.779	2.994	3.130	.0760		.0150		DAHL PR163,1377-67	
		6.929	3.073	3.210	.0970		.0150		DAHL PR163,1377-67	
		8.204	3.753	3.890	.0980		.0210		DAHL PR163,1377-67	
		8.710	4.023	4.160	.0680		.0150		DAHL PR163,1377-67	
	THRESHOLD	3.06	1.01	1.14					24 DATA POINTS LISTED	
..... REACTION 315										
LKOZO		5.973	2.564	2.700	.1160		.0180		MILLER PR140B,360-65	
		14.038	6.862	7.000	5.0000	MICROB	.9000		PEEKNA,NPB27,605-71	
	THRESHOLD	3.57	1.28	1.42					2 DATA POINTS LISTED	
..... REACTION 316										
LKS		47.813	24.861	25.000	.2920		.0290		WATERS BAPS12,541-67	A
	THRESHOLD	2.60	.77	.89						
..... REACTION 317										
LKSPIO		12.162	5.862	6.000	4.0000	MICROB	.5000		CRENNE. PRL19,1212-67	
	THRESHOLD	3.07	1.02	1.15						
..... REACTION 318										
LK		19.667	9.861	10.000	.8000		.1000		BIGI,247,CERN62	A
	THRESHOLD	2.61	.77	.90						
..... REACTION 319										
LK*+890PI-		5.973	2.564	2.700	4.0000	MICROB	1.0000		MILLER PR140B,360-65	
	THRESHOLD	4.60	1.83	1.97						
..... REACTION 320										
LK*+890PI-=LK+PI-PIO		4.662	1.865	2.000	0.0000	MICROB	1.6000		DAHL PR163,1377-67	$
		6.723	2.964	3.100	.0101		.0028		DAHL PR163,1377-67	1
		8.410	3.863	4.000	9.0000	MICROB	3.5000		DAHL PR163,1377-67	1
	THRESHOLD	4.60	1.83	1.97					3 DATA POINTS LISTED	
..... REACTION 321										
LK*+890PI-=LKOPI+PI-		4.662	1.865	2.000	0.0000	MICROB	1.1000		DAHL PR163,1377-67	$
		6.723	2.964	3.100	.0111		.0031		DAHL PR163,1377-67	1
		8.410	3.863	4.000	.0119		.0044		DAHL PR163,1377-67	1
	THRESHOLD	4.60	1.83	1.97					3 DATA POINTS LISTED	

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA
A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES
$=DATA POINT NOT USED IN FITTING OR PLOTTING

PI-P

		S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 322										
LK*0890=L(KPI)0		4.662	1.865	2.000	.0984		.0074		DAHL PR163,1377-67	1
		5.973	2.564	2.700	.0530		.0080		MILLER PR140B,360-65	
		6.723	2.964	3.100	.0630		.0056		DAHL PR163,1377-67	1
		8.410	3.863	4.000	.0631		.0077		DAHL PR163,1377-67	1
	THRESHOLD	4.02	1.52	1.66					4 DATA POINTS LISTED	
..... REACTION 323										
LK*0890PI0=L(KPI)0PI0		4.662	1.865	2.000	0.0000	MICROB	1.6000		DAHL PR163,1377-67	$
		5.973	2.564	2.700	.0120		.0020		MILLER PR140B,360-65	
		6.723	2.964	3.100	.0220		.0044		DAHL PR163,1377-67	1
		8.410	3.863	4.000	.0286		.0073		DAHL PR163,1377-67	1
	THRESHOLD	4.60	1.83	1.97					4 DATA POINTS LISTED	
..... REACTION 324										
LK*01400		8.598	3.963	4.100	7.0000	MICROB	2.0000		CHUNG PRL15,325-65	1
	THRESHOLD	6.33	2.75	2.89						
..... REACTION 325										
LAL		14.038	6.862	7.000	0.0000	MICROB	.9000		PEEKNA,NPB27,605-71	$
	THRESHOLD	4.97	2.03	2.17						
..... REACTION 326										
(L/SO)		13.663	6.662	6.800	.8000		.2500		CHANG JETP13,323-61	A
		30.925	15.861	16.000	.6800		.1000		BARTKE NC24,876-62	A
	THRESHOLD	1.25	.05	.12					2 DATA POINTS LISTED	
..... REACTION 327										
(L/SO)K+		47.813	24.861	25.000	.3500		.0750		WATERS,NPB17,445-70	A
	THRESHOLD	2.60	.76	.89						
..... REACTION 328										
(L/SO)K+MPI		19.667	9.861	10.000	.4220		.1270		BIGI NC33,1265-64	
	THRESHOLD	2.60	.76	.89						
..... REACTION 329										
(L/SO)K+PI+PI-PI-		8.410	3.863	4.000	.0330		.0100		BARTSCH NC43A,1010-66	
		9.630	4.513	4.650	.0100		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	4.12	1.58	1.71					2 DATA POINTS LISTED	
..... REACTION 330										
(L/SO)K+PI+PI-PI-PI0		8.410	3.863	4.000	.0120		.0060		BARTSCH NC43A,1010-66	
		9.630	4.513	4.650	.0500		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	4.71	1.89	2.03					2 DATA POINTS LISTED	
..... REACTION 331										
(L/SO)K+PI-		6.535	2.864	3.000	.1360		.0210		WANGLER PR137B,414-65	
		8.410	3.863	4.000	.1330		.0210		BARTSCH NC43A,1010-66	
		9.630	4.513	4.650	.0300		ERROR NOT GIVEN		BERTANZA PR130,786-63	
		14.038	6.862	7.000	.0340		.0205	.0068	PEEKNA,NPB27,605-71	
	THRESHOLD	3.07	1.01	1.15					4 DATA POINTS LISTED	
..... REACTION 332										
(L/SO)K+PI-PI0		6.067	2.614	2.750	.0860		.0130		ARMENTEROS PL9,207-64	
		6.535	2.864	3.000	.0910		.0160		WANGLER PR137B,414-65	
		8.410	3.863	4.000	.0930		.0170		BARTSCH NC43A,1010-66	
		9.630	4.513	4.650	.1300		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	3.58	1.29	1.42					4 DATA POINTS LISTED	
..... REACTION 333										
(L/SO)K+PI-Z0		8.410	3.863	4.000	.0450		.0230		BARTSCH NC43A,1010-66	
	THRESHOLD	4.12	1.58	1.71						
..... REACTION 334										
(L/SO)K+K-KOPI+PI-		9.630	4.513	4.650	.0100		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	8.29	3.80	3.94						
..... REACTION 335										
(L/SO)K0		8.410	3.863	4.000	.0930		.0140		BARTSCH NC43A,1010-66	
		9.630	4.513	4.650	.0400		.0200		BERTANZA PR130,786-63	
		12.162	5.862	6.000	.0405		.0060		CERN 68-7	
		14.038	6.862	7.000	.0330		.0092		PEEKNA,NPB27,605-71	
		14.038	6.862	7.000	.3600		.0263		PEEKNA,NPB27,605-71	A
		15.914	7.862	8.000	.0253		.0040		CERN 68-7	
		19.667	9.861	10.000	.0260		ERROR NOT GIVEN		BIGI NC33,1265-64	
		21.918	11.061	11.200	.0180		.0030		CERN 68-7	
	THRESHOLD	2.60	.76	.89					8 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C					
					6 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .96					
					K = .76 +- .60 N = -1.60 +- .41					
..... REACTION 336										
(L/SO)K0PI		19.667	9.861	10.000	.4720		.0480		BIGI NC33,1265-64	
	THRESHOLD	3.57	1.28	1.42						
..... REACTION 337										
(L/SO)K0PI+PI+PI-PI-		8.410	3.863	4.000	3.0000	MICROB	3.0000		BARTSCH NC43A,1010-66	
		9.630	4.513	4.650	.0200		ERROR NOT GIVEN		BERTANZA PR130,786-63	
		19.667	9.861	10.000	8.0000	MICROB	ERROR NOT GIVEN		BIGI NC33,1265-64	
	THRESHOLD	4.71	1.89	2.03					3 DATA POINTS LISTED	

FOOTNOTES

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PI-P

	S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 338									
(L/SO)KOPI+PI+PI-PI-PIO	8.410	3.863	4.000	.0100		.0100		BARTSCH NC43A,1010-66	
	19.667	9.861	10.000	.0650		ERROR NOT GIVEN		BIGI NC33,1265-64	
THRESHOLD	5.34	2.23	2.36					2 DATA POINTS LISTED	
..... REACTION 339									
(L/SO)KOPI+PI+PI-PI-ZO	19.667	9.861	10.000	.0630		ERROR NOT GIVEN		BIGI NC33,1265-64	
THRESHOLD	6.01	2.58	2.72						
..... REACTION 340									
(L/SO)KOPI+PI-	8.410	3.863	4.000	.2230		.0300		BARTSCH NC43A,1010-66	
	9.630	4.513	4.650	.2000		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	14.038	6.862	7.000	.0511		.0095		PEEKNA,NPB27,605-71	
	19.667	9.861	10.000	.0340		ERROR NOT GIVEN		BIGI NC33,1265-64	
THRESHOLD	3.58	1.29	1.42					4 DATA POINTS LISTED	
..... REACTION 341									
(L/SO)KOPI+PI-PIO	6.535	2.864	3.000	.0600		.0200		WANGLER PR137B,414-65	
	8.410	3.863	4.000	.0630		.0260		BARTSCH NC43A,1010-66	
	19.667	9.861	10.000	.0530		ERROR NOT GIVEN		BIGI NC33,1265-64	
THRESHOLD	4.12	1.58	1.71					3 DATA POINTS LISTED	
..... REACTION 342									
(L/SO)KOPI+PI-ZO	19.667	9.861	10.000	.1290		ERROR NOT GIVEN		BIGI NC33,1265-64	
THRESHOLD	4.71	1.89	2.03						
..... REACTION 343									
(L/SO)KOPIO	3.914	1.466	1.600	.1600		.0300		SOBB,375,AIX61	
	6.067	2.614	2.750	.1800		.0300		ARMENTEROS PL9,207-64	
	6.535	2.864	3.000	.1410		.0330		WANGLER PR137B,414-65	
	8.410	3.863	4.000	.0880		.0330		BARTSCH NC43A,1010-66	
	9.630	4.513	4.650	.1200		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	19.667	9.861	10.000	.0110		ERROR NOT GIVEN		BIGI NC33,1265-64	
THRESHOLD	3.07	1.01	1.15					6 DATA POINTS LISTED	
..... REACTION 344									
(L/SO)KOPIOPIO	6.535	2.864	3.000	.1100		.0280		WANGLER PR137B,414-65	
THRESHOLD	3.58	1.29	1.42						
..... REACTION 345									
(L/SO)KOZO	8.410	3.863	4.000	.0880		.0310		BARTSCH NC43A,1010-66	
	9.630	4.513	4.650	.0900		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	19.667	9.861	10.000	.0720		ERROR NOT GIVEN		BIGI NC33,1265-64	
THRESHOLD	3.58	1.29	1.42					3 DATA POINTS LISTED	
..... REACTION 346									
(L/SO)KO3PI+3PI-PIO	19.667	9.861	10.000	5.0000	MICROB	ERROR NOT GIVEN		BIGI NC33,1265-64	
THRESHOLD	6.71	2.96	3.09						
..... REACTION 347									
(L/SO)KO3PI+3PI-ZO	19.667	9.861	10.000	5.0000	MICROB	ERROR NOT GIVEN		BIGI NC33,1265-64	
THRESHOLD	7.46	3.36	3.49						
..... REACTION 348									
(L/SO)KS	47.813	24.861	25.000	.2000		.0170		WATERS,NPB17,445-70	A
THRESHOLD	2.60	.77	.90						
..... REACTION 349									
(L/SO)(KPI)+PI+PI-PI-ZO	8.410	3.863	4.000	2.0000	MICROB	8.0000	2.0000	BARTSCH NC43A,1010-66	
THRESHOLD	5.84	2.49	2.63						
..... REACTION 350									
(L/SO)OMKO	6.535	2.864	3.000	.0240		.0120		WANGLER PR137B,414-65	
THRESHOLD	5.73	2.44	2.57						
..... REACTION 351									
(L/SO)K*0890	6.535	2.864	3.000	.0670		.0140		WANGLER PR137B,414-65	
	14.038	6.862	7.000	.0262		.0159	.0056	PEEKNA,NPB27,605-71	
THRESHOLD	4.03	1.53	1.66					2 DATA POINTS LISTED	
..... REACTION 352									
(L/SO)K*01420(K*=KPI)	14.038	6.862	7.000	.0175		.0108	.0042	PEEKNA,NPB27,605-71	
THRESHOLD	6.43	2.81	2.94						
..... REACTION 353									
(L/SO)(AL/ASO)	47.813	24.861	25.000	.0160		.0050		WATERS,NPB17,445-70	A
THRESHOLD	10.76	5.11	5.25						
..... REACTION 354									
S(+,-)L	47.813	24.861	25.000	2.0000	MICROB	1.0000		WATERS,NPB17,445-70	A
THRESHOLD	17.95	8.95	9.09						
..... REACTION 355									
S(+,-)AL	47.813	24.861	25.000	4.7000	MICROB	1.5000		WATERS,NPB17,445-70	A
THRESHOLD	11.46	5.49	5.62						
..... REACTION 356									
S(+,-)AS(-,+)	47.813	24.861	25.000	1.0000	MICROB	.6000		WATERS,NPB17,445-70	A
THRESHOLD	11.02	5.25	5.39						

FOOTNOTES

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PI-P

		S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 357										
S+		3.226	1.100	1.232	.1500		.0500		BROWN PR107,906-57	A
		8.410	3.863	4.000	.0600		ERROR NOT GIVEN		BARTSCH NC43A,1010-66	A
		30.925	15.861	16.000	.3600		.0600		BARTKE NC24,876-62	A
	THRESHOLD	3.32	1.15	1.28					3 DATA POINTS LISTED	
..... REACTION 358										
S+K+		47.813	24.861	25.000	.0860		.0180		WATERS,NPB17,445-70	A
	THRESHOLD	3.87	1.44	1.58						
..... REACTION 359										
S+K+MPI		19.667	9.861	10.000	.0920		.0410		BIGI NC33,1265-64	
	THRESHOLD	3.87	1.44	1.58						
..... REACTION 360										
S+K+PI-PI-		4.756	1.915	2.050	3.2000	MICROB	1.4000		DAHL PR163,1377-67	
		5.805	2.474	2.610	7.5000	MICROB	2.8000		DAHL PR163,1377-67	
		5.973	2.564	2.700	.0140		.0030		MILLER PR140B,360-65	
		6.067	2.614	2.750	4.0000	MICROB	4.0000		GOUSSU NC47A,383-67	
		6.535	2.864	3.000	.0150		.0060		WANGLER PR137B,414-65	
		6.554	2.874	3.010	.0138		.0041		DAHL PR163,1377-67	
		6.779	2.994	3.130	8.0000	MICROB	3.0000		DAHL PR163,1377-67	
		6.929	3.073	3.210	.0160		.0030		DAHL PR163,1377-67	
		8.204	3.753	3.890	.0240		.0060		DAHL PR163,1377-67	
		8.410	3.863	4.000	7.0000	MICROB	4.0000		BARTSCH NC43A,1010-66	
		8.710	4.023	4.160	.0250		.0050		DAHL PR163,1377-67	
	THRESHOLD	3.86	1.44	1.57					11 DATA POINTS LISTED	
..... REACTION 361										
S+K+PI-PI-P10		6.723	2.964	3.100	1.7000	MICROB	.4000		DAHL PR163,1377-67	1
		8.410	3.863	4.000	5.3000	MICROB	1.2000		DAHL PR163,1377-67	1
		8.410	3.863	4.000	5.0000	MICROB	3.0000		BARTSCH NC43A,1010-66	
		9.630	4.513	4.650	.0100		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	4.43	1.74	1.87					4 DATA POINTS LISTED	
..... REACTION 362										
S+K0MPI		19.667	9.861	10.000	.0970		.0170		BIGI NC33,1265-64	
	THRESHOLD	3.32	1.15	1.28						
..... REACTION 363										
S+K0PI+PI+PI-PI-PI-P10		19.667	9.861	10.000	.0100		ERROR NOT GIVEN		BIGI NC33,1265-64	
	THRESHOLD	6.37	2.78	2.91						
..... REACTION 364										
S+K0PI+PI+PI-PI-PI-Z0		19.667	9.861	10.000	3.0000	MICROB	ERROR NOT GIVEN		BIGI NC33,1265-64	
	THRESHOLD	7.10	3.16	3.30						
..... REACTION 365										
S+K0PI+PI-PI-		6.535	2.864	3.000	2.0000	MICROB	1.0000		WANGLER PR137B,414-65	
		6.723	2.964	3.100	.8000	MICROB	.3000		DAHL PR163,1377-67	
		8.410	3.863	4.000	3.7000	MICROB	1.0000		DAHL PR163,1377-67	
		8.410	3.863	4.000	2.0000	MICROB	2.0000		BARTSCH NC43A,1010-66	
		9.630	4.513	4.650	.0200		ERROR NOT GIVEN		BERTANZA PR130,786-63	
		19.667	9.861	10.000	5.0000	MICROB	ERROR NOT GIVEN		BIGI NC33,1265-64	
	THRESHOLD	4.43	1.74	1.87					6 DATA POINTS LISTED	
..... REACTION 366										
S+K0PI+PI-PI-P10		19.667	9.861	10.000	.0310		ERROR NOT GIVEN		BIGI NC33,1265-64	
	THRESHOLD	5.04	2.06	2.20						
..... REACTION 367										
S+K0PI+PI-PI-Z0		19.667	9.861	10.000	8.0000	MICROB	ERROR NOT GIVEN		BIGI NC33,1265-64	
	THRESHOLD	5.68	2.41	2.55						
..... REACTION 368										
S+K0PI-		3.727	1.367	1.500	3.4000	MICROB	1.9000		SCHWARTZ UCRL11360-64	
		3.895	1.457	1.590	.0100		.0030		GOUSSU NC42A,606-66	
		3.942	1.481	1.615	.0172		.0053		DAHL PR163,1377-67	
		4.082	1.556	1.690	.0193		.0039		SCHWARTZ UCRL11360-64	
		4.381	1.716	1.850	.0340		.0050		SCHWARTZ UCRL11360-64	
		4.550	1.805	1.940	.0410		.0070		DAHL PR163,1377-67	
		4.568	1.815	1.950	.0310		.0050		SCHWARTZ UCRL11360-64	
		4.625	1.845	1.980	.0440		.0090		DAHL PR163,1377-67	
		4.662	1.865	2.000	.0340		.0090		COLLEY PR128,1930-62	
		4.756	1.915	2.050	.0410		.0080		SCHWARTZ UCRL11360-64	
		4.756	1.915	2.050	.0390		.0060		DAHL PR163,1377-67	
		4.924	2.005	2.140	.0330		.0140		DAHL PR163,1377-67	
		4.943	2.015	2.150	.0520		.0060		SCHWARTZ UCRL11360-64	
		5.130	2.115	2.250	.0620		.0060		SCHWARTZ UCRL11360-64	
		5.317	2.215	2.350	.0650		.0090		SCHWARTZ UCRL11360-64	
		5.587	2.358	2.494	.0510		.0090		HANFT COO-94-67	
		5.805	2.474	2.610	.0390		.0070		DAHL PR163,1377-67	
		5.973	2.564	2.700	.0510		.0070		MILLER PR140B,360-65	
		6.067	2.614	2.750	.0390		.0100		GOUSSU NC47A,383-67	
		6.273	2.724	2.860	.0370		.0110		DAHL PR163,1377-67	
		6.535	2.864	3.000	.0440		.0110		WANGLER PR137B,414-65	
		6.554	2.874	3.010	.0500		.0090		DAHL PR163,1377-67	
		6.779	2.994	3.130	.0470		.0070		DAHL PR163,1377-67	
		6.929	3.073	3.210	.0430		.0050		DAHL PR163,1377-67	
		8.204	3.753	3.890	.0420		.0080		DAHL PR163,1377-67	
		8.410	3.863	4.000	.0210		.0070		BARTSCH NC43A,1010-66	
		8.710	4.023	4.160	.0490		.0070		DAHL PR163,1377-67	
		9.630	4.513	4.650	.0300		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	3.33	1.15	1.29					28 DATA POINTS LISTED	

FOOTNOTES

A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES
1=AVERAGE VALUE OVER A BAND OF MOMENTA

PI-P

		S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 369										
S+KOPI-PIO		5.587	2.358	2.494	.0120		.0080		HANFT C00-94-67	
		5.805	2.474	2.610	8.2000	MICROB	3.8000		DAHL PR163,1377 67	
		5.973	2.564	2.700	.0170		.0060		MILLER PR140B,360-65	
		6.067	2.614	2.750	.0360		.0110		GOUSSU NC47A,383-67	
		6.273	2.724	2.860	.0178		.0091		DAHL PR163,1377 67	
		6.535	2.864	3.000	.0410		.0170		WANGLER PR137B,414-65	
		6.554	2.874	3.010	.0380		.0100		DAHL PR163,1377-67	
		6.779	2.994	3.130	.0230		.0060		DAHL PR163,1377-67	
		6.929	3.073	3.210	.0270		.0050		DAHL PR163,1377-67	
		8.204	3.753	3.890	.0340		.0090		DAHL PR163,1377-67	
		8.410	3.863	4.000	8.0000	MICROB	8.0000		BARTSCH NC43A,1010-66	
		8.710	4.023	4.160	.0360		.0080		DAHL PR163,1377-67	
		19.667	9.861	10.000	.0160		ERROR	NOT GIVEN	BIGI NC33,1265-64	
	THRESHOLD	3.86	1.44	1.57					13 DATA POINTS LISTED	
..... REACTION 370										
S+KOPI-ZO		8.410	3.863	4.000	7.0000	MICROB	8.0000	7.0000	BARTSCH NC43A,1010-66	
		19.667	9.861	10.000	.0240		ERROR	NOT GIVEN	BIGI NC33,1265-64	
	THRESHOLD	4.43	1.74	1.87					2 DATA POINTS LISTED	
..... REACTION 371										
S+KS		47.813	24.861	25.000	.0430		.0090		WATERS,NPB17,445-70	A
	THRESHOLD	3.32	1.15	1.28						
..... REACTION 372										
S+(KPI)+PI-PI-ZO		8.410	3.863	4.000	5.0000	MICROB	4.0000		BARTSCH NC43A,1010-66	
	THRESHOLD	5.05	2.07	2.21						
..... REACTION 373										
S+K*D890PI-		5.973	2.564	2.700	5.0000	MICROB	2.0000		MILLER PR140B,360-65	
	THRESHOLD	4.93	2.01	2.14						
..... REACTION 374										
S-		3.226	1.100	1.232	.1700		.0400		BROWN PR107,906-57	A
		8.410	3.863	4.000	.2100		ERROR	NOT GIVEN	BARTSCH NC43A,1010-66	A
		14.297	7.000	7.138	.1000		.0200		SOLOVIEV,388,ROCH60	A
		30.925	15.861	16.000	.2800		.0500		BARTKE NC24,876-62	A
	THRESHOLD	2.84	.89	1.02					4 DATA POINTS LISTED	
..... REACTION 375										
S-K+		2.964	.960	1.091	.2500		.0700		EISLER NC10,468-58	
		2.964	.960	1.091	.0900		.0400		LEIPUN. PR109,1358-58	
		3.033	.997	1.128	.2180		.0110		GOOD PR183,1142-69	
		3.111	1.039	1.170	.2310		.0063		DOYLE PR165,1483-68	
		3.204	1.088	1.220	.2700		.0280		CRAWFORD PRL3,394-59	
		3.232	1.103	1.235	.2350		.0170		GOOD PR183,1142-69	
		3.323	1.152	1.284	.2090		.0140		GOOD PR183,1142-69	
		3.402	1.194	1.326	.2450		.0210		GOOD PR183,1142-69	
		3.727	1.367	1.500	.2420		.0140		SCHWARTZ UCRL11360-64	
		3.895	1.457	1.590	.2620		.0160		GOUSSU NC4A,A606-66	
		3.942	1.481	1.615	.1800		.0200		DAHL PR163,1430-67	
		4.082	1.556	1.690	.1530		.0090		SCHWARTZ UCRL11360-64	
		4.381	1.716	1.850	.0990		.0080		SCHWARTZ UCRL11360-64	
		4.550	1.805	1.940	.0980		.0100		DAHL PR163,1430-67	
		4.568	1.815	1.950	.0990		.0070		SCHWARTZ UCRL11360-64	
		4.625	1.845	1.980	.0900		.0100		DAHL PR163,1430-67	
		4.756	1.915	2.050	.0870		.0080		DAHL PR163,1430-67	
		4.756	1.915	2.050	.0700		.0090		SCHWARTZ UCRL11360-64	
		4.924	2.005	2.140	.0390		.0100		DAHL PR163,1430-67	
		4.943	2.015	2.150	.0650		.0050		SCHWARTZ UCRL11360-64	
		5.130	2.115	2.250	.0570		.0050		SCHWARTZ UCRL11360-64	
		5.317	2.215	2.350	.0530		.0070		SCHWARTZ UCRL11360-64	
		5.587	2.358	2.494	.0510		.0100		HANFT C00-94-67	
		5.805	2.474	2.610	.0300		.0050		DAHL PR163,1430-67	
		5.973	2.564	2.700	.0310		.0050		MILLER PR140B,360-65	
		6.067	2.614	2.750	.0320		.0100		GOUSSU NC47A,383-67	
		6.273	2.724	2.860	.0220		.0070		DAHL PR163,1430-67	
		6.535	2.864	3.000	.0150		.0050		WANGLER PR137B,414-65	
		6.554	2.874	3.010	.0220		.0040		DAHL PR163,1430-67	
		6.779	2.994	3.130	.0155		.0030		DAHL PR163,1430-67	
		6.929	3.073	3.210	.0145		.0020		DAHL PR163,1430-67	
		8.204	3.753	3.890	8.5000	MICROB	2.5000		DAHL PR163,1430-67	
		8.410	3.863	4.000	5.0000	MICROB	3.0000		DAHL PR163,1430-67	
		8.710	4.023	4.160	4.5000	MICROB	1.5000		DAHL PR163,1430-67	
	THRESHOLD	2.84	.89	1.02					34 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

18 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. =1.00
K = 1.12 +- .41 N = -3.69 +- .42

..... REACTION 376										
S-K+MPI		19.667	9.861	10.000	.1610		.0520		BIGI NC33,1265-64	
		47.813	24.861	25.000	.0720		.0120		WATERS,NPB17,445-70	A
	THRESHOLD	3.86	1.44	1.57					2 DATA POINTS LISTED	

FOOTNOTES

A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES

PI-P

		S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 377										
S-K+PI+PI-		4.756	1.915	2.050	2.6000	MICROB	.8000		DAHL PR163,1377-67	
		4.924	2.005	2.140	4.2000	MICROB	2.5000		DAHL PR163,1377-67	
		5.587	2.358	2.494	6.0000	MICROB	3.0000		HANFT COO-94-67	
		5.805	2.474	2.610	.0103		.0022		DAHL PR163,1377-67	
		5.973	2.564	2.700	.0120		.0030		MILLER PR140B,360-65	
		6.067	2.614	2.750	.0300		.0060		GOUSSU NC47A,383-67	
		6.273	2.724	2.860	.0183		.0048		DAHL PR163,1377-67	
		6.535	2.864	3.000	.0290		.0070		WANGLER PR137B,414-65	
		6.554	2.874	3.010	.0145		.0029		DAHL PR163,1377-67	
		6.779	2.994	3.130	.0170		.0030		DAHL PR163,1377-67	
		6.929	3.073	3.210	.0170		.0020		DAHL PR163,1377-67	
		8.204	3.753	3.890	.0200		.0040		DAHL PR163,1377-67	
		8.410	3.863	4.000	.0240		.0080		BARTSCH NC43A,1010-66	
		8.710	4.023	4.160	.0200		.0030		DAHL PR163,1377-67	
		9.630	4.513	4.650	.0200		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	3.86	1.44	1.57					15 DATA POINTS LISTED	
..... REACTION 378										
S-K+PI+PI-PI0		5.973	2.564	2.700	4.0000	MICROB	2.0000		MILLER PR140B,360-65	
		6.535	2.864	3.000	5.0000	MICROB	3.0000		WANGLER PR137B,414-65	
		6.723	2.964	3.100	5.5000	MICROB	.8000		DAHL PR163,1377-67	1
		8.410	3.863	4.000	.0110		.0050		BARTSCH NC43A,1010-66	
		8.410	3.863	4.000	.0162		.0022		DAHL PR163,1377-67	1
		9.630	4.513	4.650	.0400		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	4.43	1.74	1.87					6 DATA POINTS LISTED	
..... REACTION 379										
S-K+PI0		3.727	1.367	1.500	8.9000	MICROB	2.7000		SCHWARTZ UCRL11360-64	
		3.895	1.457	1.590	.0150		.0040		GOUSSU NC42,A606-66	
		3.942	1.481	1.615	.0132		.0031		DAHL PR163,1377-67	
		4.082	1.556	1.690	.0210		ERROR NOT GIVEN		SCHWARTZ UCRL11360-64	
		4.381	1.716	1.850	.0380		.0050		SCHWARTZ UCRL11360-64	
		4.550	1.805	1.940	.0510		.0060		DAHL PR163,1377-67	
		4.568	1.815	1.950	.0440		.0050		SCHWARTZ UCRL11360-64	
		4.625	1.845	1.980	.0500		.0090		DAHL PR163,1377-67	
		4.756	1.915	2.050	.0520		.0060		DAHL PR163,1377-67	
		4.756	1.915	2.050	.0510		.0080		SCHWARTZ UCRL11360-64	
		4.924	2.005	2.140	.0440		.0100		DAHL PR163,1377-67	
		4.943	2.015	2.150	.0510		.0050		SCHWARTZ UCRL11360-64	
		5.130	2.115	2.250	.0560		.0050		SCHWARTZ UCRL11360-64	
		5.317	2.215	2.350	.0590		.0070		SCHWARTZ UCRL11360-64	
		5.587	2.358	2.494	.0460		.0080		HANFT COO-94-67	
		5.805	2.474	2.610	.0350		.0050		DAHL PR163,1377-67	
		5.973	2.564	2.700	.0400		.0060		MILLER PR140B,360-65	
		6.067	2.614	2.750	.0420		.0100		DAHL PR163,1377-67	
		6.067	2.614	2.750	.0420		.0080		ARMENTEROS PL9,207-64	
		6.273	2.724	2.860	.0270		.0060		DAHL PR163,1377 67	
		6.535	2.864	3.000	.0480		.0090		WANGLER PR137B,414-65	
		6.554	2.874	3.010	.0400		.0060		DAHL PR163,1377-67	
		6.779	2.994	3.130	.0290		.0040		DAHL PR163,1377-67	
		6.929	3.073	3.210	.0280		.0030		DAHL PR163,1377-67	
		8.204	3.753	3.890	.0340		.0050		DAHL PR163,1377-67	
		8.410	3.863	4.000	.0120		.0050		BARTSCH NC43A,1010-66	
		8.710	4.023	4.160	.0280		.0040		DAHL PR163,1377-67	
		9.630	4.513	4.650	.0600		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	3.33	1.15	1.29					28 DATA POINTS LISTED	
..... REACTION 380										
S-K+Z0		5.973	2.564	2.700	3.0000	MICROB	2.0000		MILLER PR140B,360-65	
	THRESHOLD	3.86	1.44	1.57						
..... REACTION 381										
S-K0MPI		19.667	9.861	10.000	.1580		.0240		BIGI NC33,1265-64	
	THRESHOLD	3.86	1.44	1.57						
..... REACTION 382										
S-K0PI+		3.727	1.367	1.500	.0115		.0032		SCHWARTZ UCRL11360-64	
		3.895	1.457	1.590	.0210		.0050		GOUSSU NC42A,606-66	
		3.942	1.481	1.615	.0220		.0040		DAHL PR163,1377-67	
		4.082	1.556	1.690	.0570		.0060		SCHWARTZ UCRL11360-64	
		4.381	1.716	1.850	.0630		.0070		SCHWARTZ UCRL11360-64	
		4.550	1.805	1.940	.1100		.0090		DAHL PR163,1377-67	
		4.568	1.815	1.950	.0940		.0070		SCHWARTZ UCRL11360-64	
		4.625	1.845	1.980	.1000		.0130		DAHL PR163,1377-67	
		4.662	1.865	2.000	.0510		.0120		COLLEY PR128,1930-62	
		4.756	1.915	2.050	.1230		.0090		DAHL PR163,1377-67	
		4.756	1.915	2.050	.1200		.0120		SCHWARTZ UCRL11360-64	
		4.924	2.005	2.140	.1100		.0160		DAHL PR163,1377-67	
		4.943	2.015	2.150	.1330		.0080		SCHWARTZ UCRL11360-64	
		5.130	2.115	2.250	.1440		.0080		SCHWARTZ UCRL11360-64	
		5.317	2.215	2.350	.1380		.0110		SCHWARTZ UCRL11360-64	
		5.587	2.358	2.494	.1000		.0130		HANFT COO-94-67	
		5.805	2.474	2.610	.0650		.0070		DAHL PR163,1377-67	
		5.973	2.564	2.700	.1180		.0100		MILLER PR140B,360-65	
		6.067	2.614	2.750	.0840		.0200		GOUSSU NC47A,383-67	
		6.273	2.724	2.860	.0730		.0110		DAHL PR163,1377-67	
		6.535	2.864	3.000	.0910		.0140		WANGLER PR137B,414-65	
		6.554	2.874	3.010	.0860		.0090		DAHL PR163,1377-67	
		6.779	2.994	3.130	.0690		.0060		DAHL PR163,1377-67	
		6.929	3.073	3.210	.0750		.0050		DAHL PR163,1377-67	
		8.204	3.753	3.890	.0600		.0070		DAHL PR163,1377-67	
		8.410	3.863	4.000	.0690		.0220		BARTSCH NC43A,1010-66	
		8.710	4.023	4.160	.0440		.0050		DAHL PR163,1377-67	
		9.630	4.513	4.650	.0400		ERROR NOT GIVEN		BERTANZA PR130,786-63	
		19.667	9.861	10.000	9.0000	MICROB	ERROR NOT GIVEN		BIGI NC33,1265-64	
	THRESHOLD	3.33	1.15	1.29					29 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

7 DATA POINTS USED ABOVE 3.0 GEV/C , PROB. = .95

K = .50 +- .42 N = -1.63 +- .70

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA

PI-P

	S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 383									
S-K0PI+PI+PI+PI-PI0	19.667	9.861	10.000	6.0000	MICROB	ERROR	NOT GIVEN	BIGI NC33,1265-64	
THRESHOLD	6.37	2.78	2.91						
..... REACTION 384									
S-K0PI+PI+PI+PI-PI-Z0	19.667	9.861	10.000	.0150		ERROR	NOT GIVEN	BIGI NC33,1265-64	
THRESHOLD	7.10	3.16	3.30						
..... REACTION 385									
S-K0PI+PI+PI-	5.973	2.564	2.700	4.0000	MICROB	2.0000		MILLER.PR140B,360-65	
	6.535	2.864	3.000	3.0000	MICROB	2.0000		WANGLERPR137,B414-65	
	6.723	2.964	3.100	2.9000	MICROB	.6000		DAHL PR163,1377-67	1
	8.410	3.863	4.000	.0132		.0020		DAHL PR163,1377-67	1
	8.410	3.863	4.000	.0110		.0050		BARTSCH NC43A,1010-66	
	9.630	4.513	4.650	.0200		ERROR	NOT GIVEN	BERTANZA PR130,786-63	
	19.667	9.861	10.000	9.0000	MICROB	ERROR	NOT GIVEN	BIGI NC33,1265-64	
THRESHOLD	4.43	1.74	1.87					7 DATA POINTS LISTED	
..... REACTION 386									
S-K0PI+PI+PI-PI0	19.667	9.861	10.000	.0290		ERROR	NOT GIVEN	BIGI NC33,1265-64	
THRESHOLD	5.04	2.06	2.20						
..... REACTION 387									
S-K0PI+PI+PI-Z0	19.667	9.861	10.000	.0220		ERROR	NOT GIVEN	BIGI NC33,1265-64	
THRESHOLD	5.68	2.41	2.55						
..... REACTION 388									
S-K0PI+PI0	4.756	1.915	2.050	1.7000	MICROB	1.2000		DAHL PR163,1377-67	
	5.805	2.474	2.610	.0115		.0042		DAHL PR163,1377-67	
	5.973	2.564	2.700	.0220		.0070		MILLER PR140B,360-65	
	6.067	2.614	2.750	.0100		.0050		GOUSSU NC47A,383-67	
	6.273	2.724	2.860	.0250		.0100		DAHL PR163,1377-67	
	6.535	2.864	3.000	.0330		.0110		WANGLER PR137B,414-65	
	6.554	2.874	3.010	.0290		.0080		DAHL PR163,1377-67	
	6.779	2.994	3.130	.0320		.0070		DAHL PR163,1377-67	
	6.929	3.073	3.210	.0300		.0050		DAHL PR163,1377-67	
	8.204	3.753	3.890	.0300		.0080		DAHL PR163,1377-67	
	8.410	3.863	4.000	.0710		.0250		BARTSCH NC43A,1010-66	
	8.710	4.023	4.160	.0550		.0110		DAHL PR163,1377-67	
	19.667	9.861	10.000	.0360		ERROR	NOT GIVEN	BIGI NC33,1265-64	
THRESHOLD	3.86	1.44	1.57					13 DATA POINTS LISTED	
..... REACTION 389									
S-K0PI+Z0	19.667	9.861	10.000	.0320		ERROR	NOT GIVEN	BIGI NC33,1265-64	
THRESHOLD	4.43	1.74	1.87						
..... REACTION 390									
S-KS	47.813	24.861	25.000	.0360		.0060		WATERS,NP817,445-70	A
THRESHOLD	3.33	1.15	1.29						
..... REACTION 391									
S-(KPI)+	4.456	1.756	1.890	.1700		.0300		ERWIN,371,AIX61	
THRESHOLD	3.33	1.15	1.29						
..... REACTION 392									
S-(KPI)+PI+PI-Z0	8.410	3.863	4.000	7.0000	MICROB	4.0000		BARTSCH NC43A,1010 66	
THRESHOLD	5.04	2.06	2.20						
..... REACTION 393									
S-(KPI)+Z0	8.410	3.863	4.000	0.0000	MICROB	19.0000		BARTSCH NC43A,1010-66	$
THRESHOLD	3.86	1.44	1.57						
..... REACTION 394									
S-K+725	4.606	1.835	1.970	6.0000	MICROB	2.0000		MILLER PL5,279-63	1
	5.149	2.125	2.260	3.0000	MICROB	1.0000		MILLER PL5,279-63	1
THRESHOLD	3.67	1.34	1.47					2 DATA POINTS LISTED	
..... REACTION 395									
S-K*+890	4.606	1.835	1.970	.0200		.0020		MILLER PL5,279-63	1
	4.662	1.865	2.000	.0453		.0032		DAHL PR163,1377-67	1
	5.149	2.125	2.260	.0300		.0020		MILLER PL5,279-63	1
	5.973	2.564	2.700	.0500		.0060		MILLER PR140B,360-65	
	6.723	2.964	3.100	.0231		.0027		DAHL PR163,1377-67	1
	8.410	3.863	4.000	8.8000	MICROB	2.1000		DAHL PR163,1377-67	1
THRESHOLD	4.33	1.69	1.82					6 DATA POINTS LISTED	
..... REACTION 396									
S-K*0890PI+	5.973	2.564	2.700	5.0000	MICROB	2.0000		MILLER PR140B,360-65	
THRESHOLD	4.93	2.01	2.14						
..... REACTION 397									
S-F*=S-KK	93.600	49.261	49.400	8.0000	MICROB	3.0000		DIBIANCA,NPB16,69-70	
THRESHOLD	7.24	3.24	3.37						
..... REACTION 398									
SO	3.226	1.100	1.232	.2100		.0600		BROWN PR107,906-57	A
THRESHOLD	2.84	.89	1.02						

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA
A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES
$=DATA POINT NOT USED IN FITTING OR PLOTTING

PI-P

		S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 399										
SOK+PI+PI-PI-		6.723	2.964	3.100	2.1000	MICROB	.6000		DAHL PR163,1377-67	1
		8.410	3.863	4.000	7.3000	MICROB	1.6000		DAHL PR163,1377-67	1
	THRESHOLD	4.43	1.74	1.87					2 DATA POINTS LISTED	
..... REACTION 400										
SOK+PI-		3.727	1.367	1.500	7.1000	MICROB	2.9000		SCHWARTZ UCRL11360-64	
		3.895	1.457	1.590	.0150		.0040		GOUSSU NC42A,606-66	
		3.942	1.481	1.615	.0138		.0035		DAHL PR163,1377-67	
		4.082	1.556	1.690	.0111		.0030		SCHWARTZ UCRL11360-64	
		4.381	1.716	1.850	.0300		.0050		SCHWARTZ UCRL11360-64	
		4.550	1.805	1.940	.0620		.0070		DAHL PR163,1377-67	
		4.568	1.815	1.950	.0670		.0070		SCHWARTZ UCRL11360-64	
		4.625	1.845	1.980	.0560		.0100		DAHL PR163,1377-67	
		4.756	1.915	2.050	.0680		.0110		SCHWARTZ UCRL11360-64	
		4.756	1.915	2.050	.0660		.0070		DAHL PR163,1377-67	
		4.924	2.005	2.140	.0630		.0130		DAHL PR163,1377-67	
		4.943	2.015	2.150	.0780		.0070		SCHWARTZ UCRL11360-64	
		5.130	2.115	2.250	.0870		.0070		SCHWARTZ UCRL11360-64	
		5.317	2.215	2.350	.0820		.0100		SCHWARTZ UCRL11360-64	
		5.587	2.358	2.494	.0600		.0120		HANFT COO-94-67	
		5.805	2.474	2.610	.0530		.0080		DAHL PR163,1377-67	
		5.973	2.564	2.700	.0750		.0090		MILLER PR140B,360-65	
		6.067	2.614	2.750	.0500		.0100		GOUSSU NC47A,383-67	
		6.273	2.724	2.860	.0560		.0110		DAHL PR163,1377-67	
		6.554	2.874	3.010	.0540		.0080		DAHL PR163,1377-67	
		6.779	2.994	3.130	.0460		.0060		DAHL PR163,1377-67	
		6.929	3.073	3.210	.0410		.0040		DAHL PR163,1377-67	
		8.204	3.753	3.890	.0430		.0070		DAHL PR163,1377-67	
		8.710	4.023	4.160	.0320		.0050		DAHL PR163,1377-67	
	THRESHOLD	3.33	1.15	1.29					24 DATA POINTS LISTED	
..... REACTION 401										
SOKO		2.964	.960	1.091	.2500		.1000		EISLER NC10,468-58	
		2.964	.960	1.091	.3500		.0900		LEIPUN. PR109,1358-58	
		3.035	.998	1.129	.2620		.0150		BINFORD PR183,1134-69	
		3.111	1.039	1.170	.2470		.0100		ANDERS. PR152,1139-66	
		3.204	1.088	1.220	.3900		.0370		CRAWFORD PRL3,394-59	
		3.232	1.103	1.235	.2640		.0250		BINFORD PR183,1134-69	
		3.310	1.145	1.277	.2290		.0200		BINFORD PR183,1134-69	
		3.353	1.168	1.300	.2200		.0200		CROLIUS UCRL16089-67	B
		3.402	1.194	1.326	.2090		.0250		BINFORD PR183,1134-69	
		3.727	1.367	1.500	.1670		.0220		SCHWARTZ UCRL11360-64	
		3.742	1.375	1.508	.1770		ERROR NOT GIVEN		YODER PR132,1778-63	O
		3.895	1.457	1.590	.1780		.0220		GOUSSU NC42A,606-66	
		3.942	1.481	1.615	.1110		.0200		DAHL PR163,1430-67	
		4.082	1.556	1.690	.1100		.0140		SCHWARTZ UCRL11360-64	
		4.381	1.716	1.850	.1400		.0170		SCHWARTZ UCRL11360-64	
		4.550	1.805	1.940	.1260		.0150		DAHL PR163,1430-67	
		4.568	1.815	1.950	.0940		.0130		SCHWARTZ UCRL11360-64	
		4.625	1.845	1.980	.1160		.0150		DAHL PR163,1430-67	
		4.756	1.915	2.050	.1230		.0210		SCHWARTZ UCRL11360-64	
		4.756	1.915	2.050	.1130		.0100		DAHL PR163,1430-67	
		4.924	2.005	2.140	.1000		.0200		DAHL PR163,1430-67	
		4.943	2.015	2.150	.1140		.0130		SCHWARTZ UCRL11360-64	
		5.130	2.115	2.250	.1050		.0120		SCHWARTZ UCRL11360-64	
		5.317	2.215	2.350	.1130		.0180		SCHWARTZ UCRL11360-64	
		5.587	2.358	2.494	.0930		.0200		HANFT COO-94-67	
		5.795	2.469	2.605	.0810		.0120		DAHL PR163,1430-67	
		5.973	2.564	2.700	.0850		.0120		MILLER.PR140B,360-65	
		6.067	2.614	2.750	.0950		.0250		GOUSSU NC47A,383-67	
		6.273	2.724	2.860	.0930		.0250		DAHL PR163,1430-67	
		6.535	2.864	3.000	.0860		.0250		WANGLER PR137B,414-65	
		6.554	2.874	3.010	.0740		.0120		DAHL PR163,1430-67	
		6.770	2.989	3.125	.0410		.0100		DAHL PR163,1430-67	
		6.929	3.073	3.210	.0500		.0060		DAHL PR163,1430-67	
		8.195	3.748	3.885	.0370		.0080		DAHL PR163,1430-67	
		8.223	3.763	3.900	.0330		.0040		ABRAMOVI,NPB27,477-71	
		8.710	4.023	4.160	.0420		.0080		DAHL PR163,1430-67	
		12.162	5.862	6.000	.0175		.0040		CRENNELL PRL18,86-67	
	THRESHOLD	2.84	.89	1.02					37 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C					
					19 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. =1.00					
					K = .46 +- .13 N = -1.82 +- .28					
..... REACTION 402										
SOKOPI+PI+PI-PI-		14.038	6.862	7.000	0.0000	MICROB	1.6000		PEEKNA,NPB27,605-71	$
	THRESHOLD	5.04	2.06	2.20						
..... REACTION 403										
SOKOPI+PI-		4.756	1.915	2.050	3.9000	MICROB	2.3000		DAHL PR163,1377-67	
		5.587	2.358	2.494	.0150		.0050		HANFT COO-94-67	
		5.805	2.474	2.610	9.9000	MICROB	4.5000		DAHL PR163,1377-67	
		5.973	2.564	2.700	.0320		.0070		MILLER PR140B,360-65	
		6.067	2.614	2.750	.0200		.0060		GOUSSU NC47A,383-67	
		6.535	2.864	3.000	.0860		.0190		WANGLER PR137B,414-65	
		6.554	2.874	3.010	.0410		.0110		DAHL PR163,1377-67	
		6.779	2.994	3.130	.0300		.0080		DAHL PR163,1377-67	
		6.929	3.073	3.210	.0170		.0040		DAHL PR163,1377-67	
		8.204	3.753	3.890	.0380		.0110		DAHL PR163,1377-67	
		8.710	4.023	4.160	.0460		.0110		DAHL PR163,1377-67	
	THRESHOLD	3.86	1.44	1.57					11 DATA POINTS LISTED	
..... REACTION 404										
SOKOPIO		3.895	1.457	1.590	.0340		.0110		GOUSSU NC42A,606-66	
	THRESHOLD	3.33	1.15	1.29						

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA
B=AVERAGE VALUE TAKEN OVER THE MOMENTUM RANGE 1.2-1.4 GEV/C
O=ORDER OF MAGNITUDE
$=DATA POINT NOT USED IN FITTING OR PLOTTING

PI-P

		S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 405											
SOK**890PI-		5.973	2.564	2.700		6.0000	MICROB	2.0000		MILLER PR140B,360-65	
	THRESHOLD	4.93	2.01	2.14							
..... REACTION 406											
SOK*0890		4.662	1.865	2.000		.0494		.0044		DAHL PR163,1377-67	1
		8.410	3.863	4.000		.0231		.0043		DAHL PR163,1377-67	1
	THRESHOLD	4.33	1.69	1.82						2 DATA POINTS LISTED	
..... REACTION 407											
SOK*0890=SOK+PI-		5.973	2.564	2.700		.0520		.0080		MILLER PR140B,360-65	
	THRESHOLD	4.33	1.69	1.82							
..... REACTION 408											
Y*+1385KOPI-=LKOPI+PI-		4.662	1.865	2.000		2.9000	MICROB	1.1000		DAHL PR163,1377-67	1
		5.973	2.564	2.700		4.0000	MICROB	1.0000		MILLER PR140B,360-65	
		6.723	2.964	3.100		.0151		.0022		DAHL PR163,1377-67	1
		8.410	3.863	4.000		.0119		.0034		DAHL PR163,1377-67	1
	THRESHOLD	4.08	1.55	1.69						4 DATA POINTS LISTED	
..... REACTION 409											
Y*-1385K+		4.662	1.865	2.000		.0470		.0040		DAHL PR163,1377-67	*
		5.973	2.564	2.700		.0180		.0030		MILLER PR140B,360-65	*
		6.535	2.864	3.000		.0110		.0050		WANGLER PR137B,414-65	
		6.723	2.964	3.100		5.0000	MICROB	1.0000		DAHL PR163,1377-67	*
		8.410	3.863	4.000		0.0000	MICROB	2.0000		DAHL PR163,1377-67	$
	THRESHOLD	3.53	1.26	1.40						5 DATA POINTS LISTED	
..... REACTION 410											
Y*-1385K+=LK+PI-		4.662	1.865	2.000		.0428		.0040		ABOLINS PRL22,427-69	1
		5.973	2.564	2.700		.0160		.0030		MILLER PR140B,360-65	
		6.723	2.964	3.100		5.0000	MICROB	1.0000		ABOLINS PRL22,427-69	1
		8.410	3.863	4.000		1.9000	MICROB	1.9000		ABOLINS PRL22,427-69	1
	THRESHOLD	3.53	1.26	1.40						4 DATA POINTS LISTED	
..... REACTION 411											
Y*-1385K+PIO=LK+PI-PIO		4.662	1.865	2.000		0.0000	MICROB	1.1000		DAHL PR163,1377-67	$
		6.723	2.964	3.100		5.5000	MICROB	2.8000		DAHL PR163,1377-67	1
		8.410	3.863	4.000		.0135		.0036		DAHL PR163,1377-67	1
	THRESHOLD	4.08	1.55	1.69						3 DATA POINTS LISTED	
..... REACTION 412											
Y*-1385KOPI+=LKOPI+PI-		4.662	1.865	2.000		0.0000	MICROB	1.1000		DAHL PR163,1377-67	$
		5.973	2.564	2.700		8.0000	MICROB	2.0000		MILLER PR140B,360-65	
		6.723	2.964	3.100		.0161		.0032		DAHL PR163,1377-67	1
		8.410	3.863	4.000		.0108		.0034		DAHL PR163,1377-67	1
	THRESHOLD	4.08	1.55	1.69						4 DATA POINTS LISTED	
..... REACTION 413											
Y*-1385K**890		6.535	2.864	3.000	U	.0100				WANGLER PR137B,414-65	
	THRESHOLD	5.18	2.14	2.27							
..... REACTION 414											
Y*-1385K**890=LK+PI-PIO		4.662	1.865	2.000		4.1000	MICROB	1.0000		DAHL PR163,1377-67	1
		6.723	2.964	3.100		5.5000	MICROB	1.9000		DAHL PR163,1377-67	1
		8.410	3.863	4.000		0.0000	MICROB	3.3000		DAHL PR163,1377-67	$
	THRESHOLD	5.18	2.14	2.27						3 DATA POINTS LISTED	
..... REACTION 415											
Y*-1385K**890=LKOPI+PI-		4.662	1.865	2.000		7.9000	MICROB	1.4000		DAHL PR163,1377-67	1
		6.723	2.964	3.100		.0101		.0031		DAHL PR163,1377-67	1
		8.410	3.863	4.000		0.0000	MICROB	1.1000		DAHL PR163,1377-67	$
	THRESHOLD	5.18	2.14	2.27						3 DATA POINTS LISTED	
..... REACTION 416											
Y*-1385K**890=L(KPI)+PI-		4.662	1.865	2.000		.0120		.0030		DAHL PR163,1377-67	*
		5.973	2.564	2.700		.0100		.0020		MILLER PR140B,360-65	
		6.723	2.964	3.100		.0160		.0060		DAHL PR163,1377-67	*
		8.410	3.863	4.000		0.0000	MICROB	10.0000		DAHL PR163,1377-67	$
	THRESHOLD	5.18	2.14	2.27						4 DATA POINTS LISTED	
..... REACTION 417											
Y*01385		3.745	1.377	1.510		.0700		.0110		CURTIS PR132,1771-63	A
	THRESHOLD	1.92	.40	.52							
..... REACTION 418											
Y*01385K+PI-=LK+PI-PIO		4.662	1.865	2.000		1.3000	MICROB	1.5000		DAHL PR163,1377-67	1
		5.973	2.564	2.700		3.0000	MICROB	1.0000		MILLER PR140B,360-65	
		6.723	2.964	3.100		.0110		.0029		DAHL PR163,1377-67	1
		8.410	3.863	4.000		9.0000	MICROB	3.5000		DAHL PR163,1377-67	1
	THRESHOLD	4.08	1.55	1.69						4 DATA POINTS LISTED	

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA
*=CROSS SECTION REDUCED BY EDITORS FROM PUBLISHED RESULTS
$=DATA POINT NOT USED IN FITTING OR PLOTTING
U=UPPER LIMIT
A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES

PI-P

		S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 419										
Y*01385K0		4.662	1.865	2.000	.0677		.0110		DAHL PR163,1377-67	*
		5.973	2.564	2.700	.0681		.0142		MILLER PR140B,360-65	*
		6.535	2.864	3.000	.0180		.0110		WANGLER PR137B,414-65	
		6.723	2.964	3.100	.0318		.0077		DAHL PR163,1377-67	*
		8.410	3.863	4.000	.0144		.0059		DAHL PR163,1377-67	*
		14.038	6.862	7.000	.0150		.0051		PEEKNA,NPB27,605-71	
	THRESHOLD	3.53	1.26	1.40					6 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C					
					6 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. = .72					
					K = .19 +- .11 N = -1.40 +- .57					
..... REACTION 420										
Y*01385K0=LK0PI0		4.662	1.865	2.000	.0616		.0100		ABOLINS PRL22,427-69	1
		5.973	2.564	2.700	.0620		.0130		MILLER PR140B,360-65	
		6.723	2.964	3.100	.0289		.0070		ABOLINS PRL22,427-69	1
		8.410	3.863	4.000	.0130		.0054		ABOLINS PRL22,427-69	1
	THRESHOLD	3.53	1.26	1.40					4 DATA POINTS LISTED	
..... REACTION 421										
Y*01385K*0890		4.662	1.865	2.000	8.0000	MICROB	3.0000		DAHL PR163,1377-67	*
		5.973	2.564	2.700	.0110		.0020		MILLER PR140B,360-65	*
		6.535	2.864	3.000	.0300		.0130		WANGLER PR137B,414 65	
		6.723	2.964	3.100	.0270		.0050		DAHL PR163,1377-67	*
		8.410	3.863	4.000	.0260		.0060		DAHL PR163,1377-67	*
		14.038	6.862	7.000	.0100		.0046		PEEKNA,NPB27,605-71	
	THRESHOLD	5.18	2.14	2.27					6 DATA POINTS LISTED	
..... REACTION 422										
Y*01385K*0890=L(KPI)0PI0		4.662	1.865	2.000	6.8000	MICROB	2.4000		DAHL PR163,1377-67	1
		5.973	2.564	2.700	.0100		.0020		MILLER PR140B,360-65	
		6.723	2.964	3.100	.0240		.0045		DAHL PR163,1377-67	1
		8.410	3.863	4.000	.0236		.0056		DAHL PR163,1377-67	1
	THRESHOLD	5.18	2.14	2.27					4 DATA POINTS LISTED	
..... REACTION 423										
Y1405K0		6.535	2.864	3.000	.0310		.0110		WANGLER PR137B,414-65	
	THRESHOLD	3.61	1.30	1.44						
..... REACTION 424										
Y1405K0=S(+,-)PI(-,+)K0		5.973	2.564	2.700	.0370		.0040		MILLER PR140B,360-65	
	THRESHOLD	3.61	1.30	1.44						
..... REACTION 425										
Y1405K0PI0=(SPI)0K0PI0		5.973	2.564	2.700	6.0000	MICROB	3.0000		MILLER PR140B,360-65	
	THRESHOLD	4.16	1.60	1.73						
..... REACTION 426										
Y1405K0=(SPI)0K0		4.662	1.865	2.000	.0510		.0047		DAHL PR163,1377-67	1
		6.723	2.964	3.100	.0374		.0037		DAHL PR163,1377-67	1
		8.410	3.863	4.000	.0303		.0046		DAHL PR163,1377-67	1
	THRESHOLD	3.61	1.30	1.44					3 DATA POINTS LISTED	
..... REACTION 427										
Y1405K*0890		5.973	2.564	2.700	.0160		.0050		MILLER PR140B,360-65	*
		6.535	2.864	3.000	.0400		.0130		WANGLER PR137B,414-65	
		6.723	2.964	3.100	.0130		.0020		DAHL PR163,1377-67	*
		8.410	3.863	4.000	.0160		.0030		DAHL PR163,1377-67	*
	THRESHOLD	5.27	2.19	2.32					4 DATA POINTS LISTED	
..... REACTION 428										
Y1405K*0890=(SPI)0(KPI)0		5.973	2.564	2.700	.0160		.0050		MILLER PR140B,360-65	
		6.723	2.964	3.100	.0130		.0020		DAHL PR163,1377-67	1
		8.410	3.863	4.000	.0160		.0030		DAHL PR163,1377-67	1
	THRESHOLD	5.27	2.19	2.32					3 DATA POINTS LISTED	
..... REACTION 429										
Y1520K0		4.662	1.865	2.000	.0490		.0060		DAHL PR163,1377-67	1
		5.973	2.564	2.700	.0850		.0150		MILLER PR140B,360-65	*
		6.535	2.864	3.000	.0600		.0200		WANGLER PR137B,414-65	
		6.723	2.964	3.100	.0470		.0070		DAHL PR163,1377-67	1
		8.410	3.863	4.000	.0280		.0070		DAHL PR163,1377-67	1
	THRESHOLD	4.06	1.54	1.68					5 DATA POINTS LISTED	
..... REACTION 431										
Y1520K0=((P/N)AK)0		4.662	1.865	2.000	.0208		.0050		DAHL PR163,1377-67	1
		6.723	2.964	3.100	.0242		.0050		DAHL PR163,1377-67	1
		8.410	3.863	4.000	.0122		.0060		DAHL PR163,1377-67	1
	THRESHOLD	4.07	1.55	1.68					3 DATA POINTS LISTED	
..... REACTION 432										
Y1520K0=LK0(PIPI)0		4.662	1.865	2.000	2.8000	MICROB	1.0000		DAHL PR163,1377-67	1
		6.723	2.964	3.100	4.4000	MICROB	1.5000		DAHL PR163,1377-67	1
		8.410	3.863	4.000	2.9000	MICROB	1.6000		DAHL PR163,1377-67	1
	THRESHOLD	4.07	1.55	1.68					3 DATA POINTS LISTED	
..... REACTION 433										
Y1520K0=(S+-PI-+/PK-)K0		5.973	2.564	2.700	.0420		.0070		MILLER PR140B,360-65	
	THRESHOLD	4.07	1.55	1.68						

FOOTNOTES

*=CROSS SECTION REDUCED BY EDITORS FROM PUBLISHED RESULTS
1=AVERAGE VALUE OVER A BAND OF MOMENTA

PI-P

		S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOTNOTES
..... REACTION 430											
Y1520K0=(SPI)0K0		4.662	1.865	2.000		.0237		.0027		DAHL PR163,1377-67	1
		6.723	2.964	3.100		.0187		.0021		DAHL PR163,1377-67	1
		8.410	3.863	4.000		.0140		.0036		DAHL PR163,1377-67	1
	THRESHOLD	4.06	1.54	1.68						3 DATA POINTS LISTED	
..... REACTION 434											
Y1520(KPI)0=PK-(KPI)0		6.723	2.964	3.100		9.0000	MICROB	1.0000		DAHL PR163,1377-67	1
		8.410	3.863	4.000		.0110		.0050		DAHL PR163,1377-67	1
	THRESHOLD	4.49	1.78	1.91						2 DATA POINTS LISTED	
..... REACTION 435											
Y1520K*0890=(SPI)0(KPI)0		6.723	2.964	3.100		7.0000	MICROB	1.0000		DAHL PR163,1377-67	1
		8.410	3.863	4.000		6.0000	MICROB	1.0000		DAHL PR163,1377-67	1
	THRESHOLD	5.81	2.48	2.61						2 DATA POINTS LISTED	
..... REACTION 436											
Y*01660K*0890=(SPI)(KPI)0		6.723	2.964	3.100		3.0000	MICROB	1.0000		DAHL PR163,1377-67	1
		8.410	3.863	4.000		3.0000	MICROB	1.0000		DAHL PR163,1377-67	1
	THRESHOLD	6.50	2.85	2.98						2 DATA POINTS LISTED	
..... REACTION 437											
Y1815K0=((P/N)K)K0		6.723	2.964	3.100		2.6000	MICROB	2.0000		DAHL PR163,1377-67	1
		8.410	3.863	4.000		.0200		.0080		DAHL PR163,1377-67	1
	THRESHOLD	5.35	2.23	2.36						2 DATA POINTS LISTED	
..... REACTION 438											
XI-		8.410	3.863	4.000		5.0000	MICROB	4.0000		BARTSCH NC43A,1010-66	A
		19.667	9.861	10.000		.0143		.0048		BIGI,247,CERN62	A
		30.925	15.861	16.000	U	.0500				BARTKE NC29,8-63	W
		47.813	24.861	25.000		.0200		.0040		WATERS,NPB17,445-70	A
	THRESHOLD	6.02	2.59	2.73						4 DATA POINTS LISTED	
..... REACTION 439											
XIKKMPI		19.667	9.861	10.000		.0155		.0045		BIGI NC33,1265-64	
	THRESHOLD	6.73	2.97	3.10							
..... REACTION 440											
XI-S		47.813	24.861	25.000		.4000	MICROB	.4000		WATERS,NPB17,445-70	A
	THRESHOLD	21.31	10.74	10.87							
..... REACTION 441											
XI-L		47.813	24.861	25.000		.7000	MICROB	.7000		WATERS,NPB17,445-70	A
	THRESHOLD	20.62	10.37	10.51							
..... REACTION 442											
XI-K+K+PI-		6.910	3.063	3.200	U	.1000	MICROB			DAHL PR163,1377-67	V
		8.410	3.863	4.000		.5000	MICROB	.4000		DAHL PR163,1377-67	1
	THRESHOLD	5.99	2.57	2.71						2 DATA POINTS LISTED	
..... REACTION 443											
XI-K+K0		6.535	2.864	3.000		1.0000	MICROB	1.0000		WANGLER PR137B,414-65	
		6.910	3.063	3.200		1.9000	MICROB	.5000		DAHL PR163,1377-67	1
		8.410	3.863	4.000		1.8000	MICROB	.9000		DAHL PR163,1377-67	1
	THRESHOLD	5.33	2.22	2.36						3 DATA POINTS LISTED	
..... REACTION 444											
XI-K+K0PI0		6.910	3.063	3.200		.2000	MICROB	.2000		DAHL PR163,1377-67	1
		8.410	3.863	4.000		.6000	MICROB	.5000		DAHL PR163,1377-67	1
	THRESHOLD	5.99	2.57	2.71						2 DATA POINTS LISTED	
..... REACTION 445											
XI-K0K0PI+		6.910	3.063	3.200		.3000	MICROB	.2000		DAHL PR163,1377-67	1
		8.410	3.863	4.000		2.3000	MICROB	1.0000		DAHL PR163,1377-67	1
	THRESHOLD	5.99	2.57	2.71						2 DATA POINTS LISTED	
..... REACTION 446											
XI0L		47.813	24.861	25.000		.7000	MICROB	.7000		WATERS,NPB17,445-70	A
	THRESHOLD	20.62	10.37	10.51							
..... REACTION 447											
XI0K+K0PI-		6.910	3.063	3.200	U	.3000	MICROB			DAHL PR163,1377-67	V
		8.410	3.863	4.000	U	.8000	MICROB			DAHL PR163,1377-67	V
	THRESHOLD	5.99	2.57	2.71						2 DATA POINTS LISTED	
..... REACTION 448											
XI0K0K0		6.910	3.063	3.200	U	1.0000	MICROB			DAHL PR163,1377-67	V
		8.410	3.863	4.000	U	2.4000	MICROB			DAHL PR163,1377-67	V
	THRESHOLD	5.33	2.22	2.36						2 DATA POINTS LISTED	
..... REACTION 449											
OM-		47.813	24.861	25.000	U	1.0000	MICROB			WATERS BAPS12,541-67	W
	THRESHOLD	10.53	4.99	5.13							
..... REACTION 450											
PI+		1.800	.340	.459		2.1000		.8000		DOBRET.JETP7,351-58	A
	THRESHOLD	1.49	.17	.28							

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA
A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES
W=A TRUE AND U TRUE
U=UPPER LIMIT
V=1 TRUE AND U TRUE

PI-P

		S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 451											
3PI+3PI-ZO		30.925	15.861	16.000		1.1800		.0700		HONECKER,NPB13,571-69	
	THRESHOLD	3.69	1.35	1.48							
..... REACTION 452											
4PI+4PI-ZO		30.925	15.861	16.000		.3930		.0510		HONECKER,NPB13,571-69	
	THRESHOLD	4.82	1.95	2.08							
..... REACTION 453											
5PI+5PI-ZO		30.925	15.861	16.000		.0650		.0200		HONECKER,NPB13,571-69	
	THRESHOLD	6.63	2.91	3.05							
..... REACTION 454											
6PI+6PI-ZO		30.925	15.861	16.000	U	5.0000	MICROB	4.0000		HONECKER,NPB13,571-69	
	THRESHOLD	8.15	3.72	3.86							
..... REACTION 455											
PI+PI+PI-PI-ZO		5.973	2.564	2.700		.5400		.0200		KLEIN PR150,1123-66	
		6.067	2.614	2.750		.4900		.0300		ALITTI NC35,1-65	
		8.410	3.863	4.000		1.4700		.0700		BONDAR NC31,485-64	
		15.235	7.500	7.638		3.7000		.3000		BAL. DUBNA P1,2963-67	
		20.136	10.111	10.250		2.3000		.5600		BISWAS PR134B,901-64	
		21.543	10.861	11.000		1.7600		.0800		DAUDIN,PC-66	
		30.925	15.861	16.000		2.8100		.1600		HONECKER,NPB13,571-69	
	THRESHOLD	2.69	.81	.94						7 DATA POINTS LISTED	
						FIT OF SIGMA AGAINST PLAB GEV/C					
						5 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .00					
						K = .95 +- .21 N =+ .35 +- .10					
..... REACTION 456											
PI+PI-ZO		2.860	.905	1.035		.8000		.2000		PICKUP PR132,1819-63	
		2.943	.949	1.080		.8000		.2000		BACON PR157,1263-67	
		3.226	1.100	1.232		3.1000		.5000		PICKUP PR132,1819-63	
		3.503	1.247	1.380		3.7000		.2000		BACON PR157,1263-67	
		3.895	1.457	1.590		3.9600		.1400		ALITTI NC29,515-63	
		4.119	1.576	1.710		4.6000		.4000		BACON PR157,1263-67	
		4.849	1.965	2.100		7.0200		.1300		WEST PR149,1089-66	
		4.924	2.005	2.140		7.4000		.3000		HAGOPI. PR152,1183-66	
		5.149	2.125	2.260		6.6600		.1900		REYNOL. PR184,1424-69	
		5.973	2.564	2.700		7.0000		.3000		MILLER PR153,1423-67	
		6.104	2.634	2.770		6.1000		.1000		BATON,NPB21,551-70	
		8.410	3.863	4.000		5.5700		.1700		BONDAR NC31,729-64	
		8.710	4.023	4.160		6.1000		.1400		EISNER PR164,1699-67	
		21.543	10.861	11.000		2.4000		.1000		DAUDIN PC-66	
		30.925	15.861	16.000		2.4900		.1500		HONECKER,NPB13,571-69	
	THRESHOLD	2.25	.58	.71						15 DATA POINTS LISTED	
						FIT OF SIGMA AGAINST PLAB GEV/C					
						9 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. = .00					
						K = 10.78 +- .51 N = -.52 +- .04					
..... REACTION 457											
K(+,-)KS		47.813	24.861	25.000		.8240		.1200		WATERS,NPB17,445-70	A
	THRESHOLD	3.72	1.37	1.50							
..... REACTION 458											
K(+,-)KL		47.813	24.861	25.000		.8240		.1200		WATERS,NPB17,445-70	A
	THRESHOLD	3.72	1.37	1.50							
..... REACTION 459											
K+K-		47.813	24.861	25.000		.6520		.0560		WATERS,NPB17,445-70	A
	THRESHOLD	3.72	1.37	1.50							
..... REACTION 460											
KO		22.294	11.261	11.400		1.9700		.3500	.6400	FERBEL NC28,1214-63	A
		30.925	15.861	16.000		2.9000		.3000		FILTHUTH,93,AIX61	A
	THRESHOLD	3.72	1.37	1.50						2 DATA POINTS LISTED	
..... REACTION 461											
KOKO		13.663	6.662	6.800		1.2000		.3000		CHANG JETP13,323-61	A
		22.294	11.261	11.400		.0900		.0700		FERBEL NC28,1214-63	A
		30.925	15.861	16.000		2.8600		.2400		BARTKE NC24,876-62	A
	THRESHOLD	3.72	1.37	1.50						3 DATA POINTS LISTED	
..... REACTION 462											
KOKOZO		8.410	3.863	4.000		.0430		.0960	.0430	BARTSCH,NC43A,1010-66	
		9.630	4.513	4.650		.1900		ERROR NOT GIVEN		BERTANZA PR130,786-63	
	THRESHOLD	4.28	1.66	1.80						2 DATA POINTS LISTED	
..... REACTION 463											
KSKS		14.038	6.862	7.000		.0810		.0087		PEEKNA,NPB27,605-71	A
		47.813	24.861	25.000		.1250		ERROR NOT GIVEN		WATERS BAPS12,541-67	A
		47.813	24.861	25.000		.1630		.0140		WATERS,NPB17,445-70	A
	THRESHOLD	3.72	1.37	1.50						3 DATA POINTS LISTED	
..... REACTION 464											
KSKSZO		5.973	2.564	2.700		6.0000	MICROB	3.0000		MILLER PR140B,360-65	
		14.038	6.862	7.000		.0134		.0033		PEEKNA,NPB27,605-71	
	THRESHOLD	4.28	1.66	1.80						2 DATA POINTS LISTED	

FOOTNOTES

U=UPPER LIMIT
A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES

PI-P

		S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 465											
KSKL		47.813	24.861	25.000		.3260		.0280		WATERS,NPB17,445-70	A
	THRESHOLD	3.72	1.37	1.50							
..... REACTION 466											
KSK		47.813	24.861	25.000		1.1500		.1200		WATERS,NPB17,445-70	A
	THRESHOLD	3.72	1.37	1.50							
..... REACTION 467											
KS(KL/K+/K-)		47.813	24.861	25.000		1.1500		.1200		WATERS,NPB17,445-70	A
	THRESHOLD	3.72	1.37	1.50							
..... REACTION 468											
KL(KS/K+/K-)		47.813	24.861	25.000		1.1500		.1200		WATERS,NPB17,445-70	A
	THRESHOLD	3.72	1.37	1.50							
..... REACTION 469											
KSAY		47.813	24.861	25.000		5.5000	MICROB	2.0000		WATERS,NPB17,445-70	A
	THRESHOLD	12.19	5.88	6.02							
..... REACTION 470											
KAK		4.456	1.756	1.890		.1400		ERROR NOT GIVEN		ERWIN,371,AIX61	A
		8.410	3.863	4.000		1.2400		ERROR NOT GIVEN		BARTSCH NC43A,1010-66	A
		9.630	4.513	4.650		.7800		ERROR NOT GIVEN		BERTANZA PR130,786-63	A
		14.038	6.862	7.000		1.2000		.3000		SOLOVIEV,388,ROCH60	A
		19.667	9.861	10.000		1.9700		.2400		BIGI NC33,1249-64	A
		30.925	15.861	16.000		2.2100		.2500		BARTKE NC24,876-62	A
		47.813	24.861	25.000		2.9600		.2400		WATERS,NPB17,445-70	A
	THRESHOLD	3.72	1.37	1.50						7 DATA POINTS LISTED	
..... REACTION 471											
AL		14.976	7.362	7.500		3.0000	MICROB	ERROR NOT GIVEN		BELYAKOV JETP18,64-64	A
		30.925	15.861	16.000	U	.0200				FILTHUTH,93,AIX61	W
	THRESHOLD	10.05	4.74	4.87						2 DATA POINTS LISTED	

FOOTNOTES

A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES
W=A TRUE AND U TRUE
U=UPPER LIMIT

********** PI-N **********

		S	K.ENERGY	PLAB		CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 472										
TOTAL		38.485	19.861	20.000		23.3000	.6000		ALLABY PL30B,500-69	
		47.880	24.861	25.000		23.7000	.5000		ALLABY PL30B,500-69	
		57.276	29.861	30.000		23.6000	.3000		ALLABY PL30B,500-69	
		66.671	34.861	35.000		23.5000	.3000		ALLABY PL30B,500-69	
		76.067	39.861	40.000		23.1000	.3000		ALLABY PL30B,500-69	
		85.462	44.861	45.000		23.3000	.3000		ALLABY PL30B,500-69	
		94.858	49.861	50.000		23.4000	.3000		ALLABY PL30B,500-69	
		104.253	54.861	55.000		23.2000	.3000		ALLABY PL30B,500-69	
		113.649	59.861	60.000		23.4000	.3000		ALLABY PL30B,500-69	
		123.044	64.861	65.000		23.4000	.3000		ALLABY PL30B,500-69	
	THRESHOLD	1.16	0.00	0.00					10 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

10 DATA POINTS USED ABOVE 20.0 GEV/C , PROB. =1.00
K = 24.16 +- 2.63 N = -.01 +- .03

..... REACTION 473										
NPI-		6.170	2.664	2.800	U	.1000			BAYUKOV JETP14,40-62	
	THRESHOLD	1.17	.00	.02						
..... REACTION 474										
N*01236PI-PI0=PPI-PI-PI0		10.301	4.862	5.000		.4400	ERROR NOT GIVEN		FLEURY HEID.67	
	THRESHOLD	2.30	.60	.73						
..... REACTION 475										
N*01236RH-=PPI-PI-PI0		10.301	4.862	5.000		.2150	ERROR NOT GIVEN		FLEURY HEID.67	
	THRESHOLD	3.98	1.50	1.63						
..... REACTION 476										
N*01570PI-=PPI-PI-		5.157	2.125	2.260		.9300	.1100		BENVENU,PR187,1852-69	
	THRESHOLD	3.28	1.12	1.26						
..... REACTION 477										
N01525PI-P10=PPI-PI-PI0		10.301	4.862	5.000		.0690	.0150		FLEURY HEID.67	
	THRESHOLD	3.26	1.11	1.25						
..... REACTION 478										
N01525RH-=PPI-PI-PI0		10.301	4.862	5.000		.0350	ERROR NOT GIVEN		FLEURY HEID.67	
	THRESHOLD	5.22	2.16	2.29						
..... REACTION 479										
N01688PI-PI0=PPI-PI-PI0		10.301	4.862	5.000		.0730	.0280		FLEURY HEID.67	
	THRESHOLD	3.87	1.44	1.57						
..... REACTION 480										
N01688RH-=PPI-PI-PI0		10.301	4.862	5.000		.0440	ERROR NOT GIVEN		FLEURY HEID.67	
	THRESHOLD	5.99	2.57	2.71						
..... REACTION 481										
S-K+PI-		5.157	2.125	2.260		.0700	.0100		KALBFLEIS PL4,225-63	
	THRESHOLD	3.33	1.15	1.28						

FOOTNOTES

U=UPPER LIMIT

PI-DE

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	REFERENCE	FOOT-NOTES
..... REACTION 482							
TOTAL	4.597	.142	.245	183.0000	7.0000	PEWILT PR131,1826-63	
	5.299	.330	.448	55.5000	2.9700	BRUNHART NC29,1162-63	
	5.389	.354	.473	67.4900	1.6800	CARTER PR168,1457-68	
	5.479	.378	.498	62.1500	1.3000	CARTER PR168,1457-68	
	5.530	.391	.512	60.4200	1.2400	CARTER PR168,1457-68	1
	5.581	.405	.526	58.2400	1.2000	CARTER PR168,1457-68	
	5.646	.422	.544	56.5000	2.0000	LERAY PAM6310-63	
	5.664	.427	.549	55.3500	1.1000	CARTER PR168,1457-68	
	5.722	.442	.565	54.3600	.9000	CARTER PR168,1457-68	1
	5.759	.452	.575	53.1600	.8700	CARTER PR168,1457-68	
	5.828	.471	.594	51.8000	1.7000	LERAY PAM6310-63	
	5.828	.471	.594	52.6100	.8300	CARTER PR168,1457-68	
	5.927	.497	.621	52.3200	.0700	CARTER PR168,1457-68	1
	5.964	.507	.631	52.7400	.6500	CARTER PR168,1457-68	
	6.033	.525	.650	53.7200	.6000	CARTER PR168,1457-68	1
	6.081	.538	.663	54.7700	.5500	CARTER PR168,1457-68	
	6.085	.539	.664	54.0000	1.3000	LERAY PAM6310-63	
	6.114	.547	.672	55.4600	.4000	CARTER PR168,1457-68	
	6.147	.556	.681	56.4800	.5200	CARTER PR168,1457-68	1
	6.188	.566	.692	57.3900	.5200	CARTER PR168,1457-68	
	6.221	.575	.701	57.8500	.5000	CARTER PR168,1457-68	
	6.254	.584	.710	58.3700	.5000	CARTER PR168,1457-68	1
	6.280	.591	.717	58.2400	.5000	CARTER PR168,1457-68	
	6.283	.592	.718	58.4000	1.4000	LERAY PAM6310-63	
	6.372	.615	.742	58.2500	.5000	CARTER PR168,1457-68	
	6.453	.637	.764	57.5000	1.3000	LERAY PAM6310-63	
	6.486	.646	.773	57.3200	.5000	CARTER PR168,1457-68	
	6.597	.675	.803	56.2400	.5000	CARTER PR168,1457-68	
	6.626	.683	.811	56.3600	.5000	CARTER PR168,1457-68	1
	6.649	.689	.817	56.4000	.5000	CARTER PR168,1457-68	
	6.671	.695	.823	56.3800	.5000	CARTER PR168,1457-68	
	6.741	.714	.842	56.6000	1.2000	LERAY PAM6310-63	
	6.749	.716	.844	57.5300	.5000	CARTER PR168,1457-68	
	6.852	.744	.872	59.8800	.5000	CARTER PR168,1457-68	1
	6.889	.753	.882	61.5100	.5000	CARTER PR168,1457-68	
	6.930	.764	.893	59.2000	1.2000	LERAY PAM6310-63	
	6.956	.771	.900	62.2800	.0400	GIACOMELLI PC 67	
	7.067	.801	.930	68.5100	.5000	CARTER PR168,1457-68	1
	7.097	.809	.938	70.0500	.4500	CARTER PR168,1457-68	
	7.142	.821	.950	70.4400	.0400	GIACOMELLI PC 67	
	7.194	.834	.964	71.8000	1.3000	LERAY PAM6310-63	
	7.216	.840	.970	74.4100	.4000	CARTER PR168,1457-68	1
	7.279	.857	.987	75.6500	.3500	CARTER PR168,1457-68	
	7.309	.865	.995	76.3300	.3300	CARTER PR168,1457-68	
	7.327	.870	1.000	76.7500	.0600	GIACOMELLI PC 67	
	7.383	.885	1.015	76.6800	.3200	CARTER PR168,1457-68	1
	7.398	.889	1.019	74.5000	1.4000	LERAY PAM6310-63	
	7.424	.896	1.026	76.5700	.3000	CARTER PR168,1457-68	
	7.513	.920	1.050	75.2400	.2900	CARTER PR168,1457-68	
	7.513	.920	1.050	77.1100	.0600	GIACOMELLI PC 67	
	7.588	.939	1.070	72.7000	1.3000	LERAY PAM6310-63	
	7.602	.943	1.074	73.5100	.2800	CARTER PR168,1457-68	
	7.654	.957	1.088	72.4600	.2800	CARTER PR168,1457-68	1
	7.699	.969	1.100	71.7200	.2800	CARTER PR168,1457-68	
	7.699	.969	1.100	72.5400	.0600	GIACOMELLI PC 67	
	7.774	.989	1.120	67.6000	1.0000	LERAY PAM6310-63	
	7.796	.995	1.126	69.9000	.2900	CARTER PR168,1457-68	1
	7.885	1.019	1.150	68.2900	.0600	GIACOMELLI PC 67	
	7.885	1.019	1.150	68.8500	.2800	CARTER PR168,1457-68	
	7.941	1.034	1.165	68.3200	.2800	CARTER PR168,1457-68	1
	7.978	1.044	1.175	68.3600	.2800	CARTER PR168,1457-68	
	8.049	1.063	1.194	68.1900	.2800	CARTER PR168,1457-68	1
	8.072	1.069	1.200	66.5900	.0600	GIACOMELLI PC 67	
	8.072	1.069	1.200	68.4000	.2800	CARTER PR168,1457-68	
	8.150	1.089	1.221	66.3000	1.1000	LERAY PAM6310-63	
	8.165	1.093	1.225	68.6100	.2800	CARTER PR168,1457-68	
	8.258	1.118	1.250	66.3900	.0600	GIACOMELLI PC 67	
	8.258	1.118	1.250	69.2400	.2800	CARTER PR168,1457-68	
	8.348	1.142	1.274	69.7800	.2800	CARTER PR168,1457-68	1
	8.370	1.148	1.280	70.1300	.2800	CARTER PR168,1457-68	
	8.422	1.162	1.294	68.0000	1.1000	LERAY PAM5310-63	
	8.444	1.168	1.300	67.6400	.0600	GIACOMELLI PC 67	
	8.486	1.179	1.311	70.9100	.2800	CARTER PR168,1457-68	
	8.560	1.199	1.331	71.8600	.2800	CARTER PR168,1457-68	1
	8.624	1.216	1.348	72.5100	.2800	CARTER PR168,1457-68	
	8.631	1.218	1.350	69.4100	.0600	GIACOMELLI PC 67	
	8.646	1.222	1.354	72.4100	.2700	CARTER PR168,1457-68	
	8.739	1.246	1.379	73.2800	.2700	CARTER PR168,1457-68	
	8.792	1.260	1.393	70.5000	.9000	LERAY PAM5310-63	
	8.810	1.265	1.398	73.3100	.2600	CARTER PR168,1457-68	1
	8.818	1.267	1.400	70.6900	.0600	GIACOMELLI PC 67	
	8.848	1.275	1.408	73.5300	.2600	CARTER PR168,1457-68	
	8.937	1.299	1.432	73.5600	.2500	CARTER PR168,1457-68	1
	9.004	1.317	1.450	73.6300	.2500	CARTER PR168,1457-68	
	9.004	1.317	1.450	71.0600	.0600	GIACOMELLI PC 67	
	9.098	1.342	1.475	73.1000	.2500	CARTER PR168,1457-68	1
	9.165	1.360	1.493	72.8400	.2500	CARTER PR168,1457-68	
	9.165	1.360	1.493	69.0000	1.0000	LERAY PAM6310-63	
	9.191	1.367	1.500	70.5600	.0500	GIACOMELLI PC 67	
	9.303	1.397	1.530	71.9300	.2500	CARTER PR168,1457-68	
	9.378	1.417	1.550	69.2600	.0500	GIACOMELLI PC 67	
	9.460	1.439	1.572	70.7300	.2500	CARTER PR168,1457-68	1
	9.565	1.466	1.600	67.9800	.0500	GIACOMELLI PC 67	
	9.576	1.469	1.603	69.6400	.2500	CARTER PR168,1457-68	1
	9.643	1.487	1.621	69.1900	.2500	CARTER PR168,1457-68	1
	9.752	1.516	1.650	66.6500	.0500	GIACOMELLI PC 67	
	9.830	1.537	1.671	67.9300	.2600	CARTER PR168,1457-68	
	9.939	1.566	1.700	65.4200	.0500	GIACOMELLI PC 67	
	10.006	1.584	1.718	66.9200	.2600	CARTER PR168,1457-68	
	10.126	1.616	1.750	64.4700	.0500	GIACOMELLI PC 67	
	10.208	1.638	1.772	66.0500	.3000	CARTER PR168,1457-68	
	10.253	1.650	1.784	66.1700	.3400	CARTER PR168,1457-68	
	10.313	1.666	1.800	63.9000	.0500	GIACOMELLI PC 67	
	10.388	1.686	1.820	65.4100	.3800	CARTER PR168,1457-68	
	10.500	1.716	1.850	63.4500	.0500	GIACOMELLI PC 67	

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA

PI-DE

		S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 482									
TOTAL		10.500	1.716	1.850	65.3900	.4200		CARTER PR168,1457-68	1
(CONTINUATION)		10.567	1.734	1.868	65.0800	.4200		CARTER PR168,1457-68	
		10.687	1.766	1.900	63.1300	.0500		GIACOMELLI PC 67	
		10.743	1.781	1.915	64.9100	.4200		CARTER PR168,1457-68	
		10.874	1.815	1.950	62.9000	.0500		GIACOMELLI PC 67	
		10.874	1.815	1.950	64.7100	.4300		CARTER PR168,1457-68	
		10.934	1.831	1.966	64.6700	.4400		CARTER PR168,1457-68	
		11.061	1.865	2.000	62.7400	.0400		GIACOMELLI PC 67	
		11.117	1.880	2.015	64.6300	.4400		CARTER PR168,1457-68	
		11.245	1.914	2.049	64.5400	.4800		CARTER PR168,1457-68	1
		11.308	1.931	2.066	64.4600	.4900		CARTER PR168,1457-68	
		11.435	1.965	2.100	62.4300	.0400		GIACOMELLI PC 67	
		11.443	1.967	2.102	64.5200	.5400		CARTER PR168,1457-68	
		11.686	2.032	2.167	64.3000	.4800		CARTER PR168,1457-68	
		11.810	2.065	2.200	62.3200	.0400		GIACOMELLI PC 67	
		11.870	2.081	2.216	64.0500	.6600		CARTER PR168,1457-68	
		12.057	2.131	2.266	64.0200	.6700		CARTER PR168,1457-68	
		12.184	2.165	2.300	61.9900	.0400		GIACOMELLI PC 67	
		12.428	2.230	2.365	63.6200	.6700		CARTER PR168,1457-68	
		12.559	2.264	2.400	61.8700	.0400		GIACOMELLI PC 67	
		12.608	2.277	2.413	63.4200	.7800		CARTER PR168,1457-68	
		12.817	2.333	2.469	63.1000	1.4000		CARTER PR168,1457-68	
		13.012	2.385	2.521	63.1800	1.4000		CARTER PR168,1457-68	1
		13.184	2.431	2.567	62.8400	1.3000		CARTER PR168,1457-68	
		13.357	2.477	2.613	62.3900	1.3000		CARTER PR168,1457-68	
		13.548	2.528	2.664	62.1200	1.3000		CARTER PR168,1457-68	
		26.057	5.862	6.000	52.7000	.5000		GALBR.PR138B,913-65	
		33.559	7.862	8.000	51.0000	.5000		GALBR.PR138B,913-65	
		41.063	9.861	10.000	49.3000	.5000		GALBR.PR138B,913-65	
		48.566	11.861	12.000	47.9000	.5000		GALBR.PR138B,913-65	
		56.069	13.861	14.000	47.1000	.5000		GALBR.PR138B,913-65	
		63.573	15.861	16.000	46.4000	.5000		GALBR.PR138B,913-65	
		71.077	17.861	18.000	46.4000	.5000		GALBR.PR138B,913-65	
		78.581	19.861	20.000	45.8000	.5000		GALBR.PR138B,913-65	
		78.581	19.861	20.000	47.2800	.6000		ALLABY PL30B,500-69	
		97.340	24.861	25.000	47.1400	.5000		ALLABY PL30B,500-69	
		116.100	29.861	30.000	47.1700	.3000		ALLABY PL30B,500-69	
		134.860	34.861	35.000	46.8500	.3000		ALLABY PL30B,500-69	
		153.620	39.861	40.000	46.4000	.3000		ALLABY PL30B,500-69	
		172.380	44.861	45.000	46.2000	.3000		ALLABY PL30B,500-69	
		191.140	49.861	50.000	46.6300	.3000		ALLABY PL30B,500-69	
		209.900	54.861	55.000	46.4400	.3000		ALLABY PL30B,500-69	
		228.659	59.861	60.000	46.6200	.3000		ALLABY PL30B,500-69	
		247.419	64.861	65.000	46.7600	.3000		ALLABY PL30B,500-69	
	THRESHOLD	4.06	0.00	0.00				149 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

11 DATA POINTS USED ABOVE 20.0 GEV/C , PROB. = .99
K = 47.66 +- 2.30 N = -.01 +- .01

..... REACTION 483									
PI-DE		5.299	.330	.448	13.3000	1.1700		BRUNHART NC29,1162-63	
	THRESHOLD	4.06	0.00	0.00					
..... REACTION 484									
NEUTRALS		4.597	.142	.245	37.2000	2.8000		PEWILT PR131,1826-63	
		5.314	.333	.452	8.3000	.8500		BRUNHART NC29,1162-63	
	THRESHOLD	4.06	0.00	0.00				2 DATA POINTS LISTED	
..... REACTION 485									
CHARGED INELASTIC		5.299	.330	.448	33.9000	2.6000		BRUNHART NC29,1162-63	
	THRESHOLD	5.27	.32	.44					
..... REACTION 486									
DEPI+PI-PI-		17.431	3.563	3.700	.0500	ERROR NOT GIVEN		ABOLINS PRL15,125-65	
		17.431	3.563	3.700	.0500	ERROR NOT GIVEN		LANDER,217,ATHENS65	
		22.306	4.862	5.000	.2640	.0100		VANDERHA,NPB13,329-69	
		22.456	4.902	5.040	.3240	.0250		VANDE. NP B13,329-69	
	THRESHOLD	5.27	.32	.44				4 DATA POINTS LISTED	
..... REACTION 487									
DERHOPI-		17.431	3.563	3.700	.1000	ERROR NOT GIVEN		LANDER,217,ATHENS65	
		17.431	3.563	3.700	.1000	ERROR NOT GIVEN		ABOLINS PRL15,125-65	
		22.306	4.862	5.000	.1470	.0210		VANDERHA,NPB13,329-69	
	THRESHOLD	7.71	.97	1.10				3 DATA POINTS LISTED	
..... REACTION 488									
DERHPI		22.456	4.902	5.040	.1470	.0210		VANDE. NP B13,329-69	
	THRESHOLD	7.71	.97	1.10					
..... REACTION 489									
DE*++PI-PI-		17.431	3.563	3.700	.0400	ERROR NOT GIVEN		ABOLINS PRL15,125-65	
		22.456	4.902	5.040	.0480	.0070		VANDE. NP B13,329-69	
	THRESHOLD	5.76	.45	.58				2 DATA POINTS LISTED	
..... REACTION 490									
DE*0PI+PI-		17.431	3.563	3.700	.1000	ERROR NOT GIVEN		ABOLINS PRL15,125-65	
	THRESHOLD	5.76	.45	.58					
..... REACTION 491									
DE*0RHO		17.431	3.563	3.700	.1300	ERROR NOT GIVEN		ABOLINS PRL15,125-65	
		22.456	4.902	5.040	.1060	.0180		VANDE. NP B13,329-69	
	THRESHOLD	8.64	1.22	1.35				2 DATA POINTS LISTED	

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA

********** PI-DE **********

		S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 492									
DE*OF		22.306	4.862	5.000	.0180	.0050		VANDERHA,NPB13,329-69	
	THRESHOLD	6.00	.52	.64					
..... REACTION 493									
PPPI-PI-P10		22.306	4.862	5.000	.5600	.0300		VANDERH. PL24B,493-67	
		22.456	4.902	5.040	.2850	.0600		GHIDINI NC58A,524-68	P
	THRESHOLD	5.27	.32	.44				2 DATA POINTS LISTED	
..... REACTION 494									
PPRH-PI-=PPPI-PI-PI0		22.306	4.862	5.000	.0150	.0050.		VANDERH. PL24B,493-67	
	THRESHOLD	7.71	.97	1.10					
..... REACTION 495									
S-PK0		8.154	1.090	1.222	.1850	.0350		KRAEMER,273,CERN62	
	THRESHOLD	6.87	.75	.88					
..... REACTION 496									
S-NK+		8.154	1.090	1.222	.2000	.0280		KRAEMER,273,CERN62	
	THRESHOLD	6.89	.75	.88					
..... REACTION 497									
(S0/L)NK0		8.183	1.098	1.230	.7600	.0600		SHAFER PR130,2077-63	
	THRESHOLD	6.48	.64	.77					

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FOOTNOTES

P=PROTON IS A SPECTATOR

PI-HE

		S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 498									
TOTAL		14.418	.060	.143	89.0000	18.0000		FOWLER PR91,135-53	
		14.741	.105	.201	207.0000	24.0000		FOWLER PR91,135-53	
		15.085	.153	.257	266.0000	16.0000		BUDAGOV JETP15,824-62	
		15.948	.273	.388	220.0000	20.0000		KOZODA. JETP11,300-60	
		16.358	.330	.448	150.0000	15.0000		IGNATE. CERNS2,313-56	
		16.358	.330	.448	150.0000	15.0000		KOZODA. JETP11,300-60	
		17.331	.465	.588	111.5000	4.0000		CHAVANON NC40A,935-65	
		18.522	.630	.757	116.4000	3.5000		CHAVANON NC40A,935-65	
		19.096	.710	.838	120.0000	3.0000		CHAVANON NC40A,935-65	
		19.459	.760	.889	123.3000	3.5000		CHAVANON NC40A,935-65	
		19.950	.829	.958	126.3000	3.0000		CHAVANON NC40A,935-65	
		20.349	.884	1.014	132.2000	3.0000		CHAVANON NC40A,935-65	
		20.884	.958	1.089	133.6000	3.0000		CHAVANON NC40A,935-65	
		20.963	.969	1.100	135.0000	ERROR NOT GIVEN		BLOCK NC12,642-59	
		20.970	.970	1.101	167.4000	5.4000		BRAUTTI NC19,1270-61	
		22.336	1.160	1.292	130.5000	4.0000		CHAVANON NC40A,935-65	
		25.978	1.666	1.800	110.0000	ERROR NOT GIVEN		BLOCK NC12,642-59	
		26.007	1.670	1.804	140.7000	8.1000		BRAUTTI NC19,1270-61	
		30.260	2.260	2.396	104.7000	1.5000		BRAUTTI NC19,1270-61	
	THRESHOLD	13.98	0.00	0.00				19 DATA POINTS LISTED	
..... REACTION 499									
PI-HE		14.418	.060	.143	37.0000	12.0000		FOWLER PR91,135-53	
		14.741	.105	.201	74.0000	14.0000		FOWLER PR91,135-53	
		15.085	.153	.257	95.0000	8.4000		BUDAGOV,JETP15,824-62	
		15.085	.153	.257	95.0000	8.4000		BUDAGOV JETP15,824-62	
		15.948	.273	.388	75.0000	9.0000		KOZODA. JETP11,300-60	
		16.358	.330	.448	47.0000	5.0000		KOZODA. JETP11,300-60	
		16.358	.330	.448	51.0000	19.0000		IGNATE. CERNS2,313-56	
		17.331	.465	.588	31.5000	4.0000		CHAVANON NC40A,935-65	
		18.522	.630	.757	24.5000	3.5000		CHAVANON NC40A,935-65	
		19.096	.710	.838	23.0000	3.0000		CHAVANON NC40A,935-65	
		19.459	.760	.889	29.0000	3.5000		CHAVANON NC40A,935-65	
		19.950	.829	.958	25.0000	3.0000		CHAVANON NC40A,935-65	
		20.349	.884	1.014	32.0000	3.0000		CHAVANON NC40A,935-65	
		20.884	.958	1.089	35.0000	3.0000		CHAVANON NC40A,935-65	
		22.336	1.160	1.292	36.0000	4.0000		CHAVANON NC40A,935-65	
	THRESHOLD	13.98	0.00	0.00				15 DATA POINTS LISTED	
..... REACTION 500									
INELASTIC		14.418	.060	.143	52.0000	22.0000		FOWLER PR91,135-53	
		14.741	.105	.201	133.0000	38.0000		FOWLER PR91,135-53	
		15.085	.153	.257	171.0000	12.0000		BUDAGOV JETP15,824-62	
		15.948	.273	.388	145.0000	15.0000		KOZODA. JETP11,300-60	
		16.358	.330	.448	99.0000	12.0000		IGNATE. CERNS2,313-56	
		16.358	.330	.448	103.0000	10.0000		KOZODA. JETP11,300-60	
		17.331	.465	.588	83.0000	3.5000		CHAVANON NC40A.935-65	
		18.522	.630	.757	91.9000	3.0000		CHAVANON NC40A.935-65	
		19.096	.710	.838	97.0000	3.0000		CHAVANON NC40A.935-65	
		19.459	.760	.889	94.3000	3.0000		CHAVANON NC40A.935-65	
		19.950	.829	.958	101.3000	3.0000		CHAVANON NC40A.935-65	
		20.349	.884	1.014	100.5000	3.0000		CHAVANON NC40A,935-65	
		20.884	.958	1.089	98.6000	ERROR NOT GIVEN		CHAVANON NC40A,935-65	
		22.336	1.160	1.292	94.5000	4.0000		CHAVANON NC40A,935-65	
	THRESHOLD	13.99	.00	.01				14 DATA POINTS LISTED	

PLOTS OF CROSS SECTION

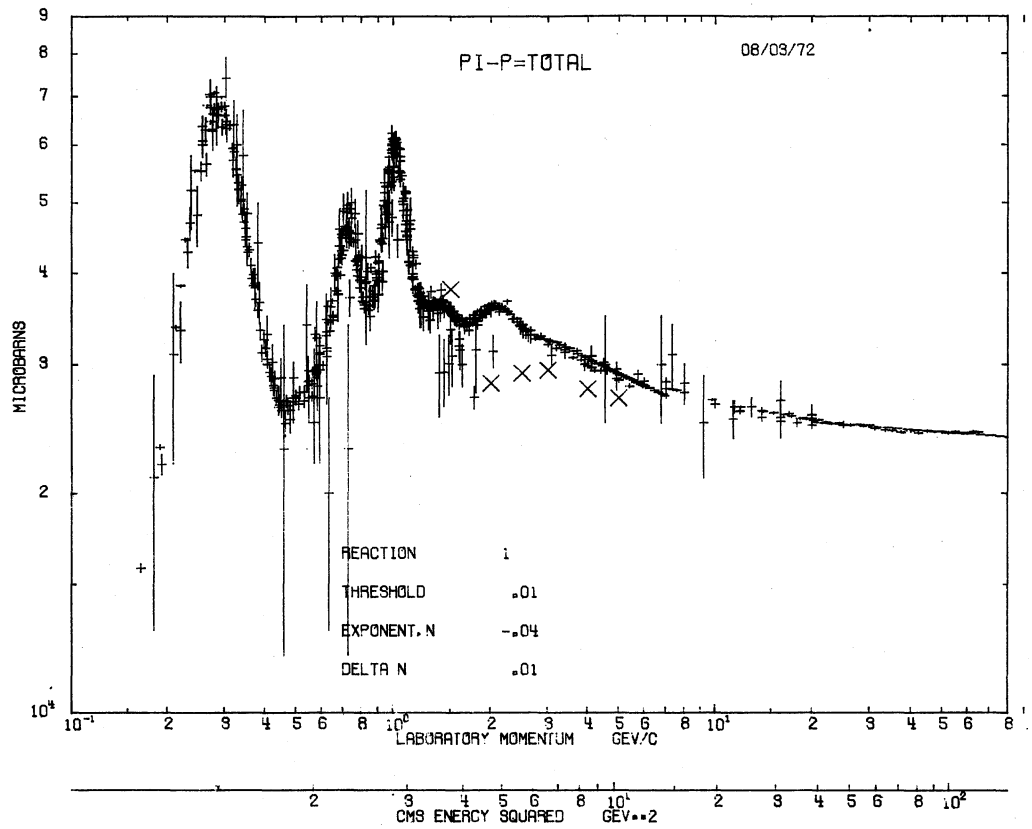
VERSUS INCIDENT LABORATORY MOMENTUM

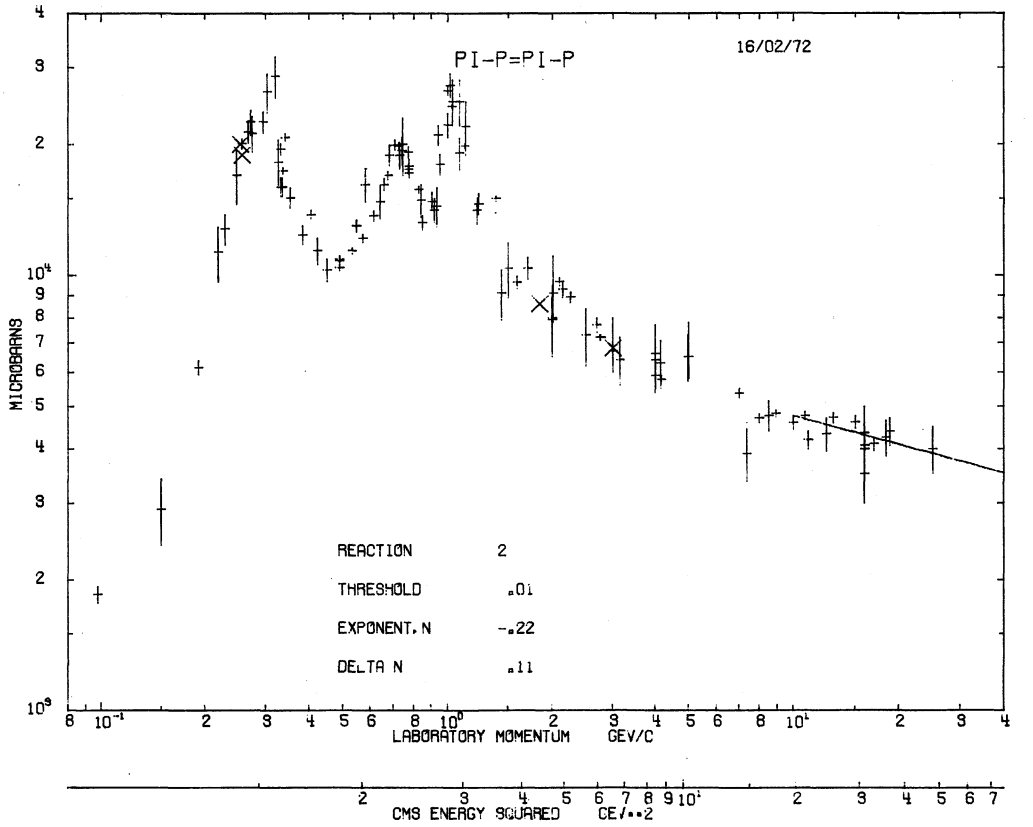
Description

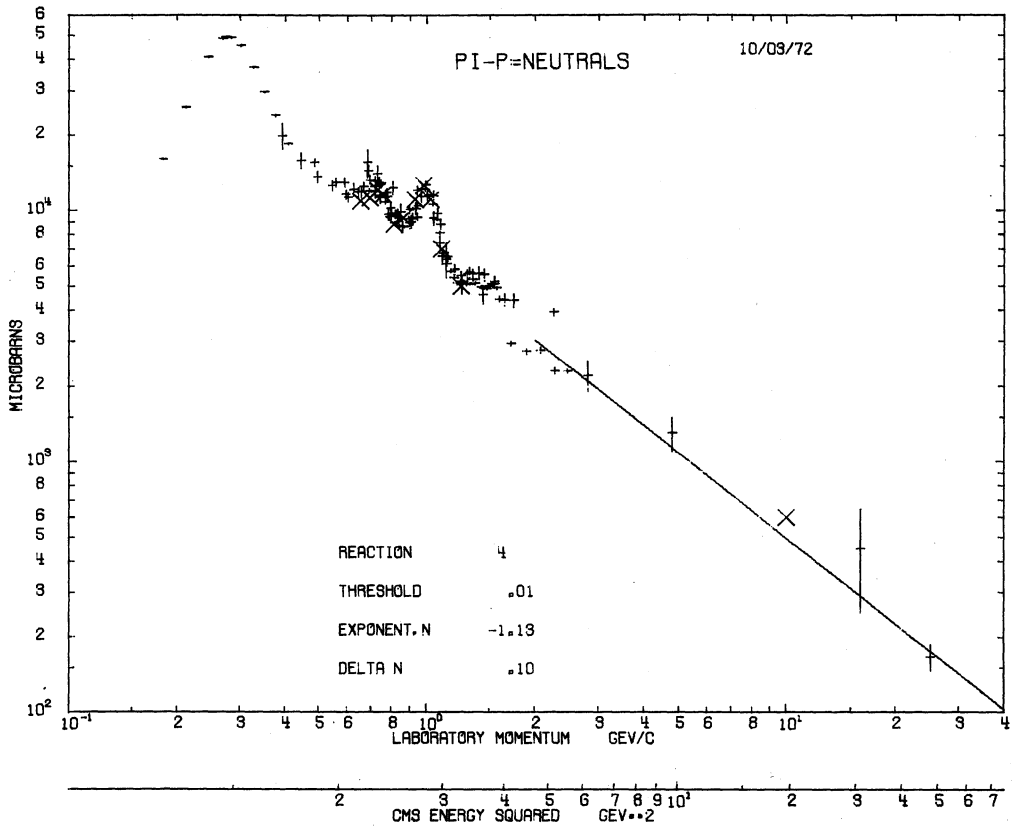
For those reactions having a sufficient number of data points, a graph is given of the cross section, σ, versus the momentum, p_{Lab} on log-log scales.

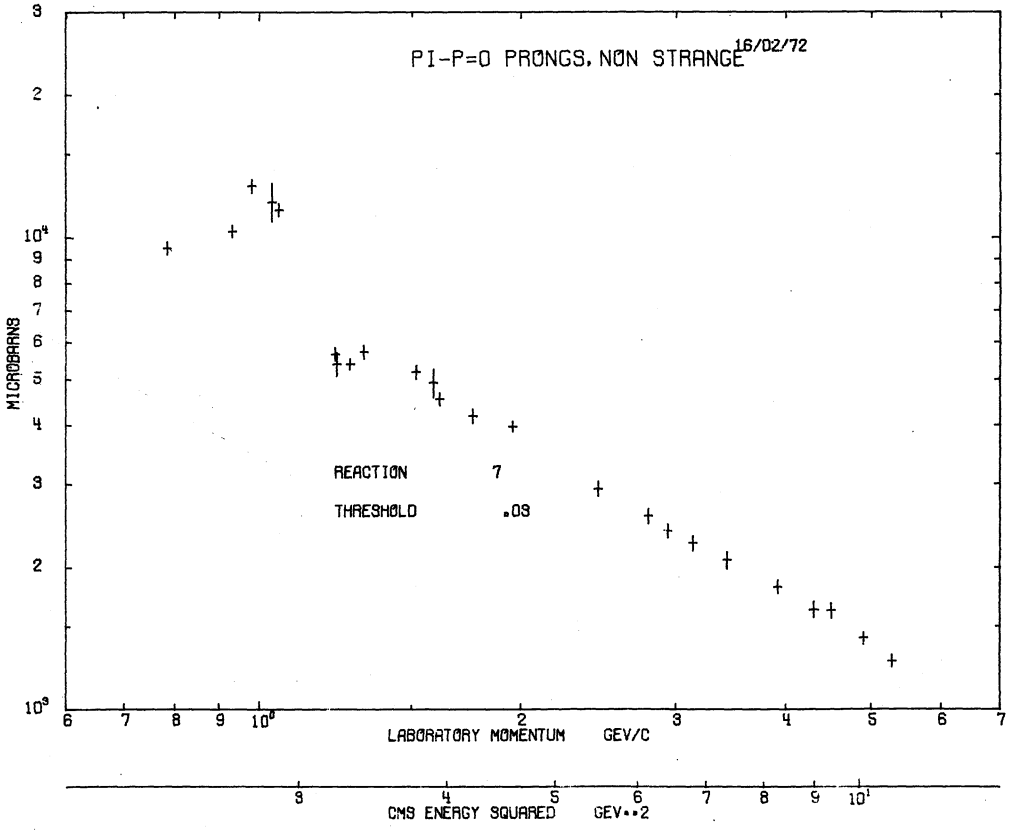
Errors are shown whenever they have been given. If no errors have been published, the data point is given as a cross, X. If only an upper limit is quoted, this is shown as a short horizontal bar together with a line extending to the bottom of the graph.

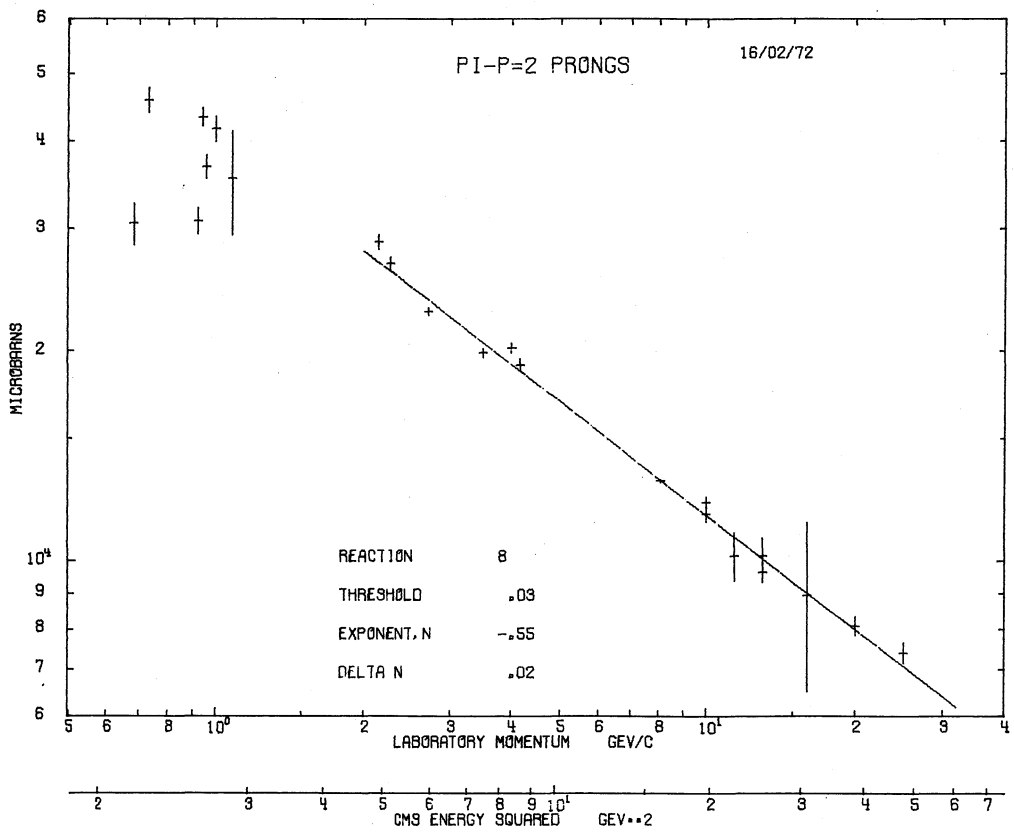
Lines drawn on the graph are fits to the high energy data of the formula (1), i.e. σ = constant. $(p_{Lab})^{+n}$, and the value of the exponent, n and its error are printed on the graph.

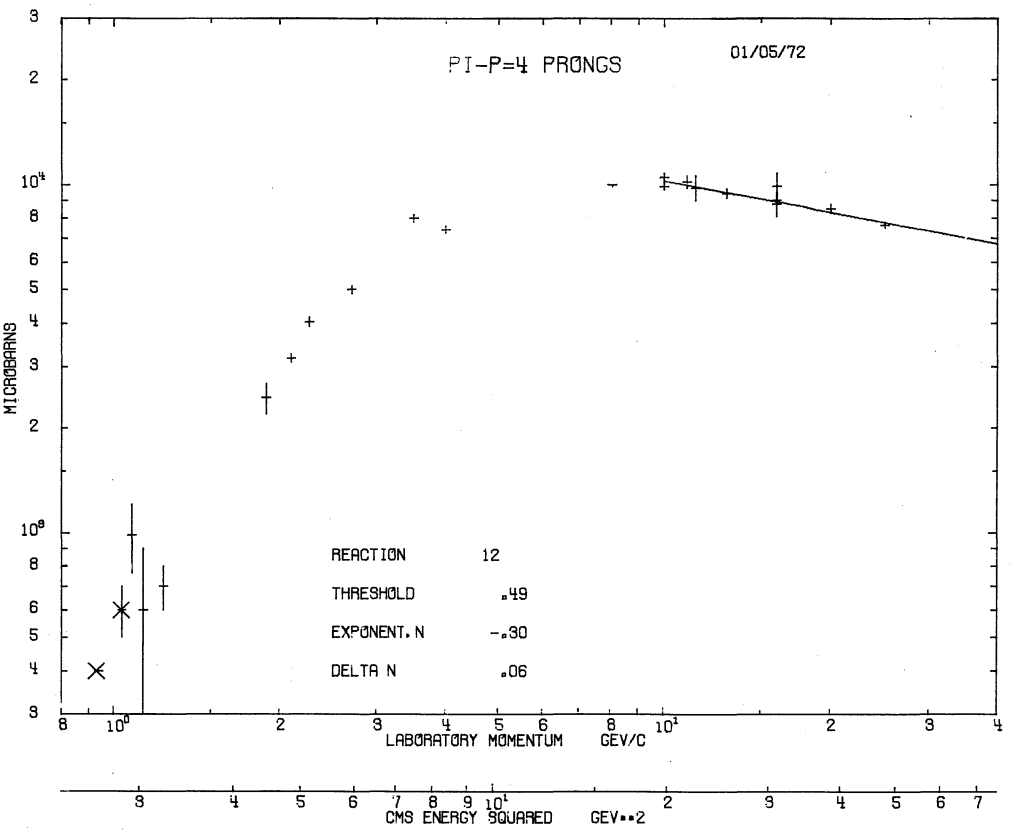

PI-P=TOTAL
08/03/72
MICROBARNS
REACTION 1
THRESHOLD .01
EXPONENT.N -.04
DELTA N .01
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

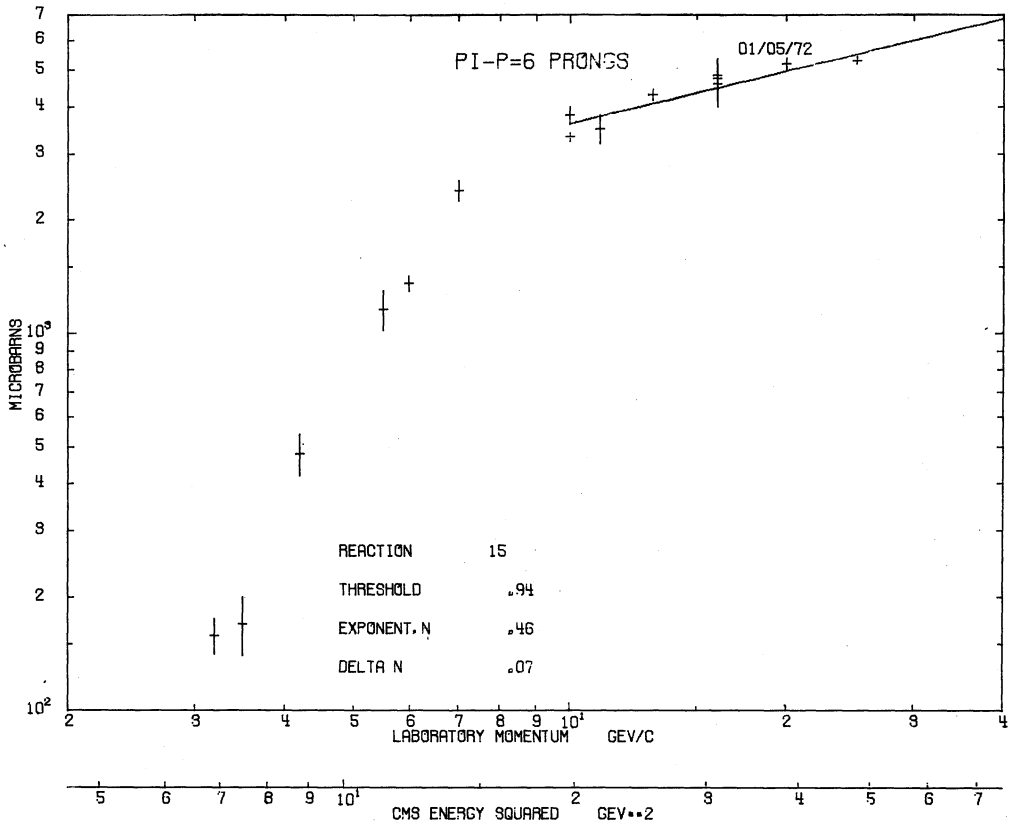

PI-P=PI-P
16/02/72
MICROBARNS
REACTION 2
THRESHOLD .01
EXPONENT.N -.22
DELTA N .11
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

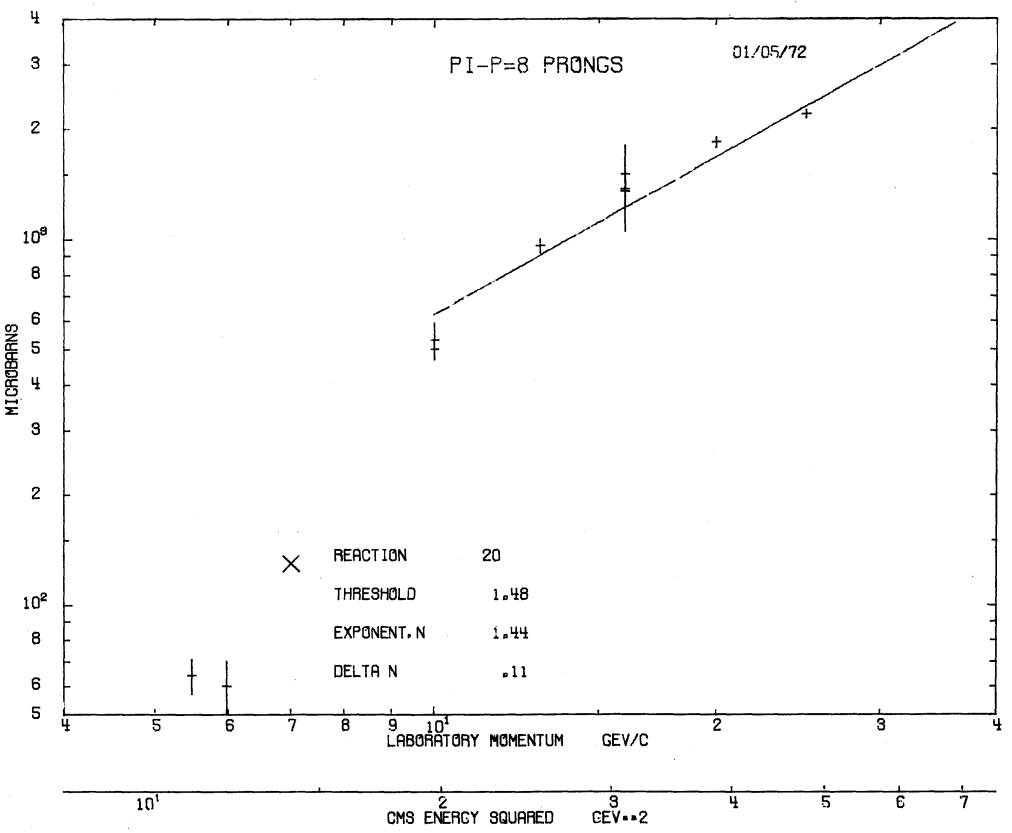

PI-P=NEUTRALS
10/03/72
MICROBARNS
REACTION 4
THRESHOLD .01
EXPONENT. N -1.13
DELTA N .10
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

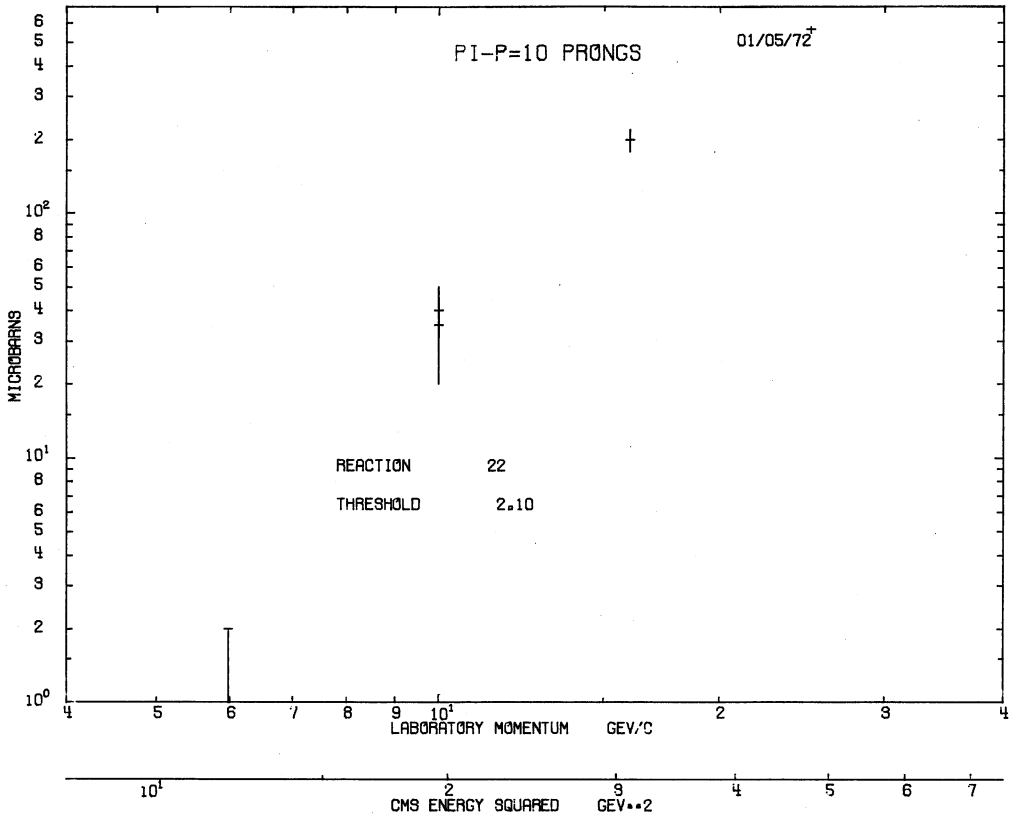

PI-P=0 PRONGS, NON STRANGE
16/02/72
MICROBARNS
REACTION 7
THRESHOLD .08
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

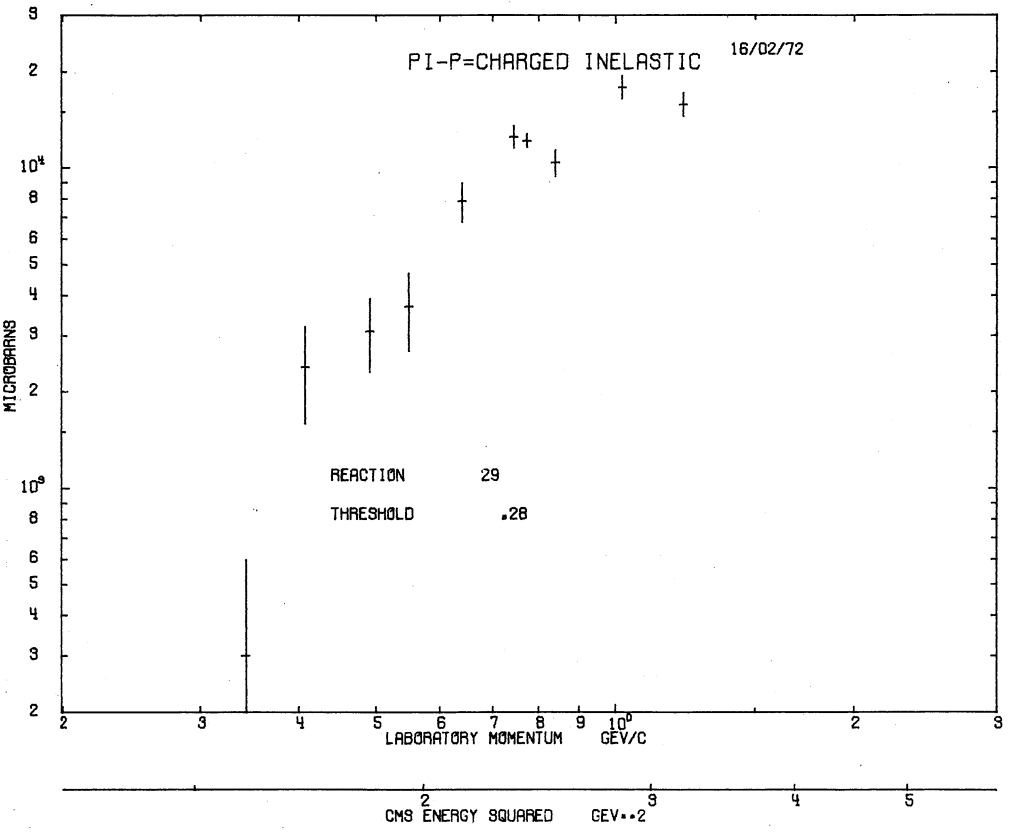

PI-P=2 PRØNGS
16/02/72
MICROBARNS
REACTION 8
THRESHOLD .03
EXPONENT, N -.55
DELTA N .02
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

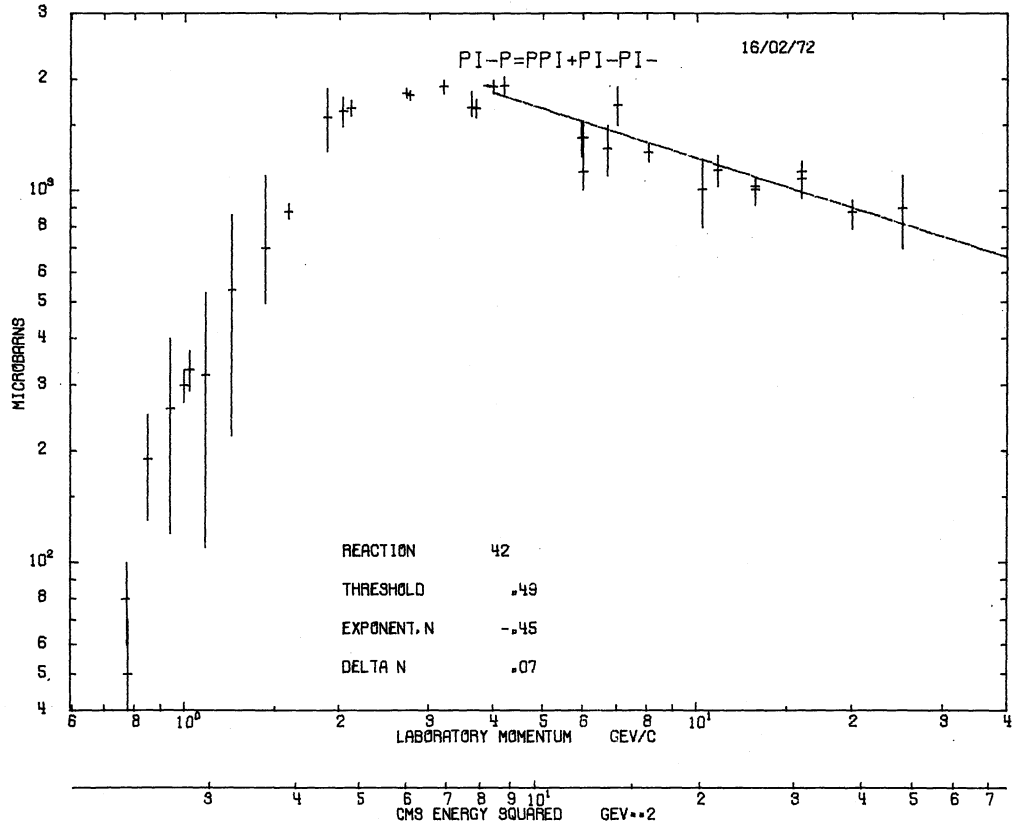

PI-P=4 PRØNGS
01/05/72
MICROBARNS
REACTION 12
THRESHOLD .49
EXPONENT, N -.30
DELTA N .06
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

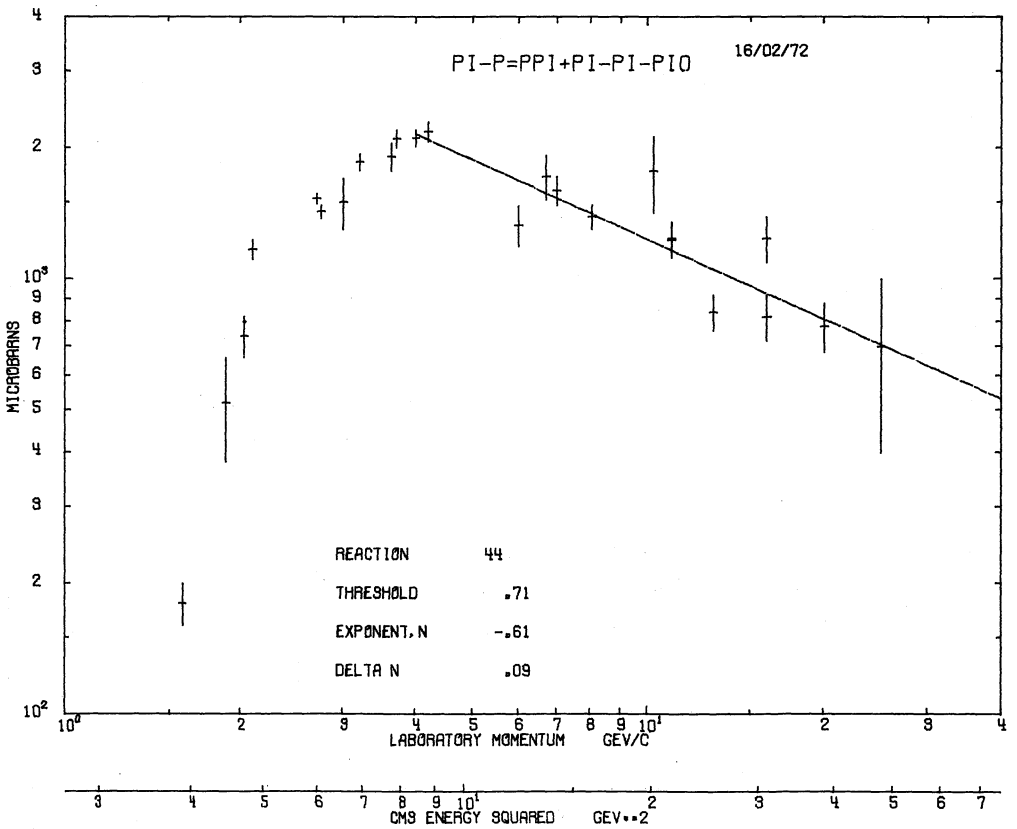

PI-P=6 PRONGS
01/05/72
MICROBARNS
REACTION 15
THRESHOLD .94
EXPONENT.N .46
DELTA N .07
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

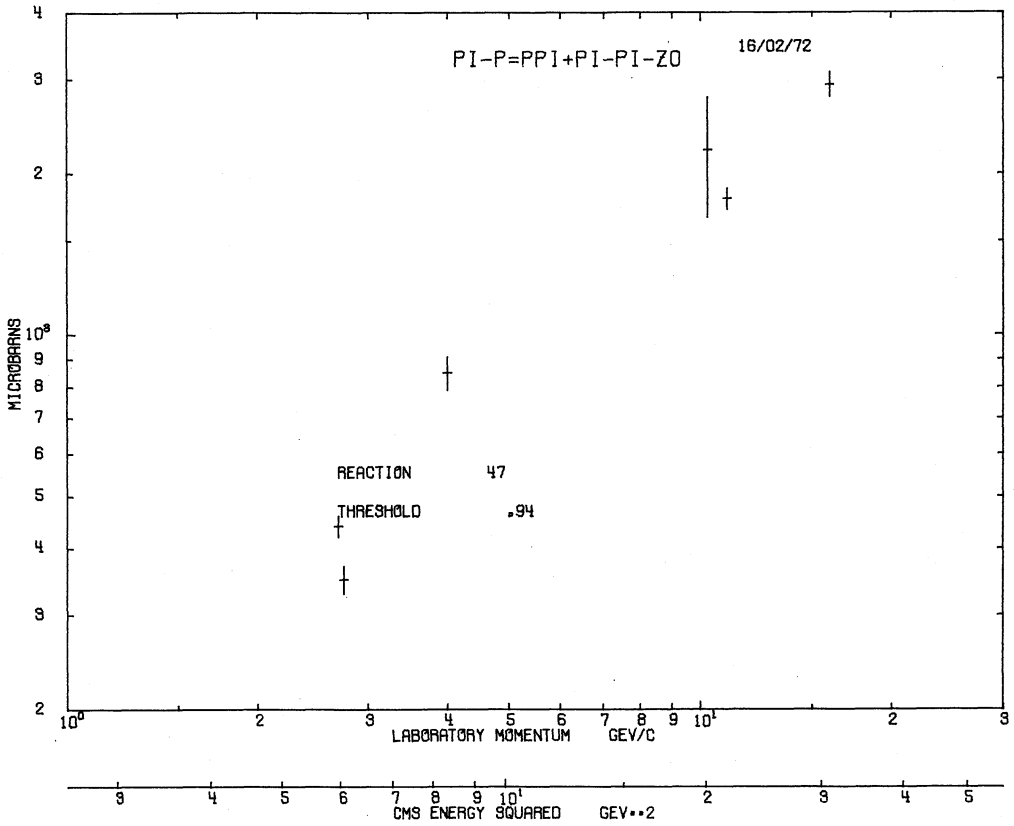

PI-P=8 PRONGS
01/05/72
MICROBARNS
REACTION 20
THRESHOLD 1.48
EXPONENT.N 1.44
DELTA N .11
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

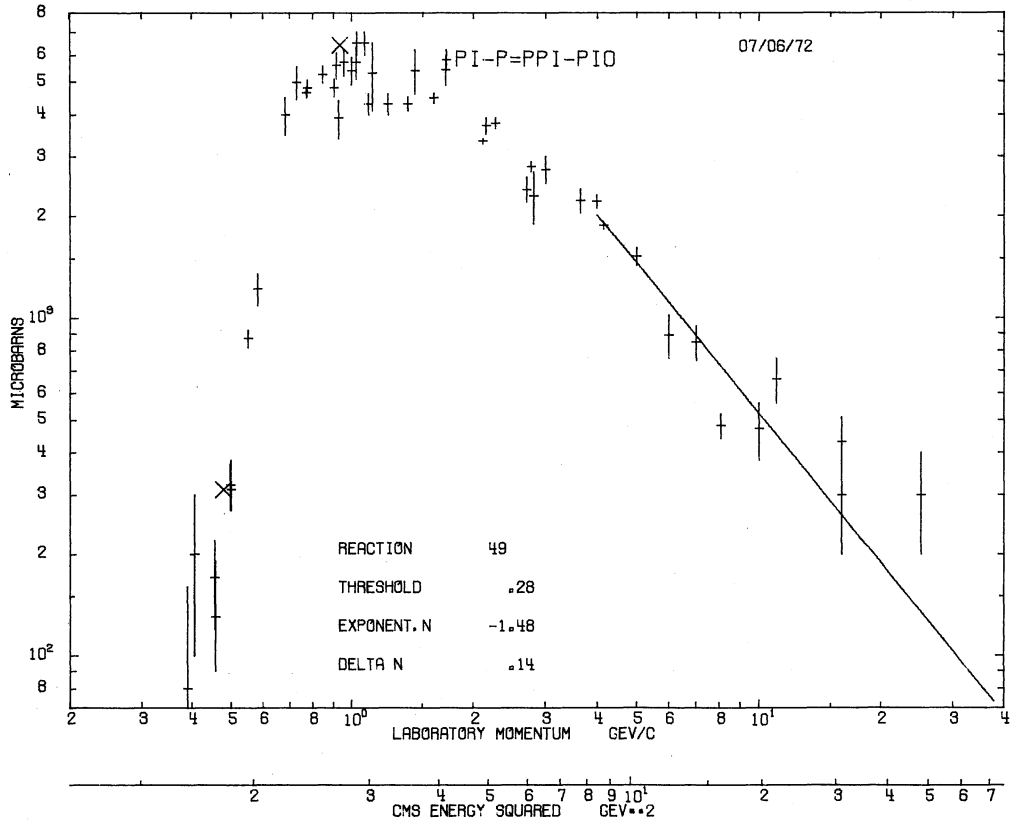

PI-P=10 PRONGS
01/05/72
REACTION 22
THRESHOLD 2.10
MICROBARNS
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

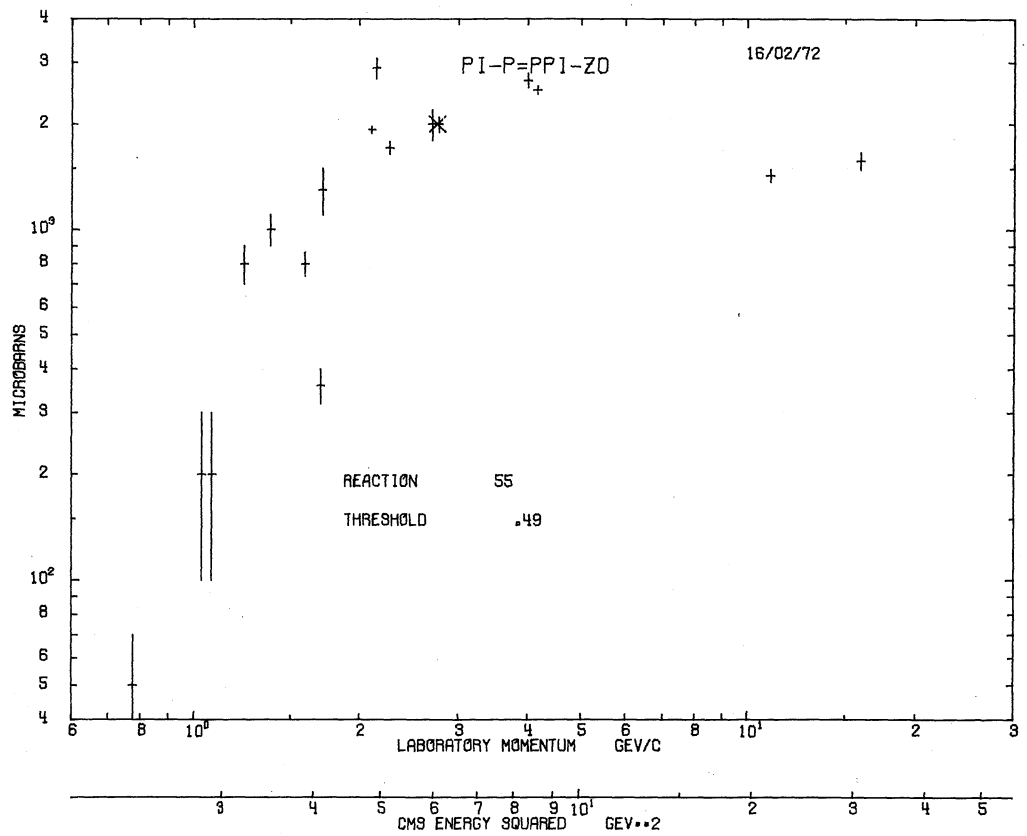

PI-P=CHARGED INELASTIC
16/02/72
REACTION 29
THRESHOLD .28
MICROBARNS
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

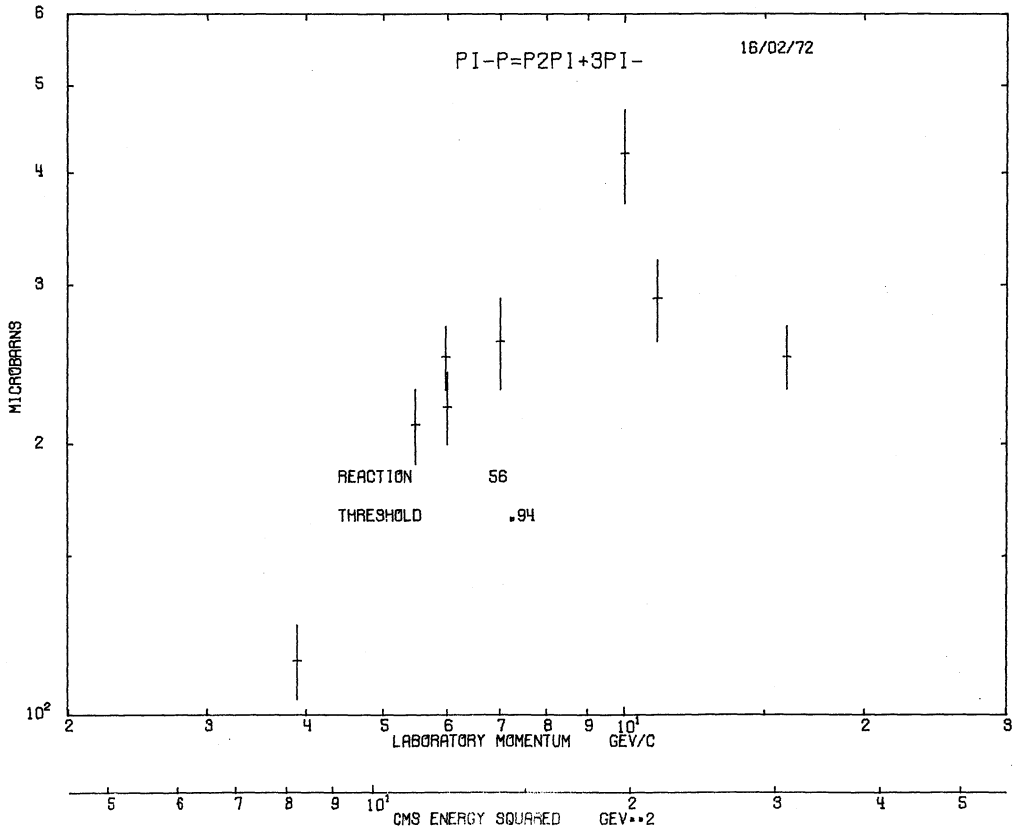

PI-P=PPI+PI-PI-
16/02/72
MICROBARNS
REACTION 42
THRESHOLD .49
EXPONENT. N -.45
DELTA N .07
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

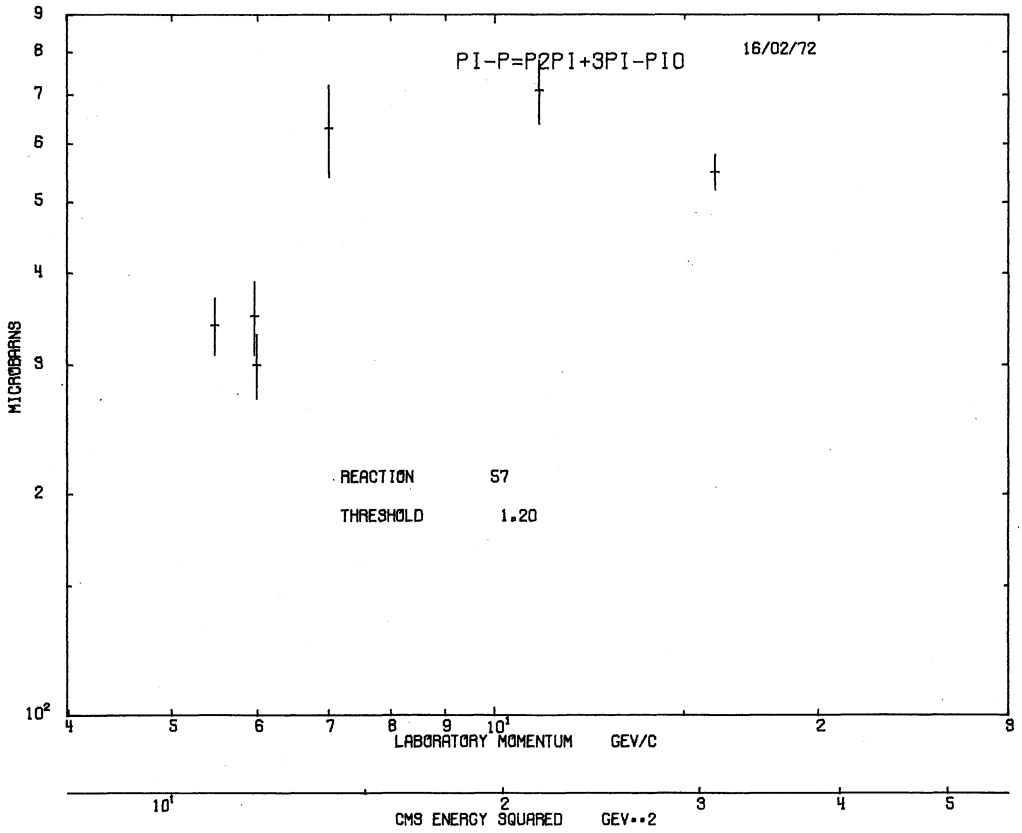

PI-P=PPI+PI-PI-PIO
16/02/72
MICROBARNS
REACTION 44
THRESHOLD .71
EXPONENT. N -.61
DELTA N .09
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

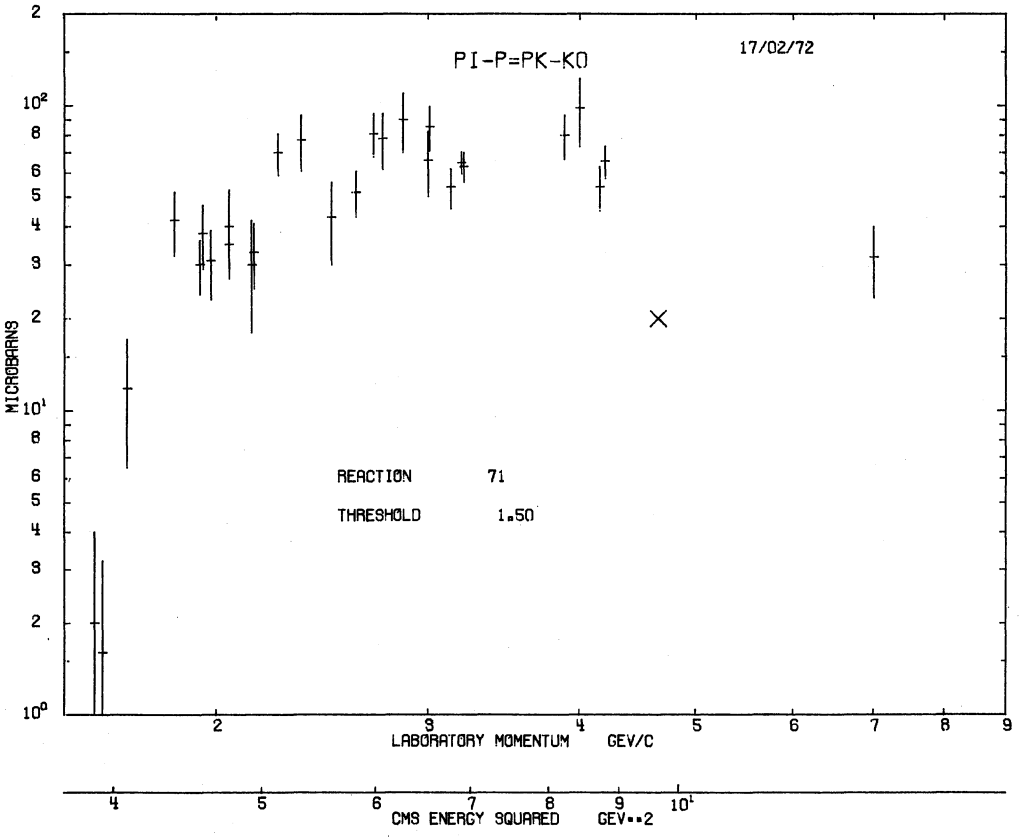

PI-P=PPI+PI-PI-ZO
16/02/72
REACTION 47
THRESHOLD .94
MICROBARNS
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

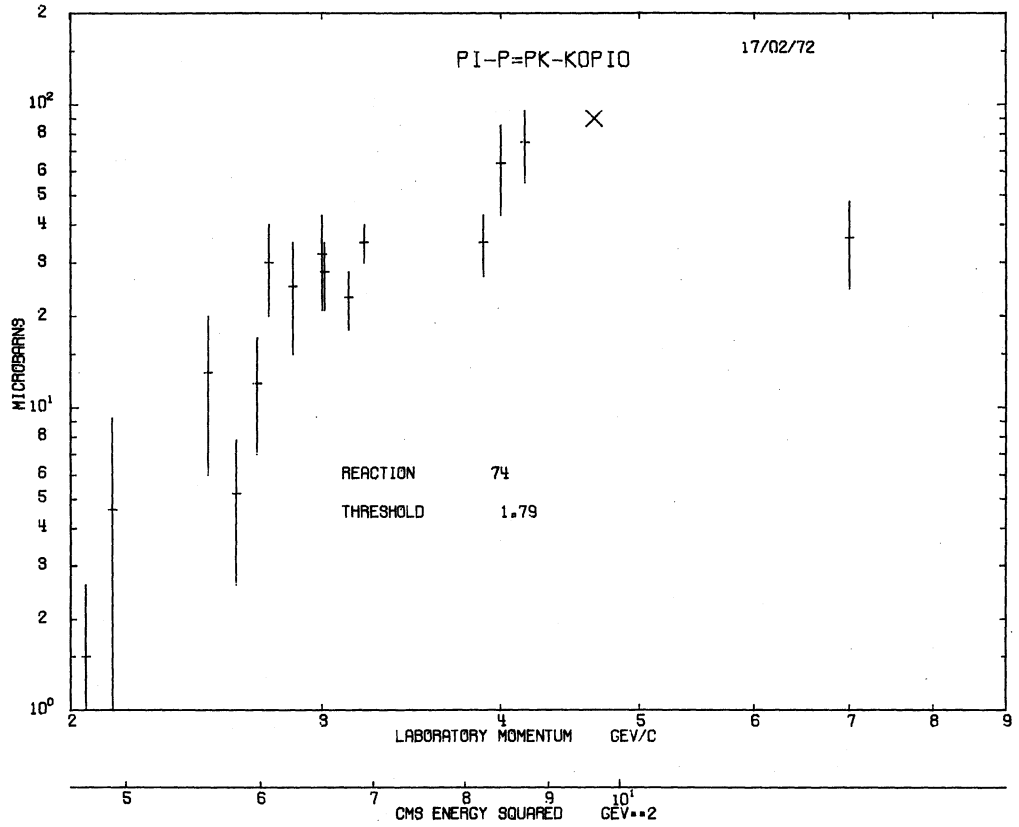

PI-P=PPI-PIO
07/06/72
REACTION 49
THRESHOLD .28
EXPONENT.N -1.48
DELTA N .14
MICROBARNS
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

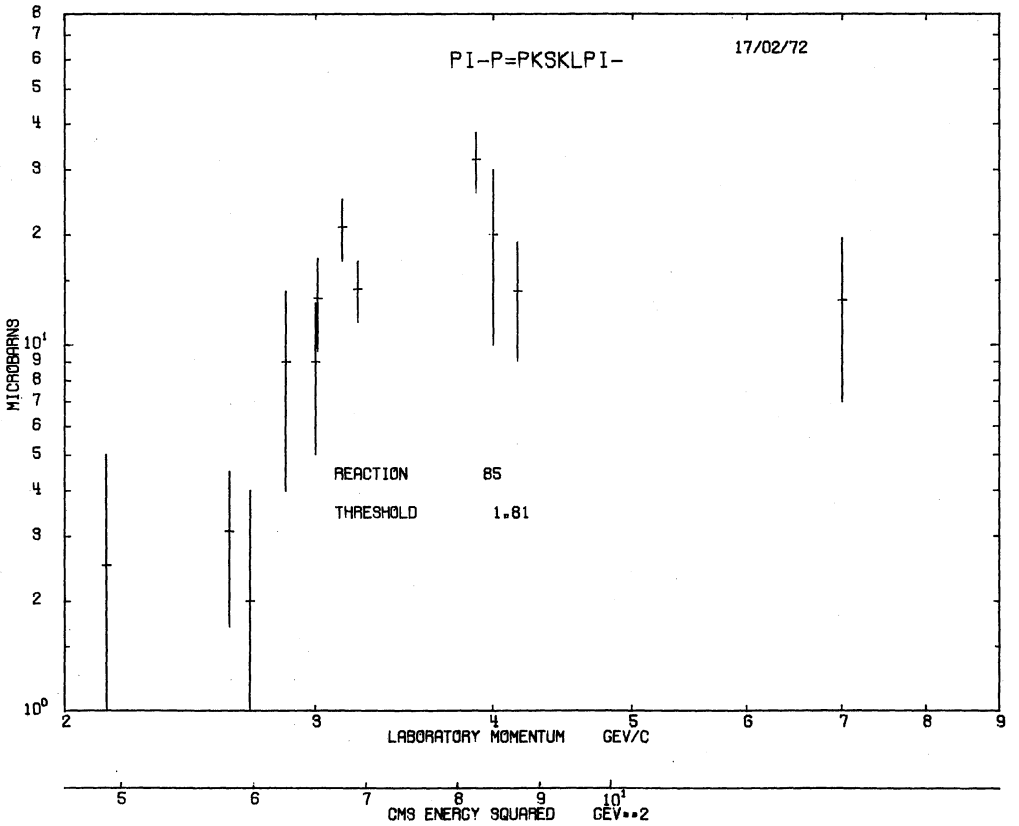

PI-P=PPI-Z0
16/02/72
REACTION 55
THRESHOLD .49
MICROBARNS
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

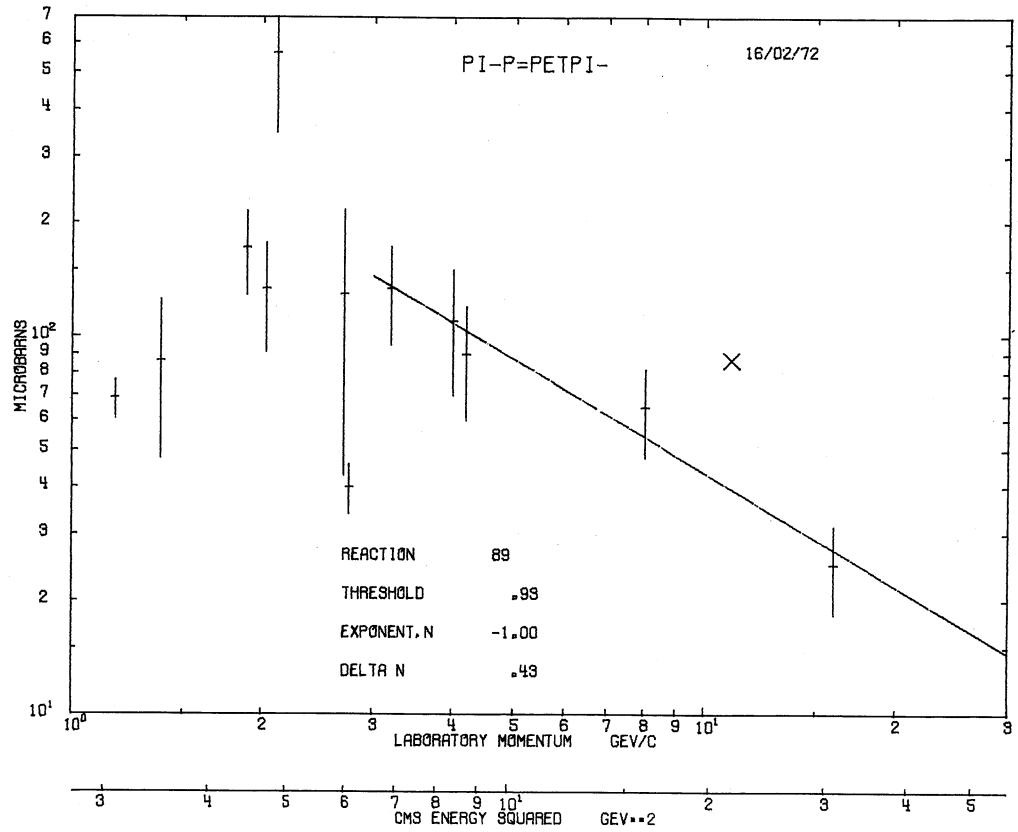

PI-P=P2PI+3PI-
16/02/72
REACTION 56
THRESHOLD .94
MICROBARNS
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

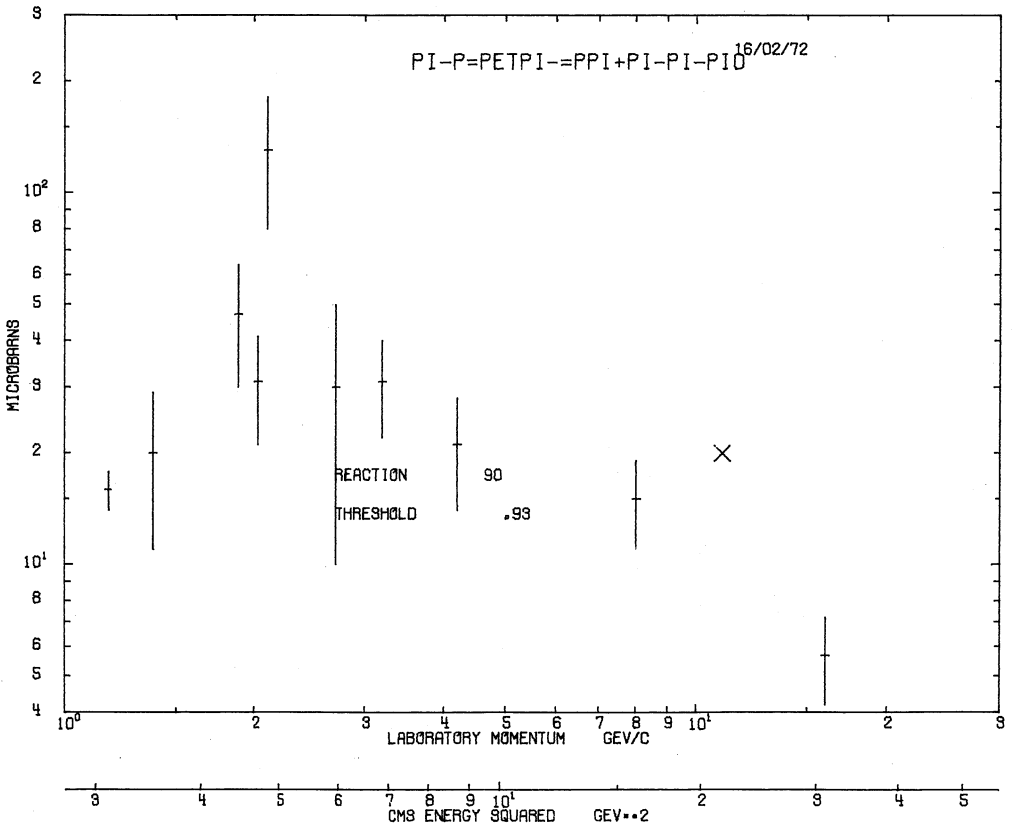

PI-P=P2PI+3PI-PIO
16/02/72
REACTION 57
THRESHOLD 1.20
MICROBARNS
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

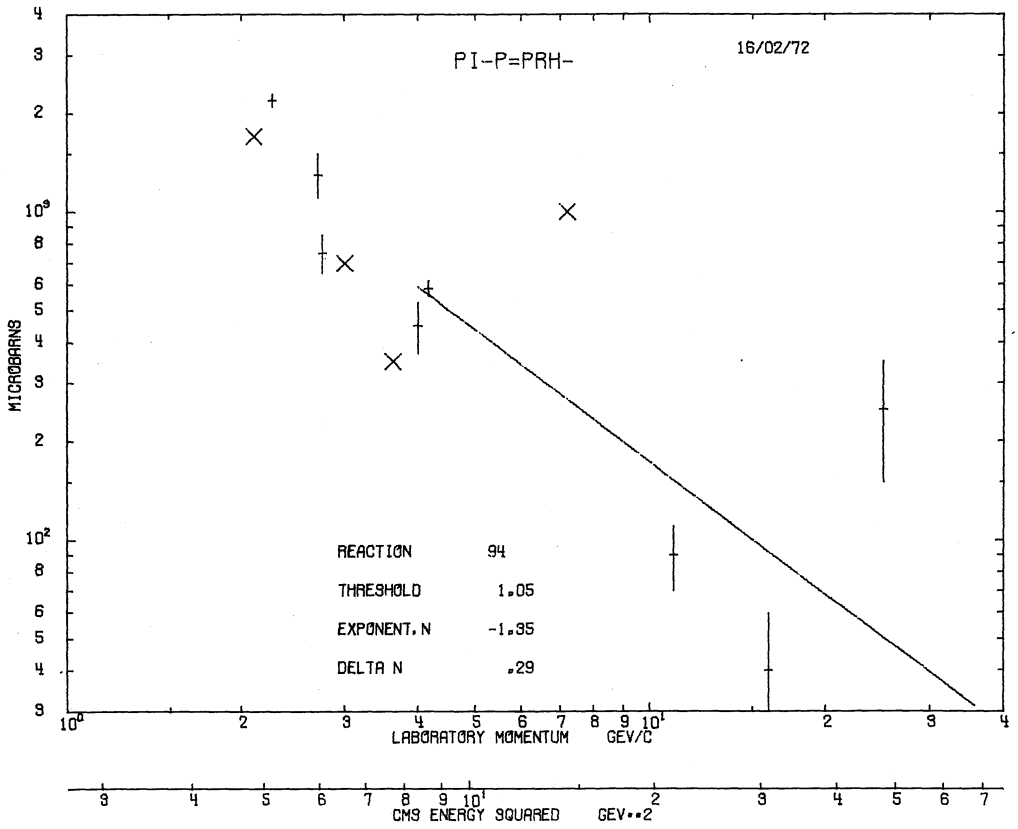

PI-P=PK-KO
17/02/72
REACTION 71
THRESHOLD 1.50
MICROBARNS
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

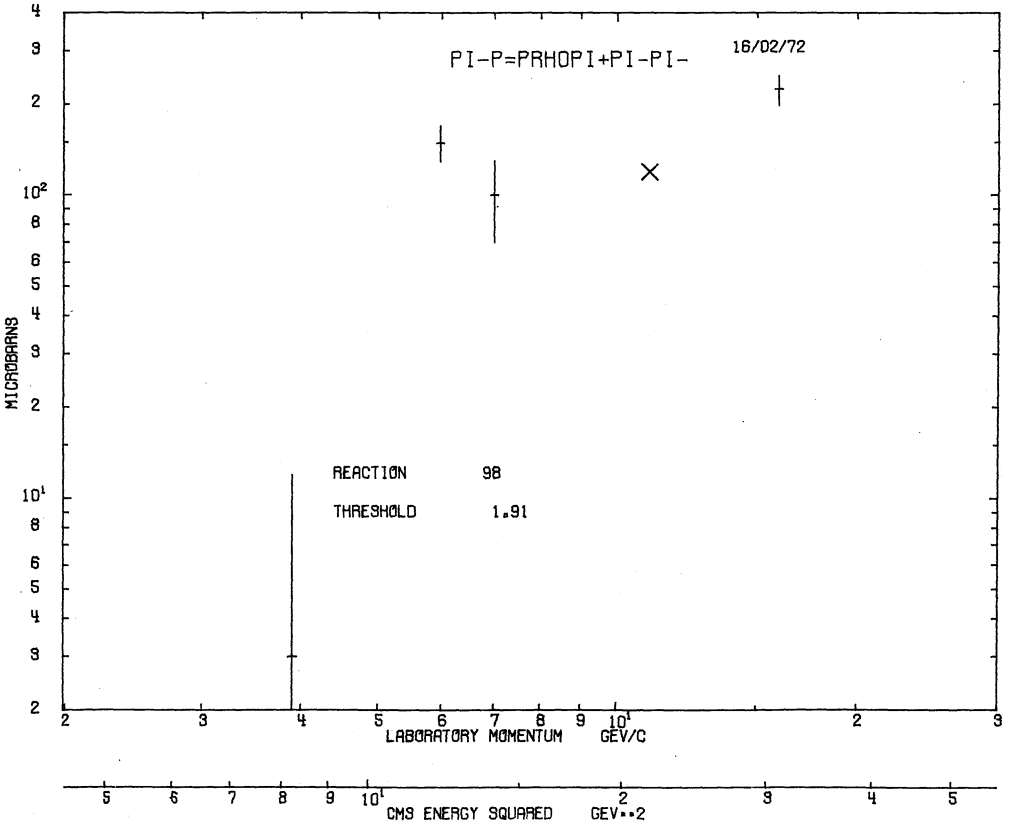

PI-P=PK-KOPIO
17/02/72
MICROBARNS
REACTION 74
THRESHOLD 1.79
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

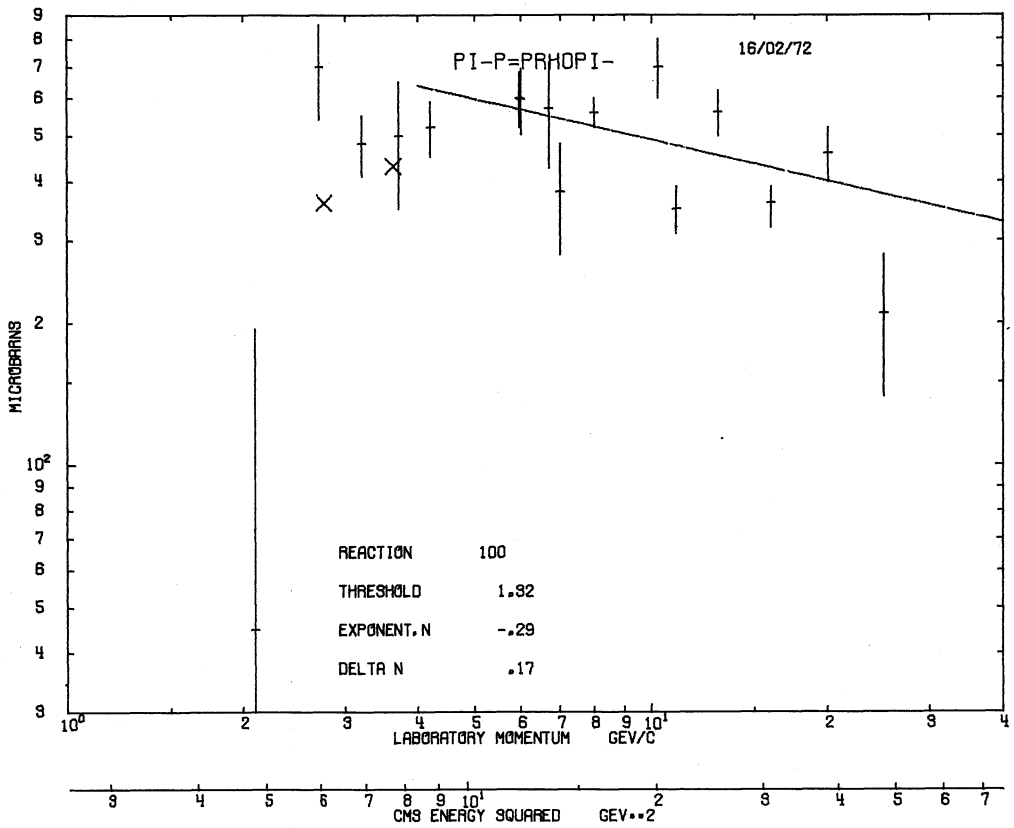

PI-P=PKSKLPI-
17/02/72
MICROBARNS
REACTION 85
THRESHOLD 1.81
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

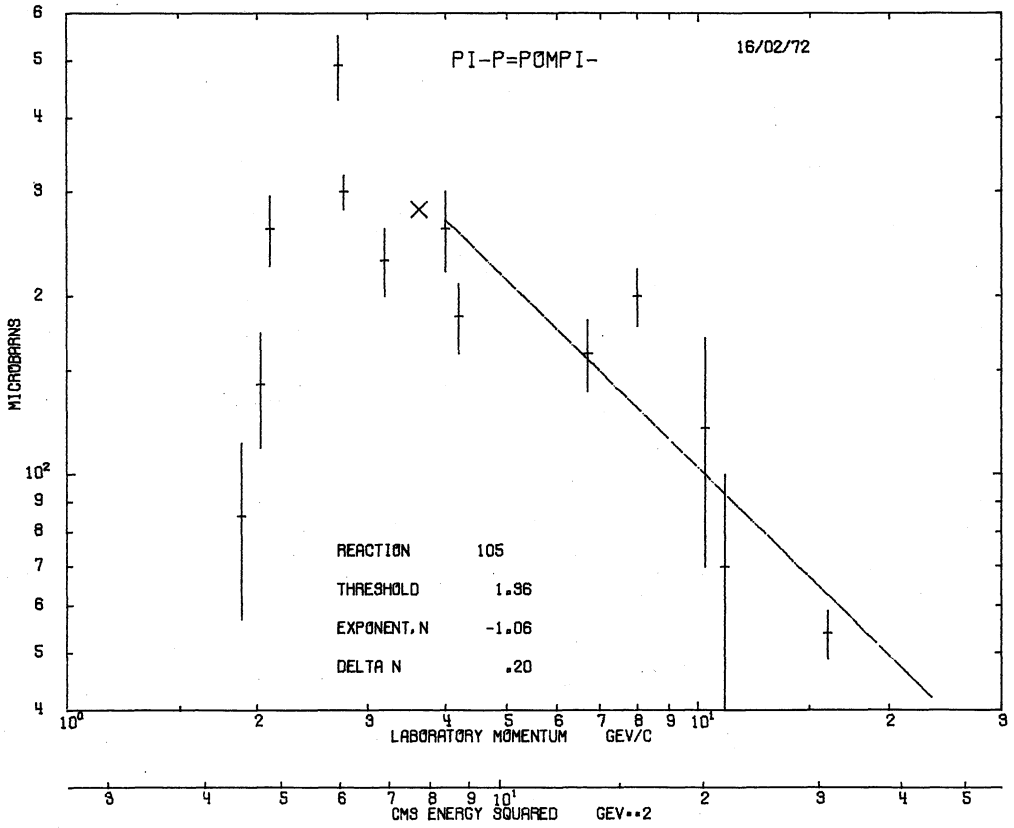

PI-P=PETPI-
16/02/72
MICROBARNS
REACTION 89
THRESHOLD .93
EXPONENT, N -1.00
DELTA N .43
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

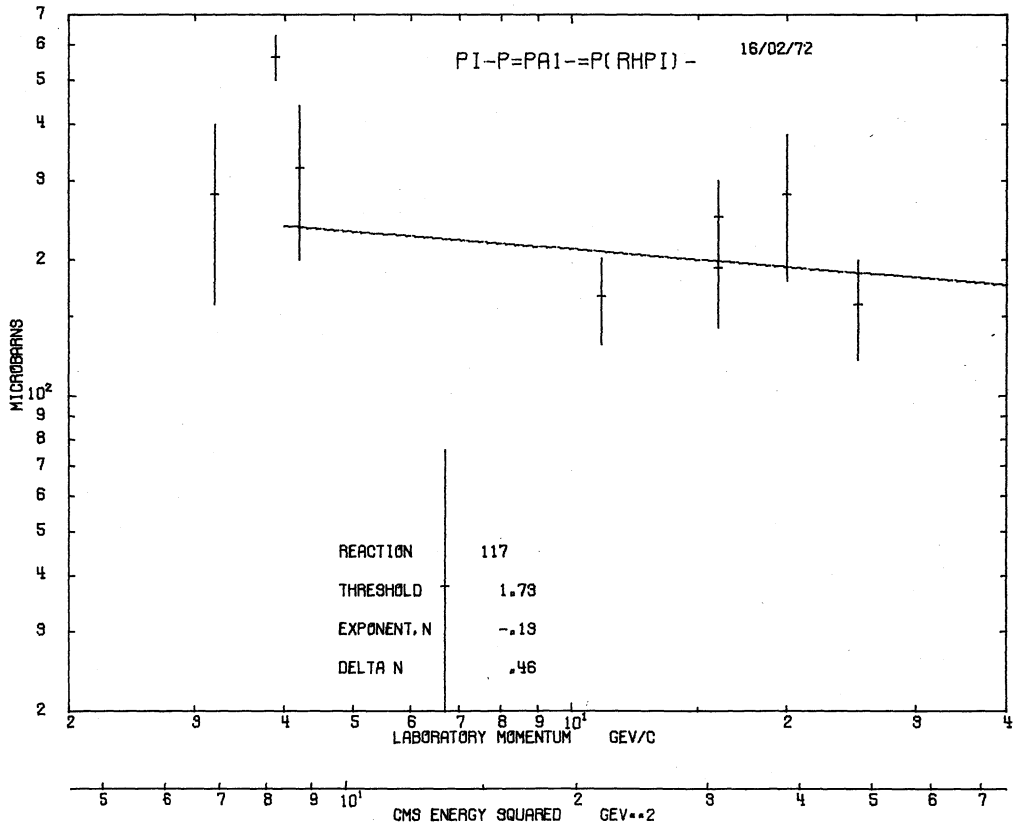

PI-P=PETPI-=PPI+PI-PI-PIO
16/02/72
MICROBARNS
REACTION 90
THRESHOLD .93
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

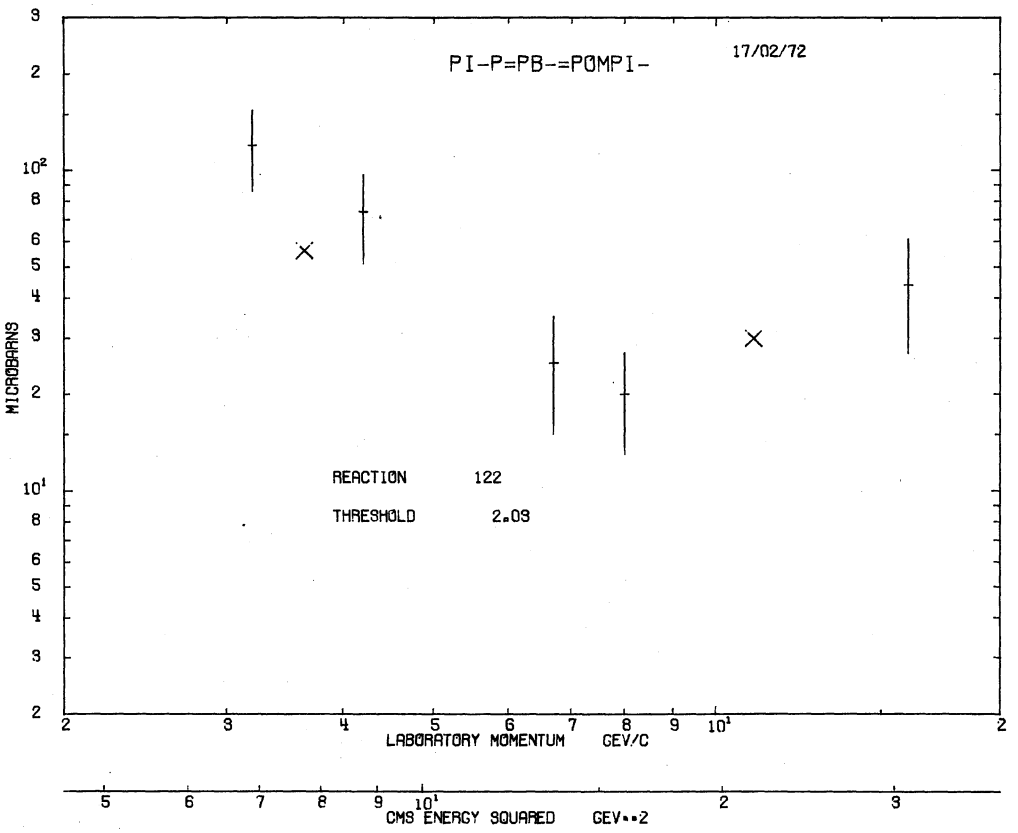

PI-P=PRH-
16/02/72
MICROBARNS
REACTION 94
THRESHOLD 1.05
EXPONENT, N -1.35
DELTA N .29
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

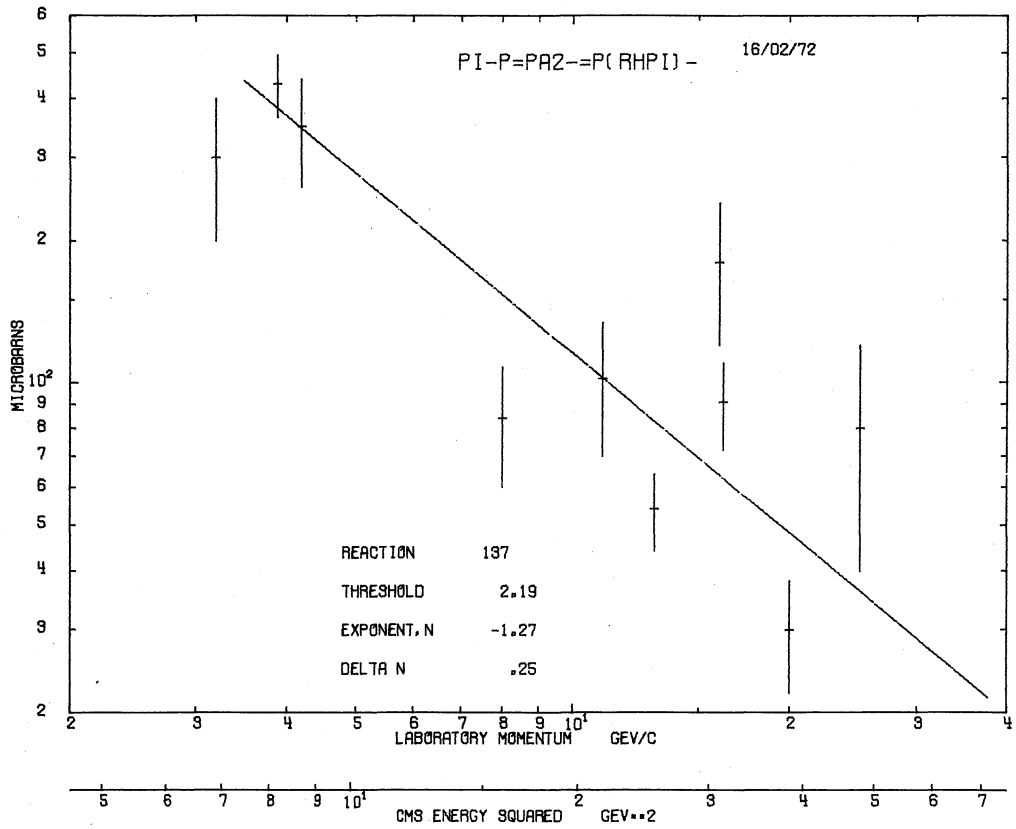

PI-P=PRHOPI+PI-PI-
16/02/72
MICROBARNS
REACTION 98
THRESHOLD 1.91
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

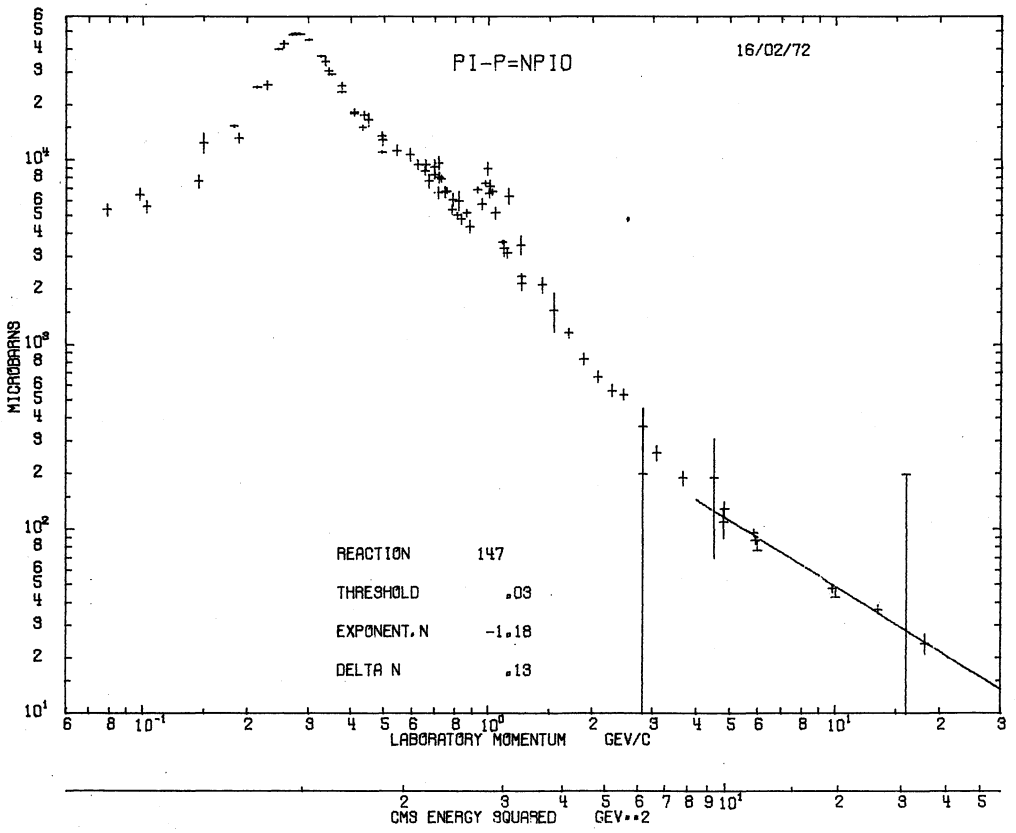

PI-P=PRHOPI-
16/02/72
MICROBARNS
REACTION 100
THRESHOLD 1.92
EXPONENT, N -.29
DELTA N .17
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

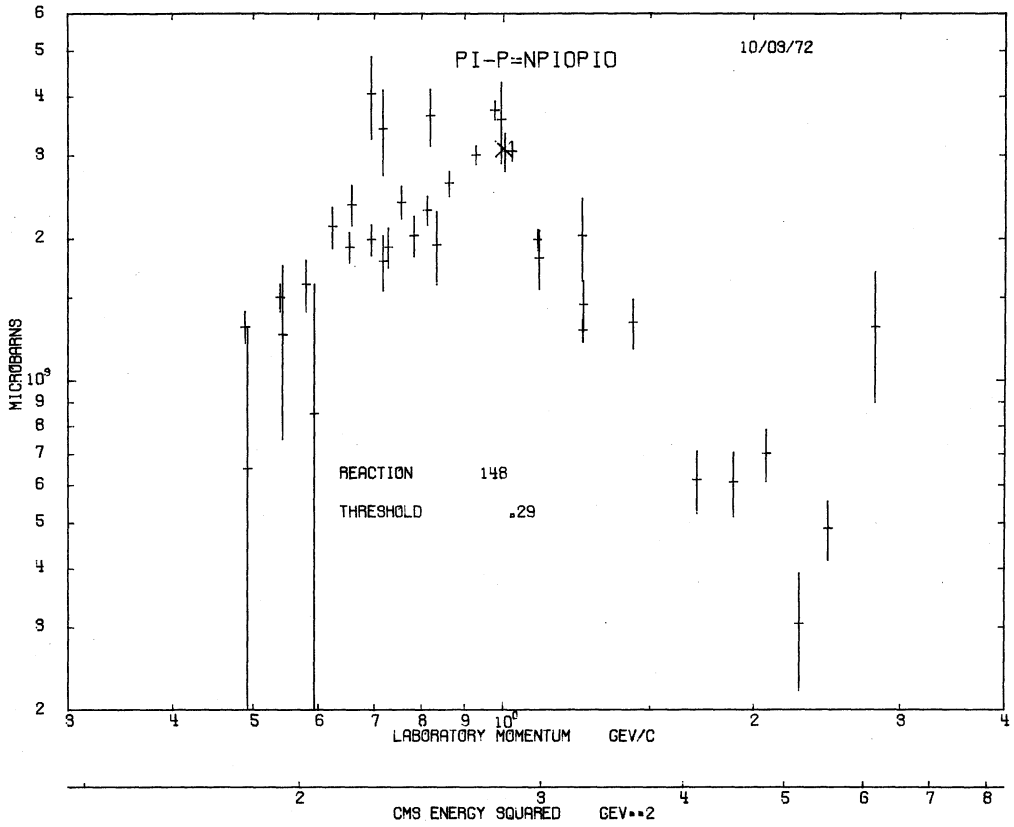

PI-P=POMPI-
16/02/72
MICROBARNS
REACTION 105
THRESHOLD 1.96
EXPONENT, N -1.06
DELTA N .20
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

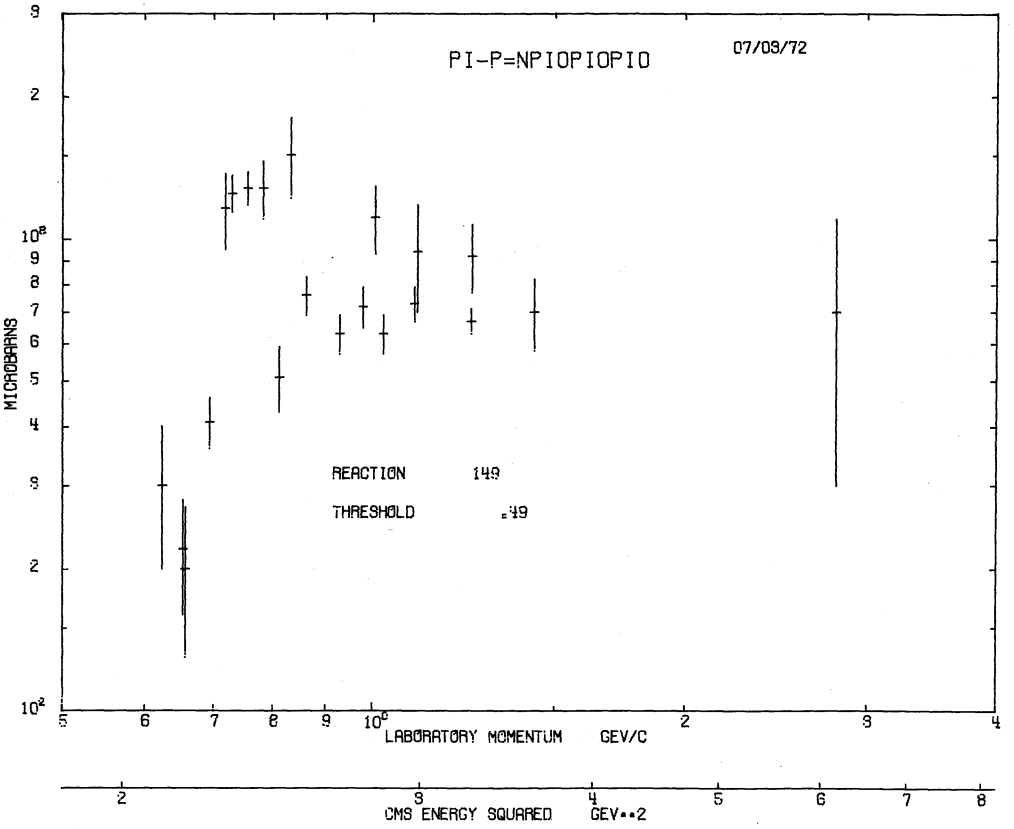

PI-P=PA1-=P(RHPI)-
16/02/72
MICROBARNS
REACTION 117
THRESHOLD 1.73
EXPONENT, N -.19
DELTA N .46
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

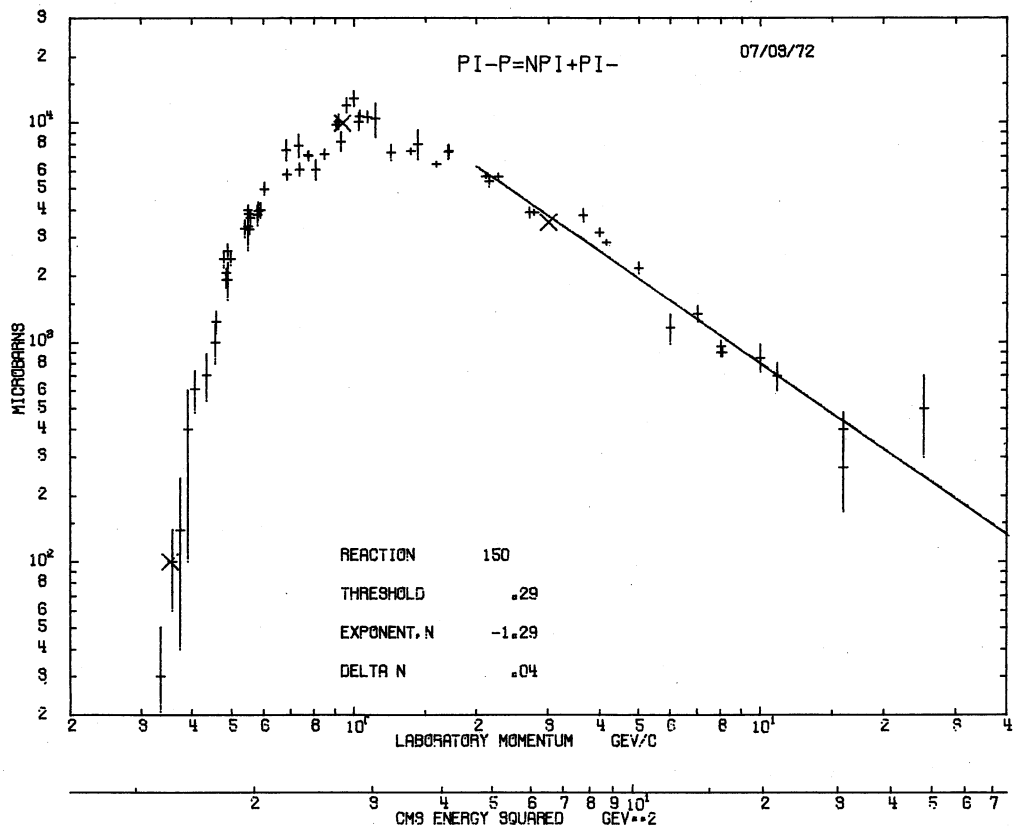

PI-P=PB-=POMPI-
17/02/72
MICROBARNS
REACTION 122
THRESHOLD 2.09
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

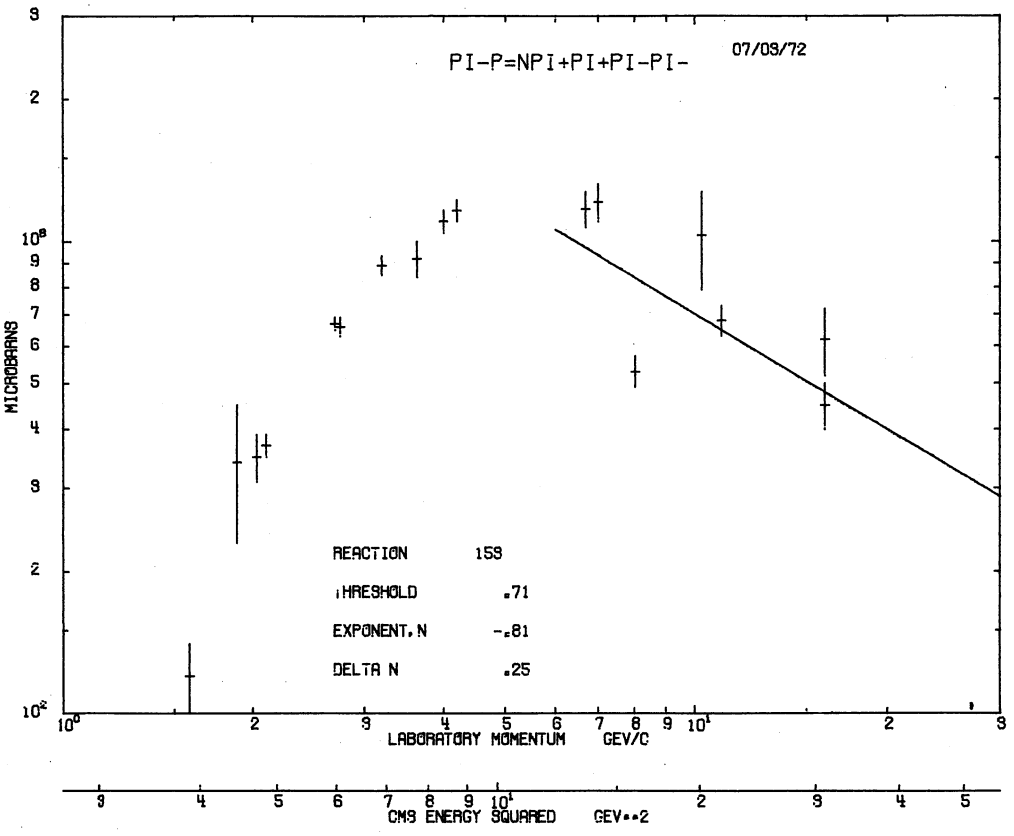

PI-P=PA2-=P(RHPI)-
16/02/72
MICROBARNS
REACTION 137
THRESHOLD 2.19
EXPONENT,N -1.27
DELTA N .25
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

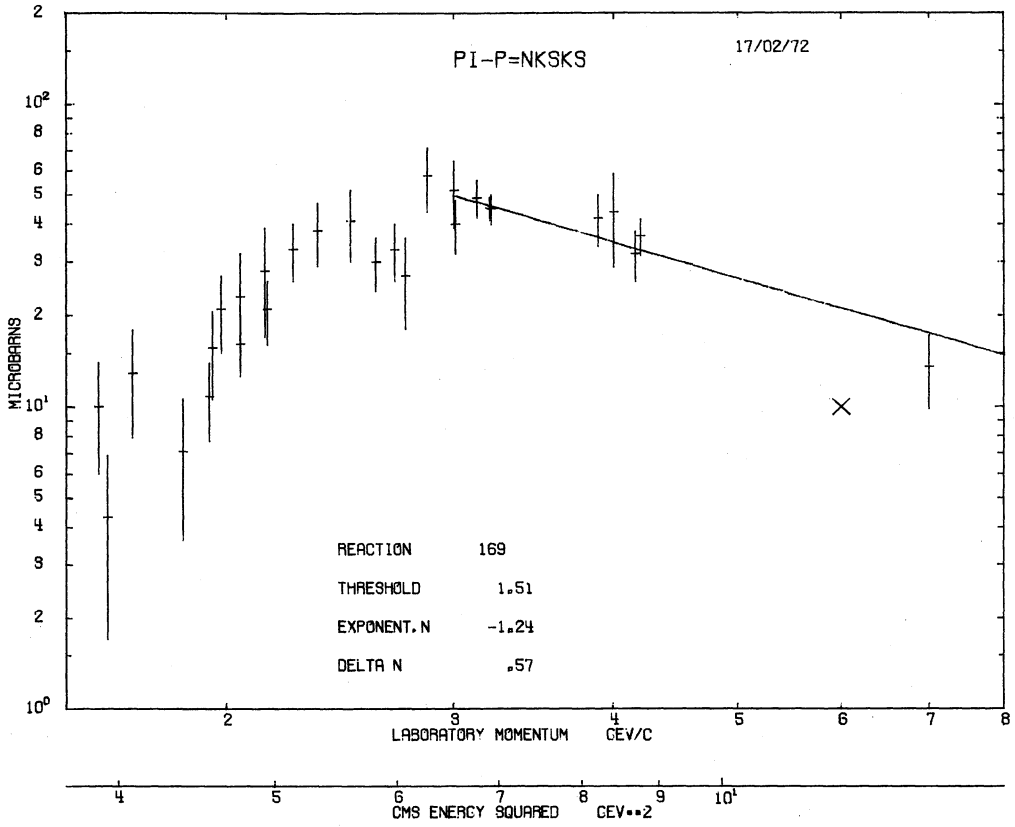

PI-P=NPIO
16/02/72
MICROBARNS
REACTION 147
THRESHOLD .03
EXPONENT,N -1.18
DELTA N .13
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

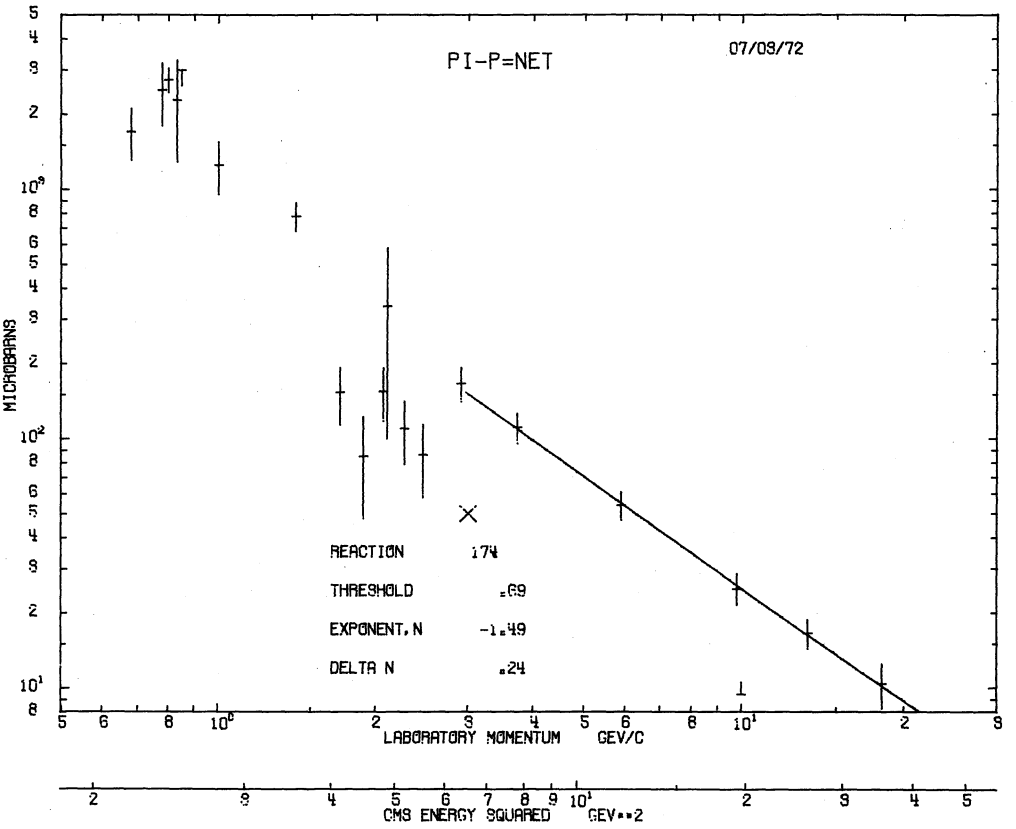

PI-P=NPIOPIO
10/09/72
MICROBARNS
REACTION 148
THRESHOLD .29
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

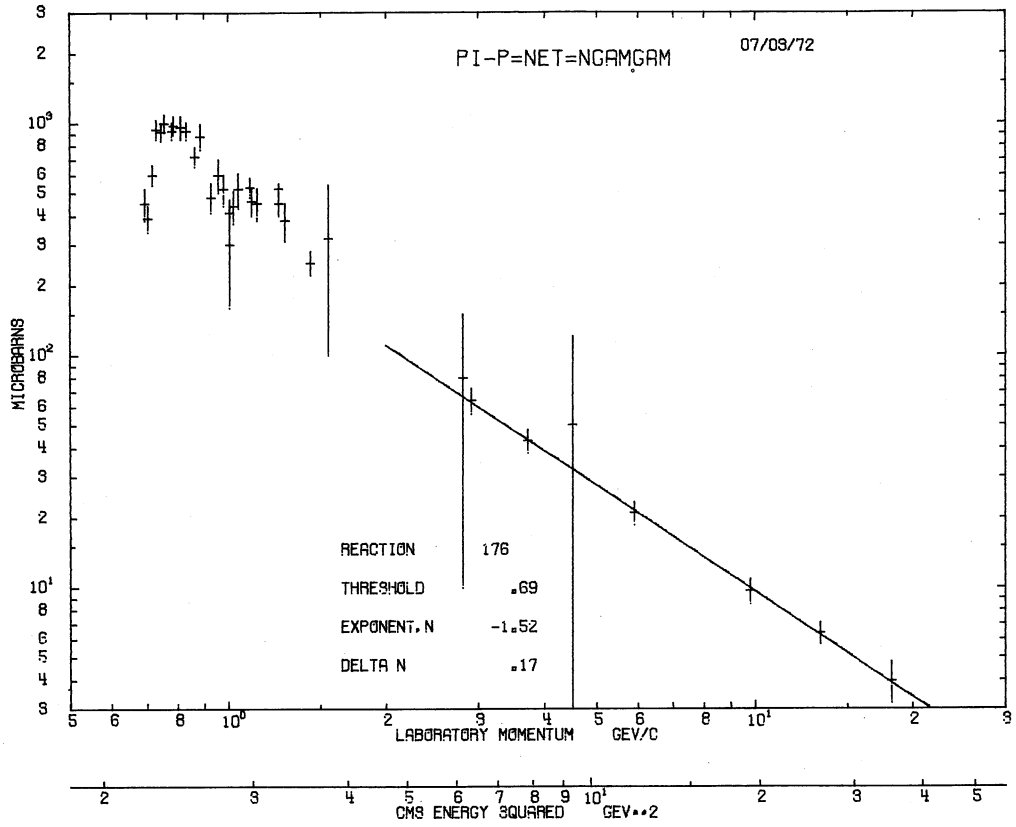

PI-P=NPIOPIOPIO
07/09/72
MICROBARNS
REACTION 149
THRESHOLD .49
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

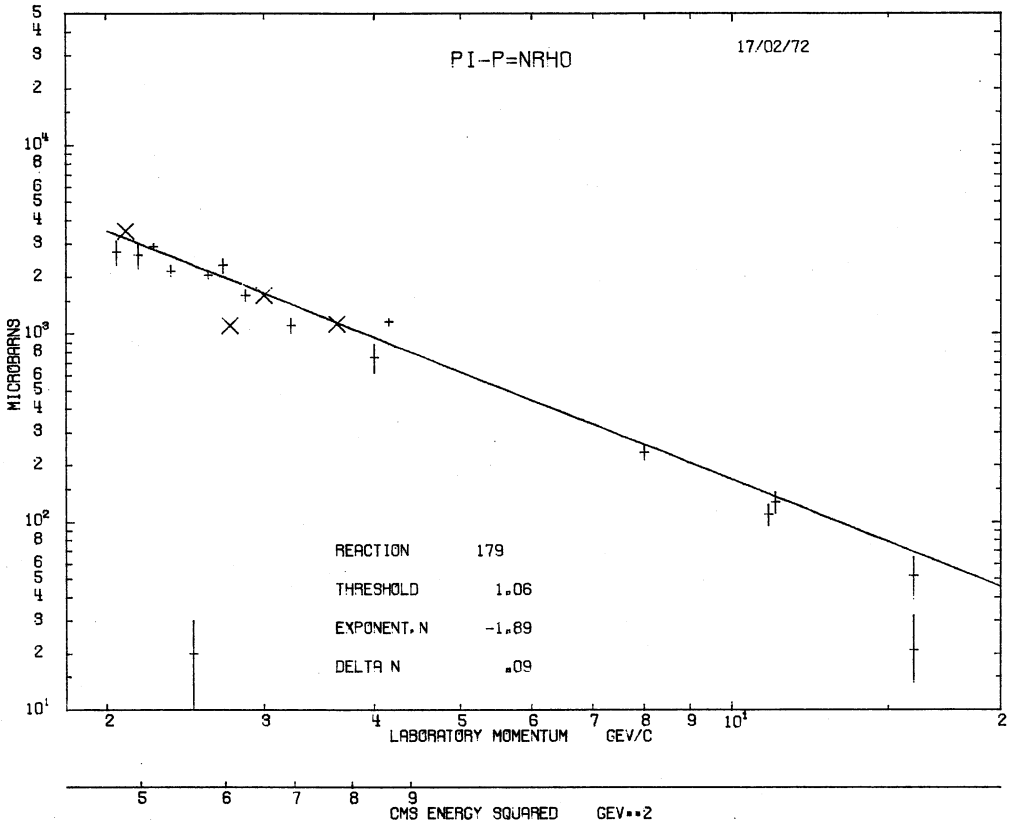

PI-P=NPI+PI-
07/09/72
MICROBARNS
REACTION 150
THRESHOLD .29
EXPONENT, N -1.29
DELTA N .04
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

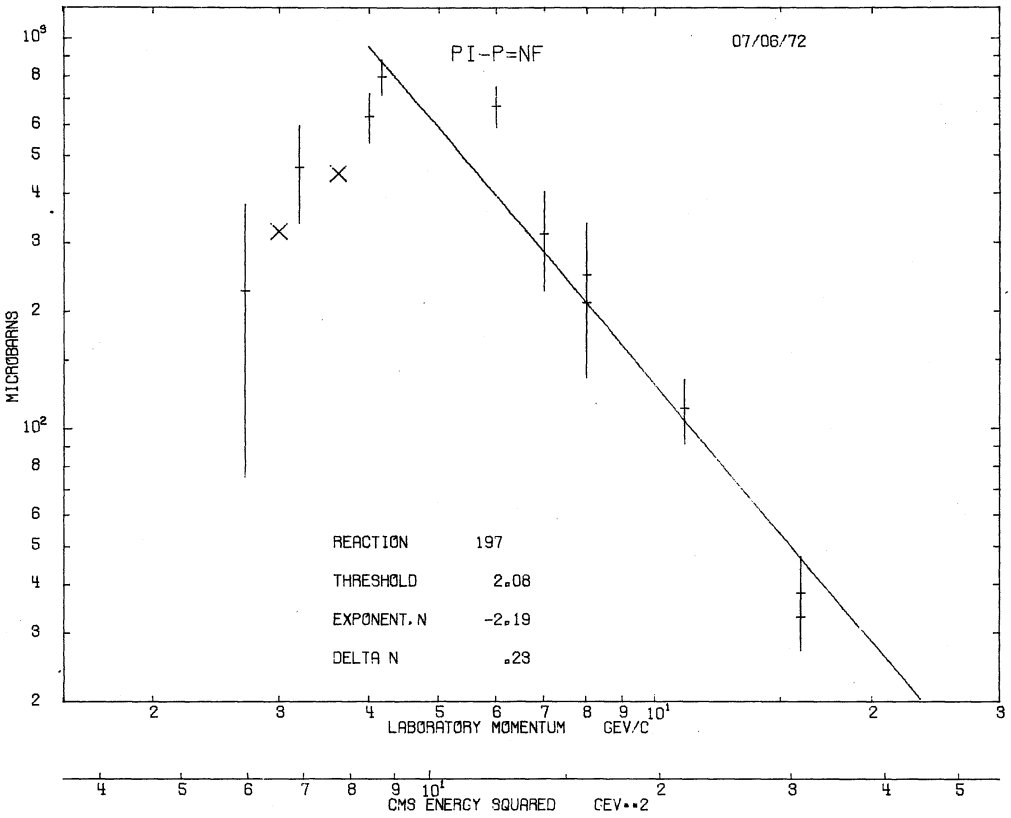

PI-P=NPI+PI+PI-PI-
07/09/72
MICROBARNS
REACTION 158
THRESHOLD .71
EXPONENT, N -.81
DELTA N .25
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

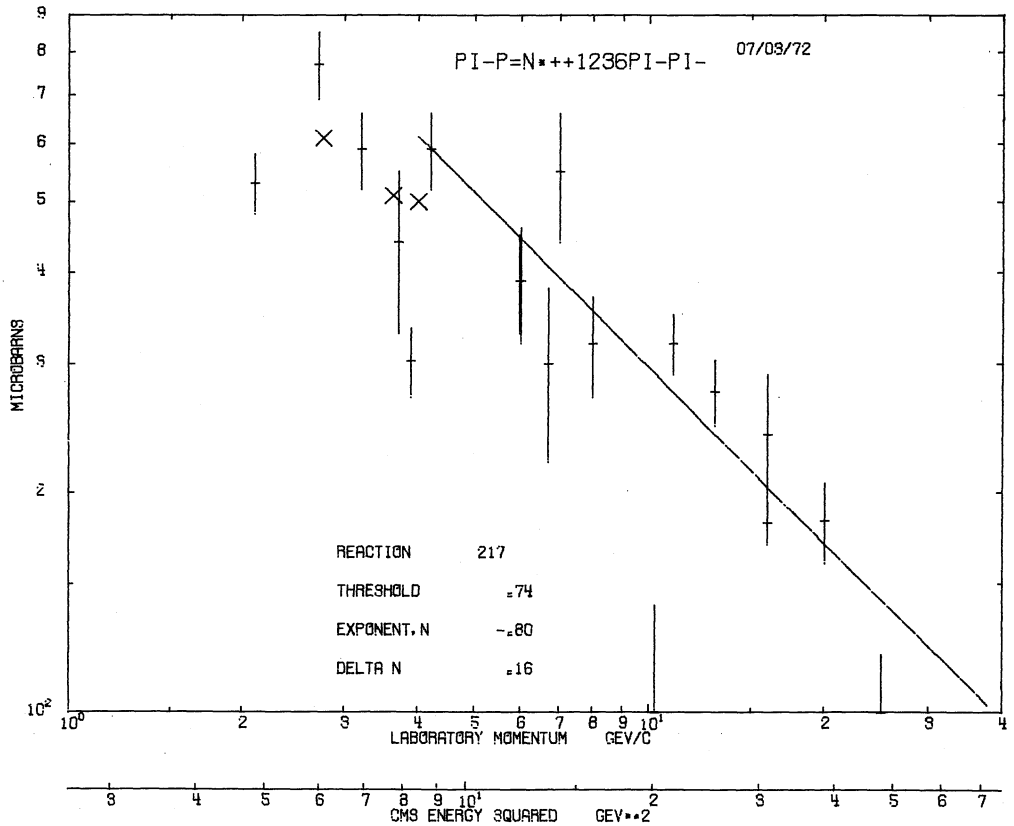

PI-P=NKSKS
17/02/72
MICROBARNS
REACTION 169
THRESHOLD 1.51
EXPONENT.N -1.24
DELTA N .57
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

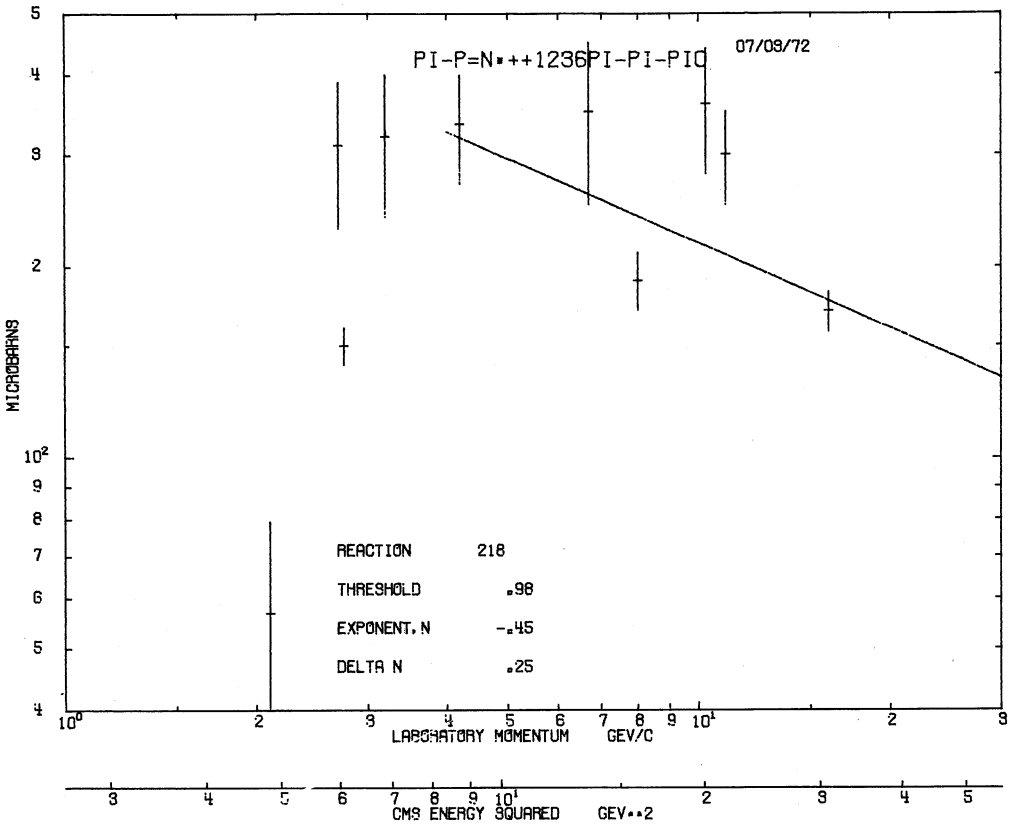

PI-P=NET
07/03/72
MICROBARNS
REACTION 174
THRESHOLD .69
EXPONENT.N -1.49
DELTA N .24
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

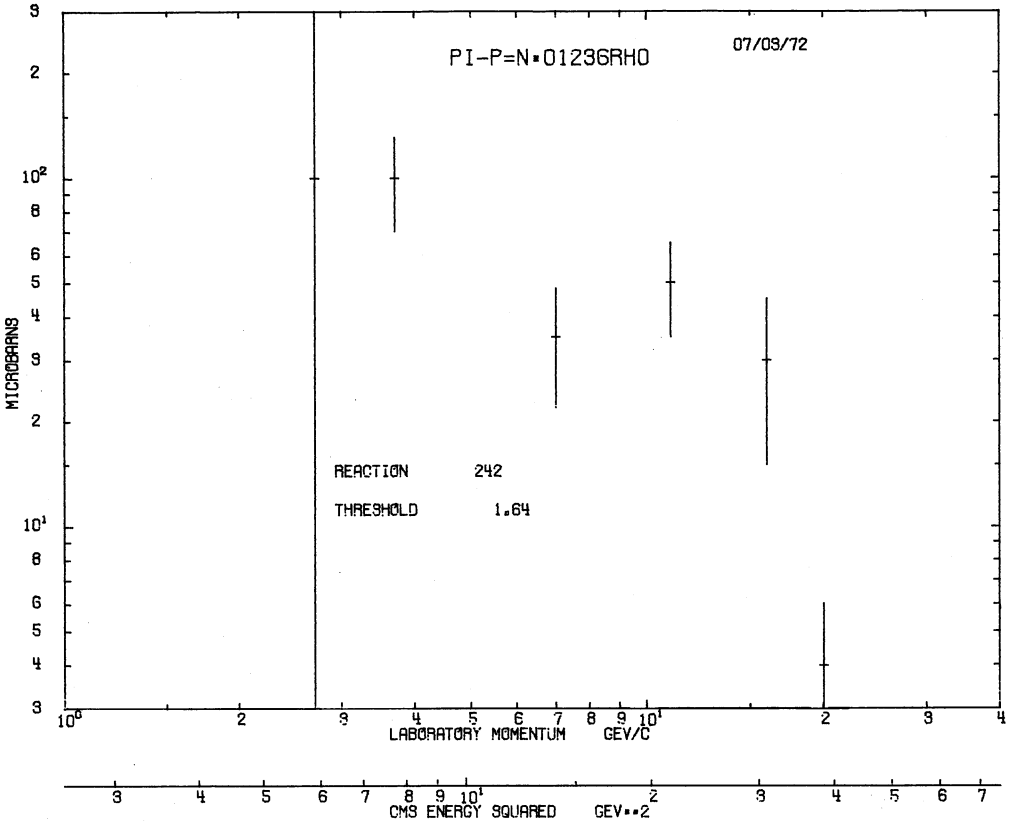

PI-P=NET=NGAMGAM
07/09/72
MICROBARNS
REACTION 176
THRESHOLD .69
EXPONENT.N -1.52
DELTA N .17
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

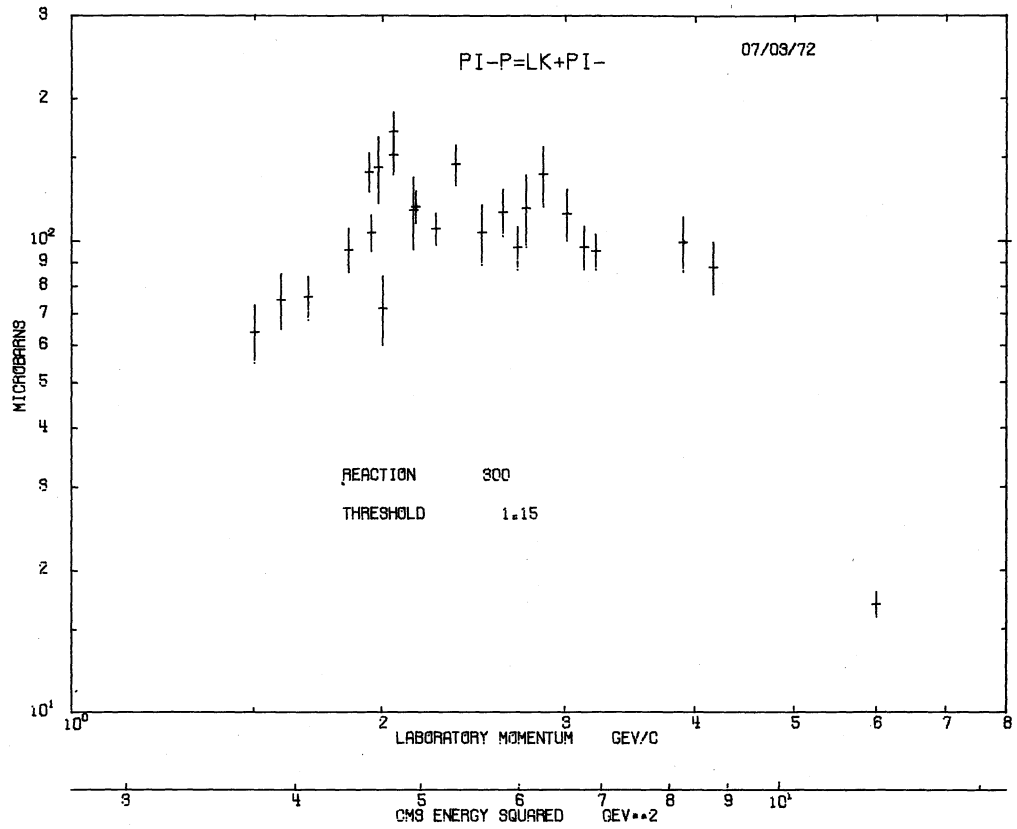

PI-P=NRHO
17/02/72
MICROBARNS
REACTION 179
THRESHOLD 1.06
EXPONENT.N -1.89
DELTA N .09
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

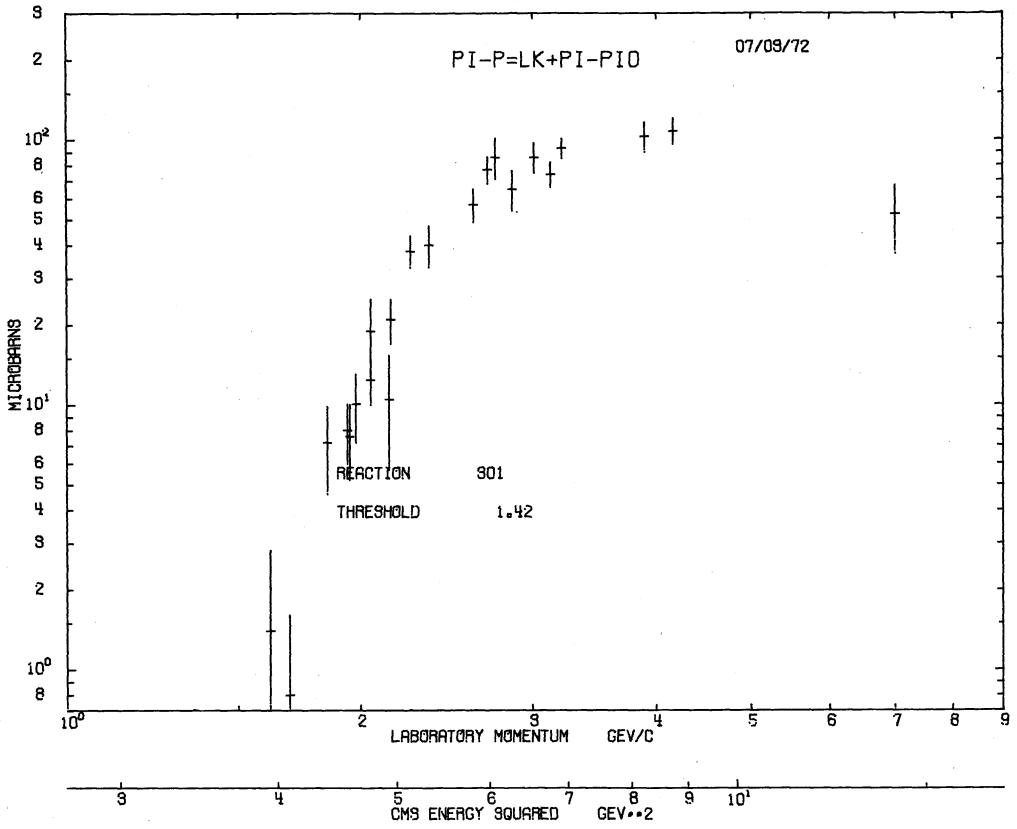

PI-P=NF
07/06/72
MICROBARNS
REACTION 197
THRESHOLD 2.08
EXPONENT.N -2.19
DELTA N .23
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

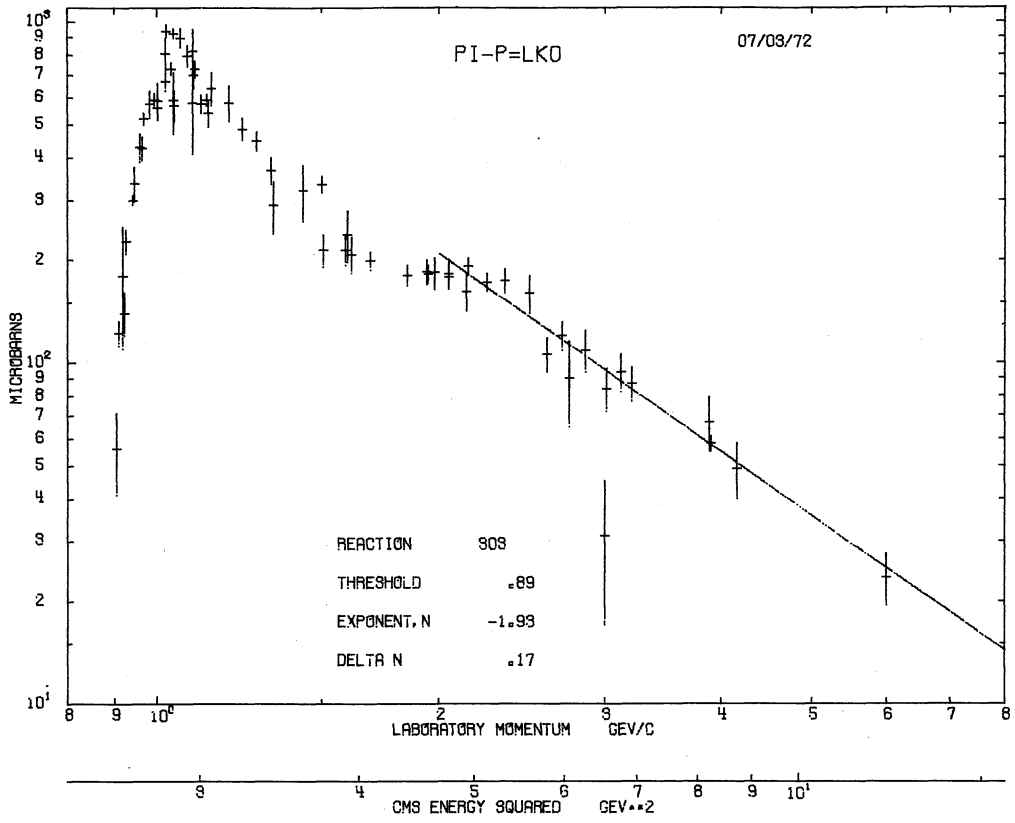

PI-P=N*++1236PI-PI-
07/03/72
MICROBARNS
REACTION 217
THRESHOLD .74
EXPONENT.N -.80
DELTA N .16
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

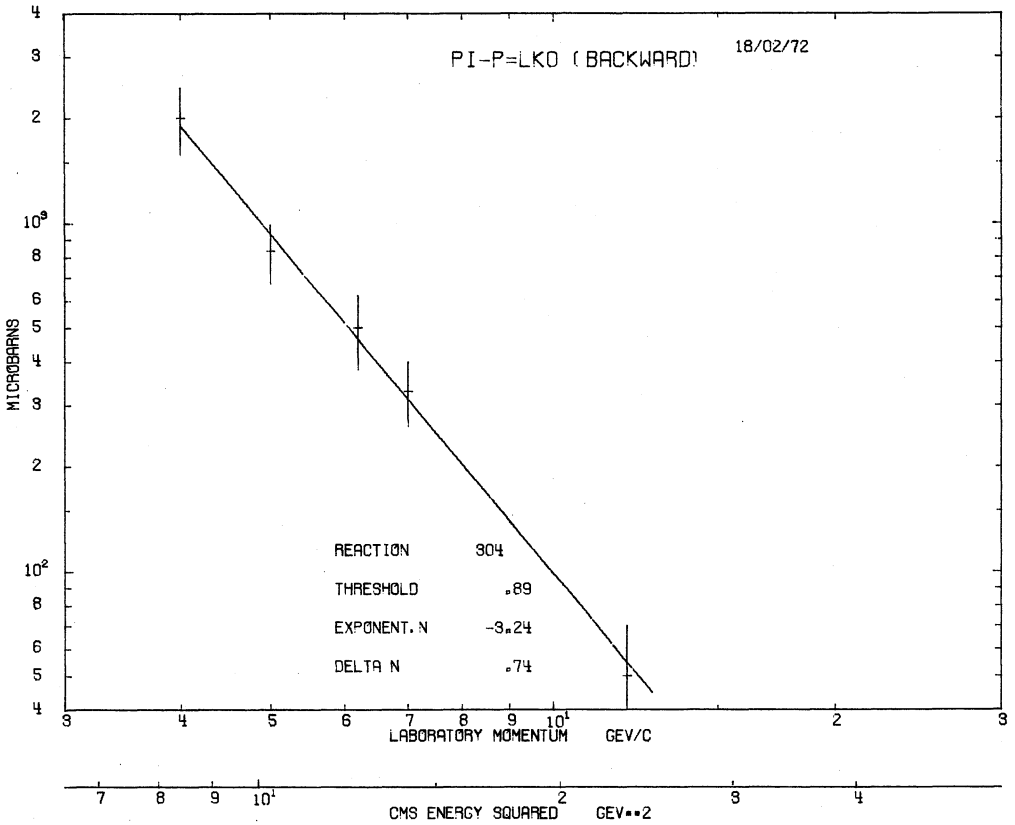

PI-P=N*++1236PI-PI-PIO
07/09/72
MICROBARNS
REACTION 218
THRESHOLD .98
EXPONENT, N -.45
DELTA N .25
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

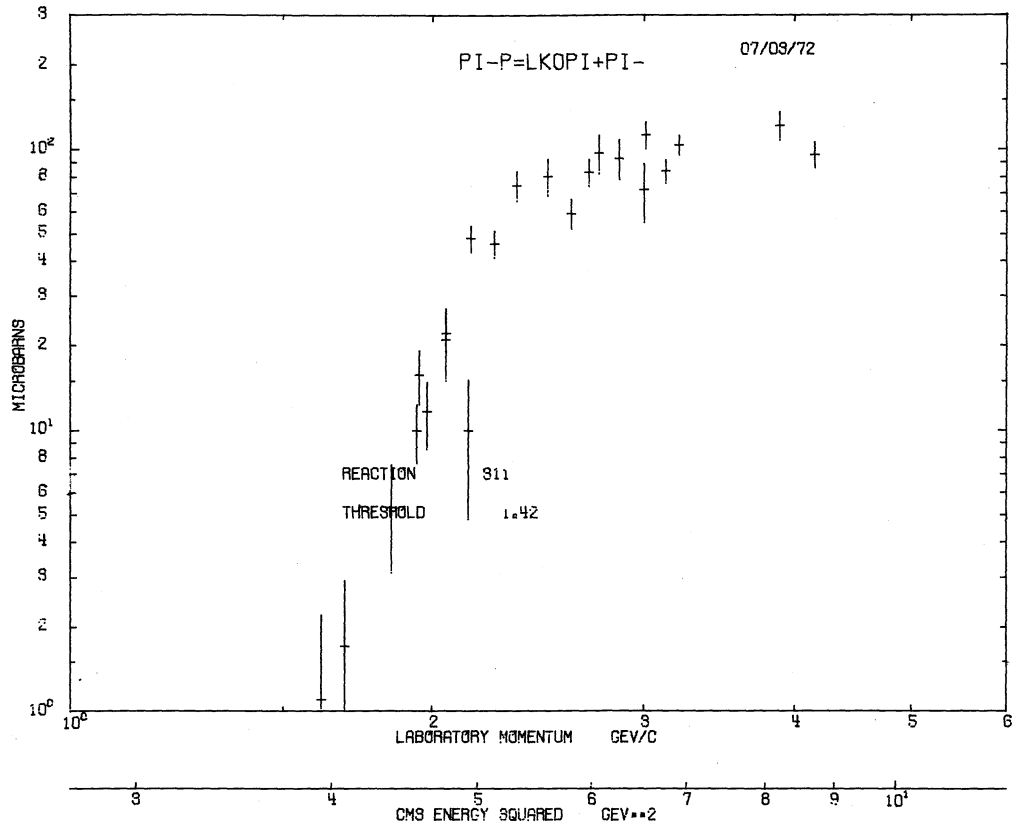

PI-P=N*01236RHO
07/09/72
MICROBARNS
REACTION 242
THRESHOLD 1.64
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

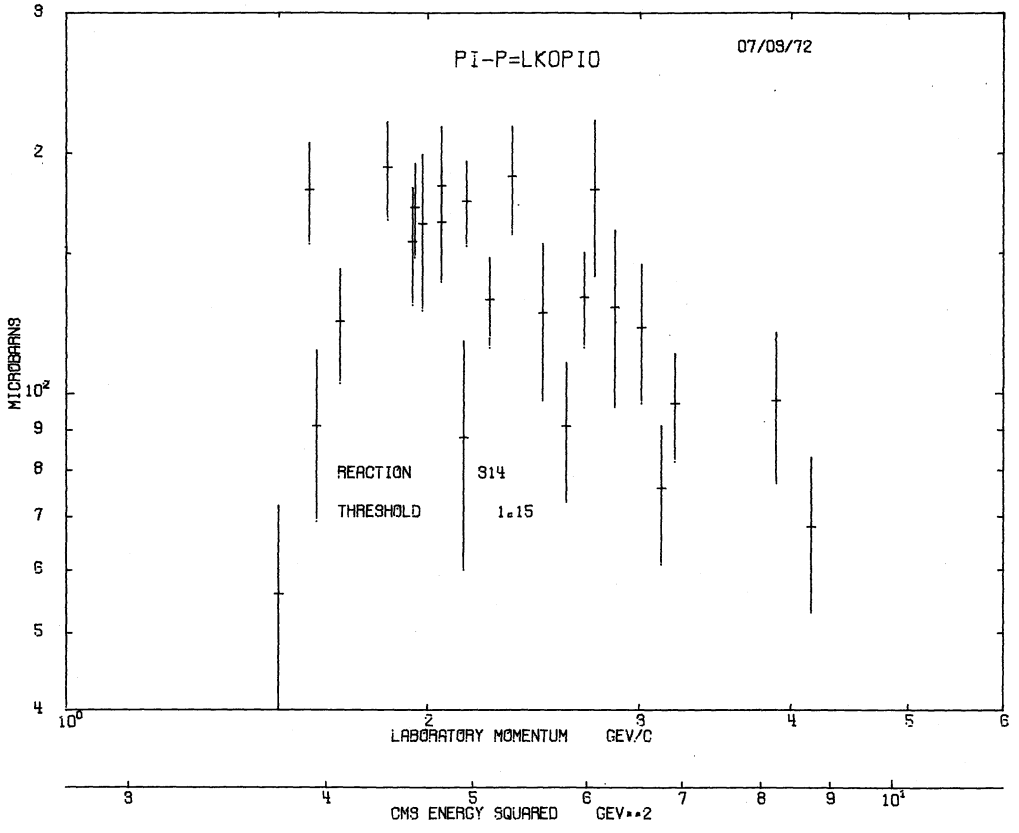

PI-P=LK+PI-
07/09/72
MICROBARNS
REACTION 300
THRESHOLD 1.15
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

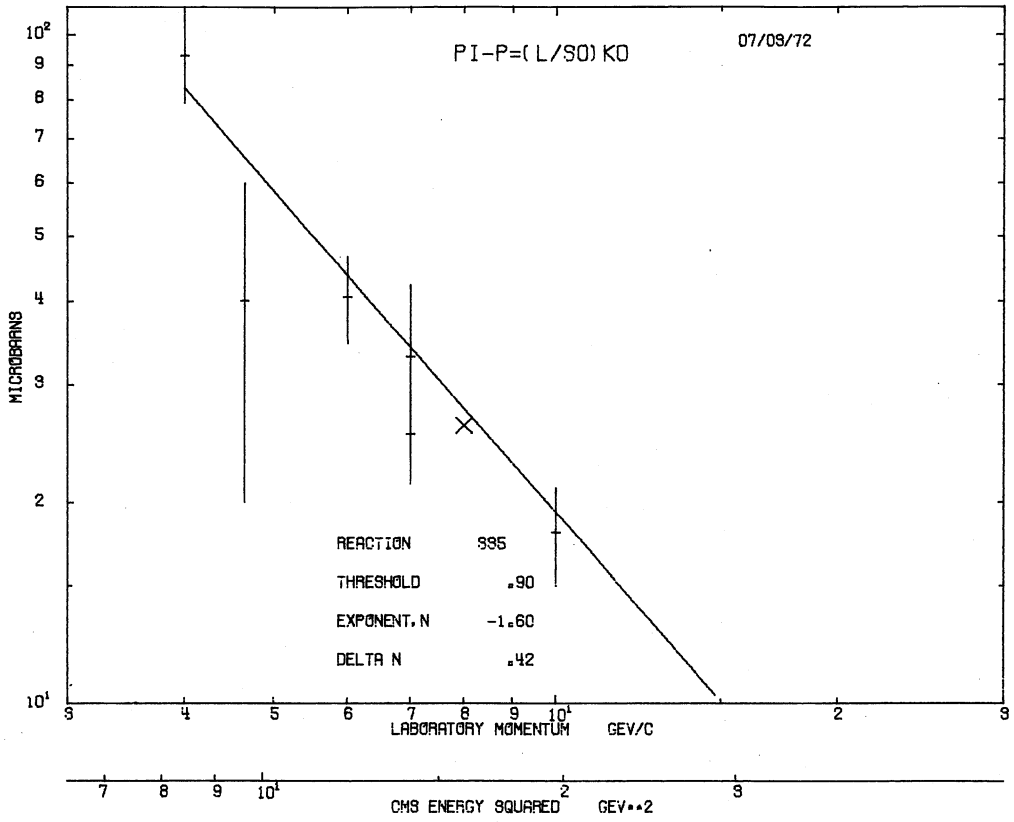

PI-P=LK+PI-PIO
07/09/72
MICROBARNS
REACTION 301
THRESHOLD 1.42
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

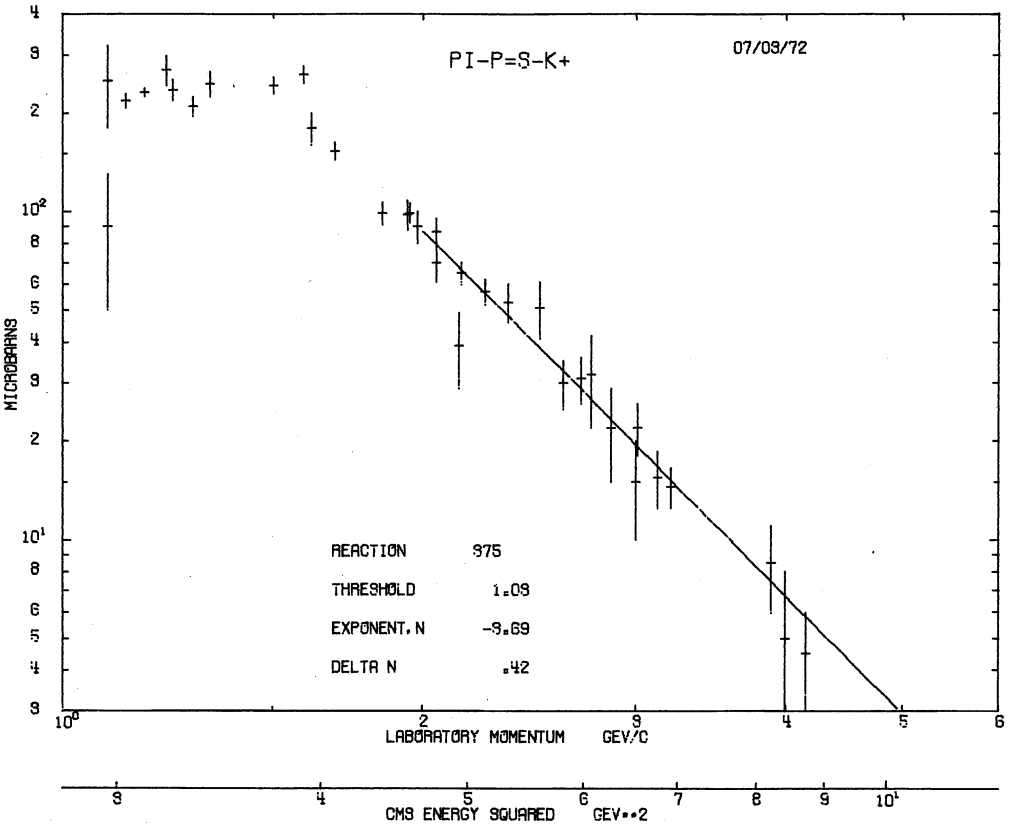

PI-P=LKO
07/03/72
MICROBARNS
REACTION 303
THRESHOLD .89
EXPONENT, N -1.93
DELTA N .17
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

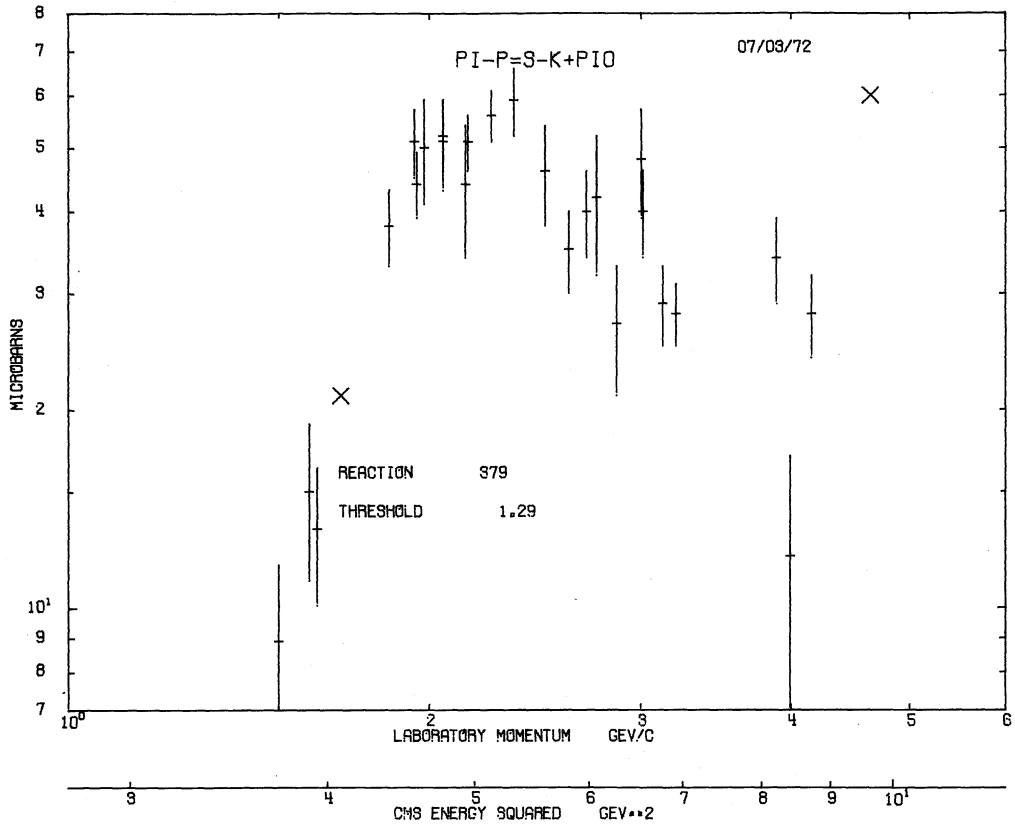

PI-P=LKO (BACKWARD)
18/02/72
MICROBARNS
REACTION 304
THRESHOLD .89
EXPONENT, N -3.24
DELTA N .74
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

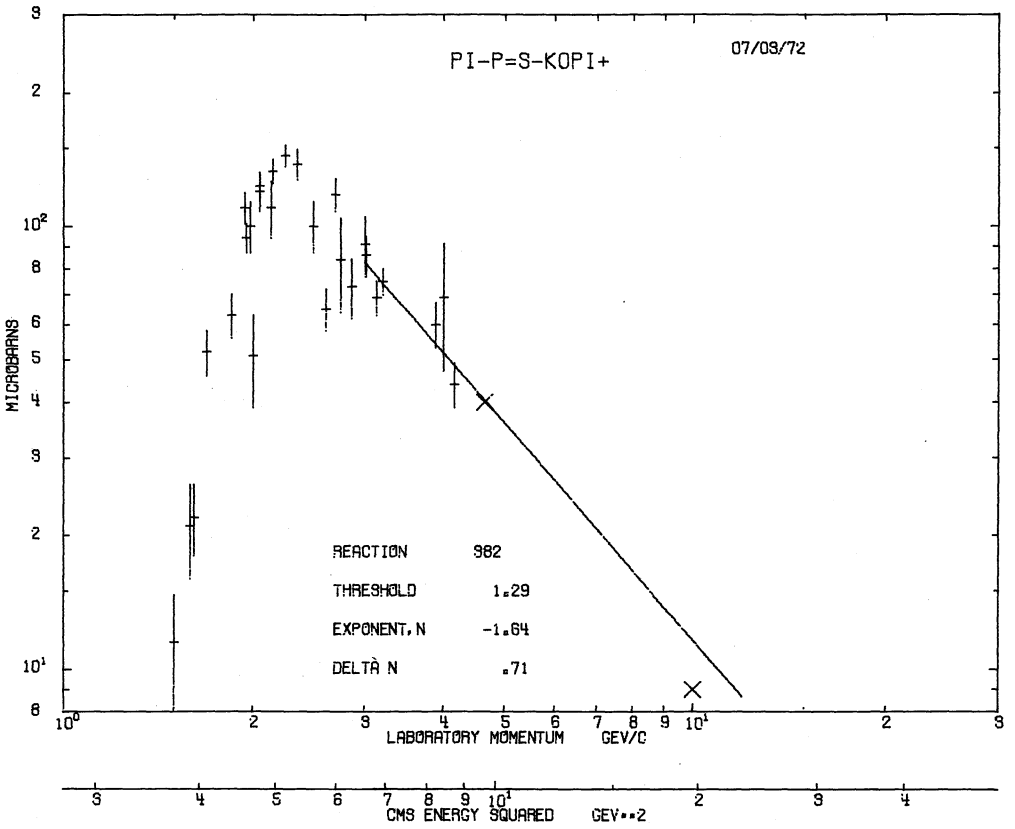

PI-P=LKOPI+PI-
07/09/72
MICROBARNS
REACTION 311
THRESHOLD 1.42
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

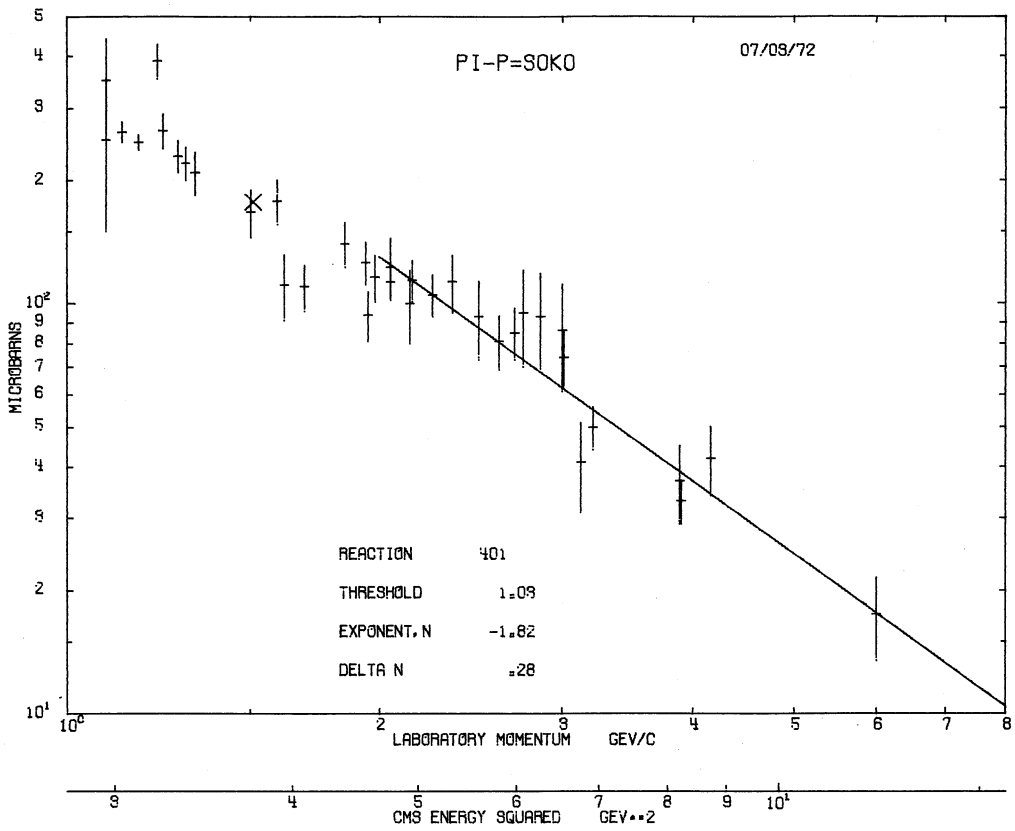

PI-P=LKOPIO
07/09/72
MICROBARNS
REACTION 314
THRESHOLD 1.15
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

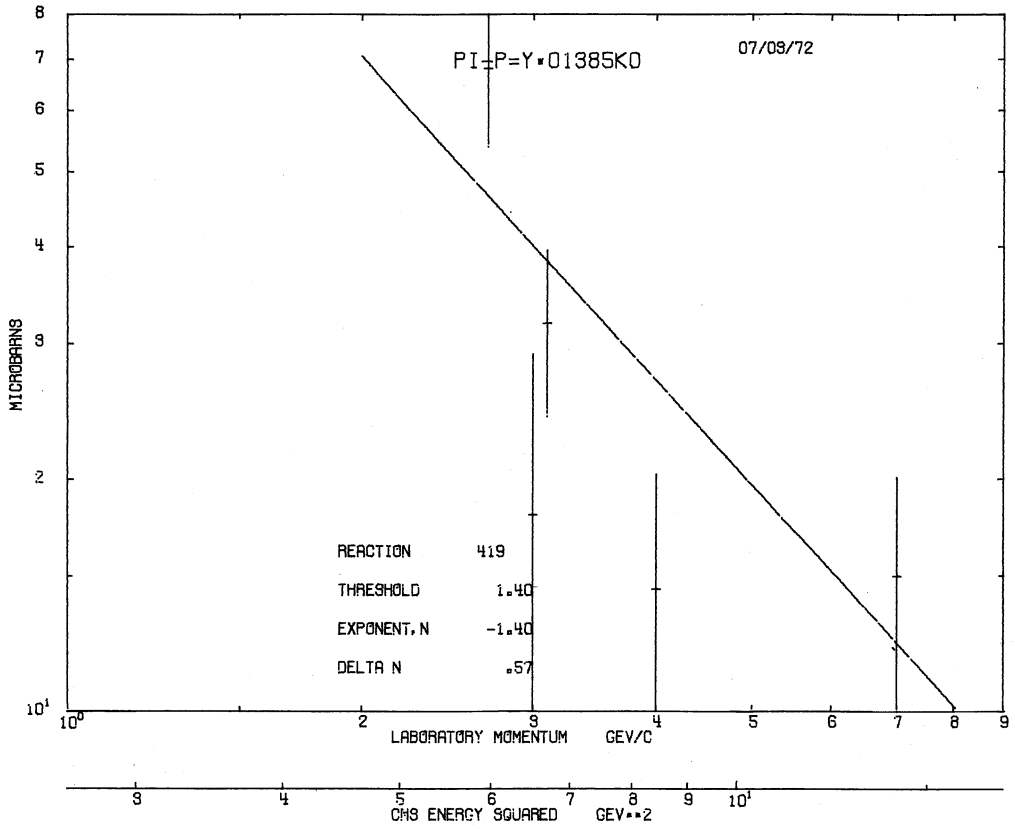

PI-P=(L/SO)KO
07/09/72
MICROBARNS
REACTION 995
THRESHOLD .90
EXPONENT, N -1.60
DELTA N .42
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

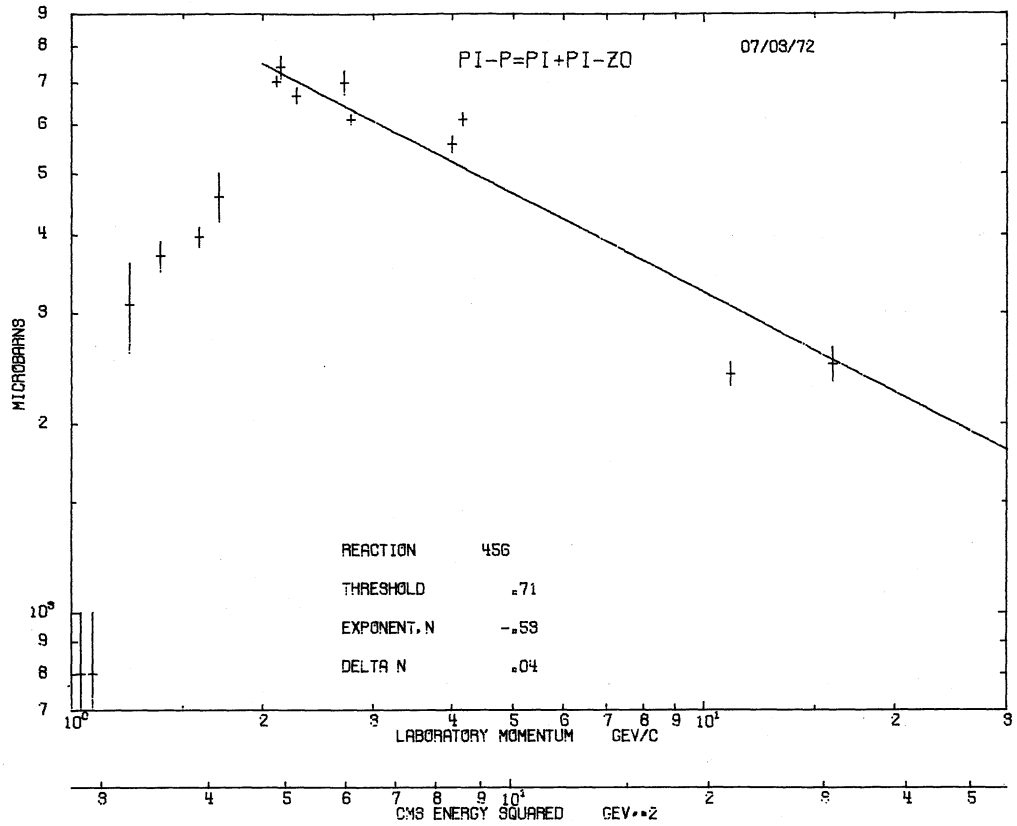

PI-P=S-K+
07/09/72
MICROBARNS
REACTION 975
THRESHOLD 1.08
EXPONENT, N -3.69
DELTA N .42
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

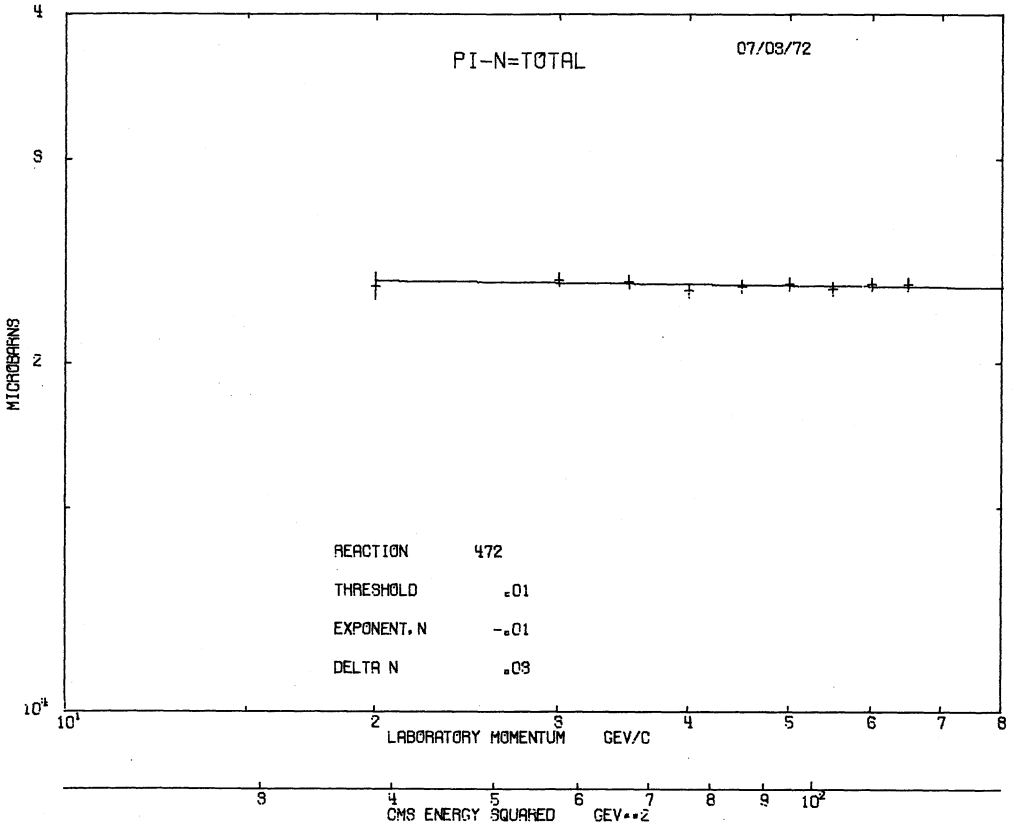

PI-P=S-K+PIO
07/03/72
MICROBARNS
REACTION 379
THRESHOLD 1.29
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

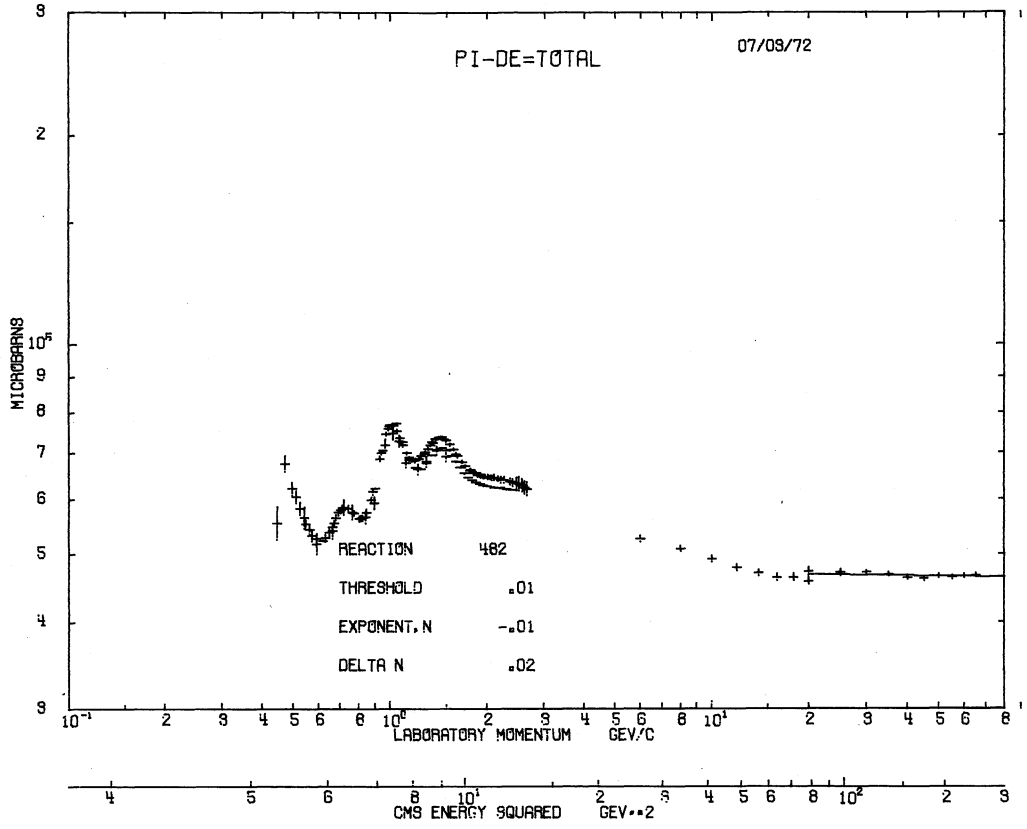

PI-P=S-KOPI+
07/03/72
MICROBARNS
REACTION 382
THRESHOLD 1.29
EXPONENT, N -1.64
DELTA N .71
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

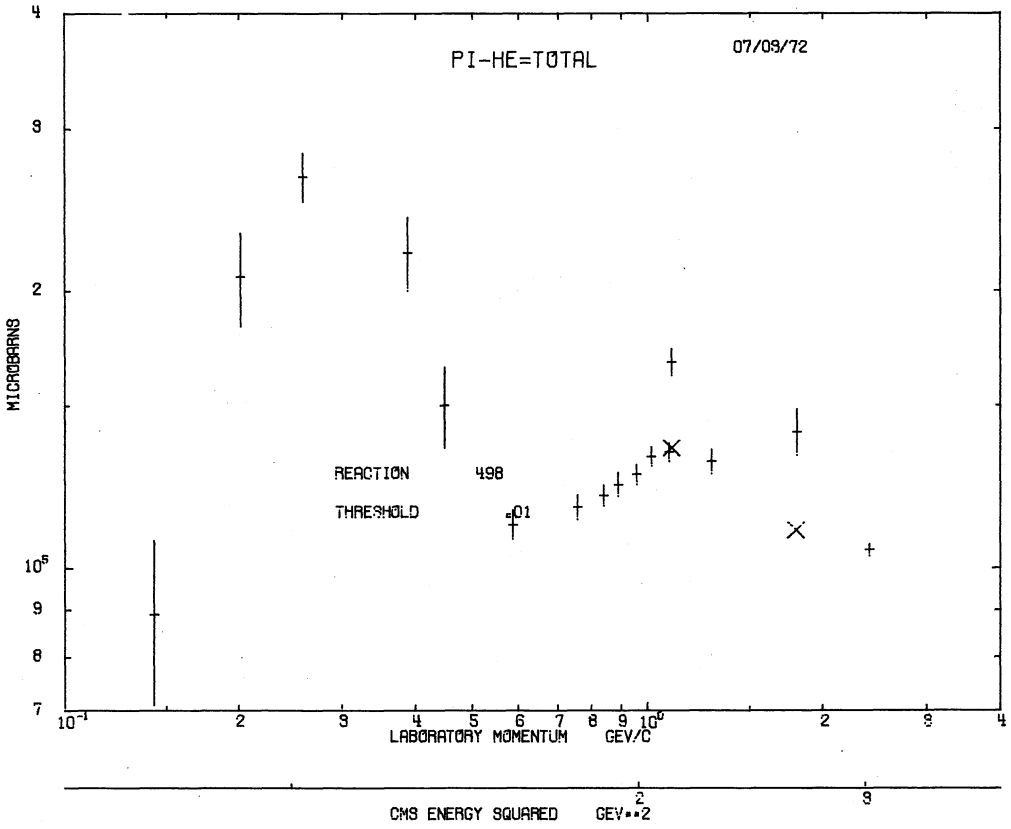

PI-P=SOKO
07/09/72
MICROBARNS
REACTION 401
THRESHOLD 1.09
EXPONENT, N -1.82
DELTA N .28
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

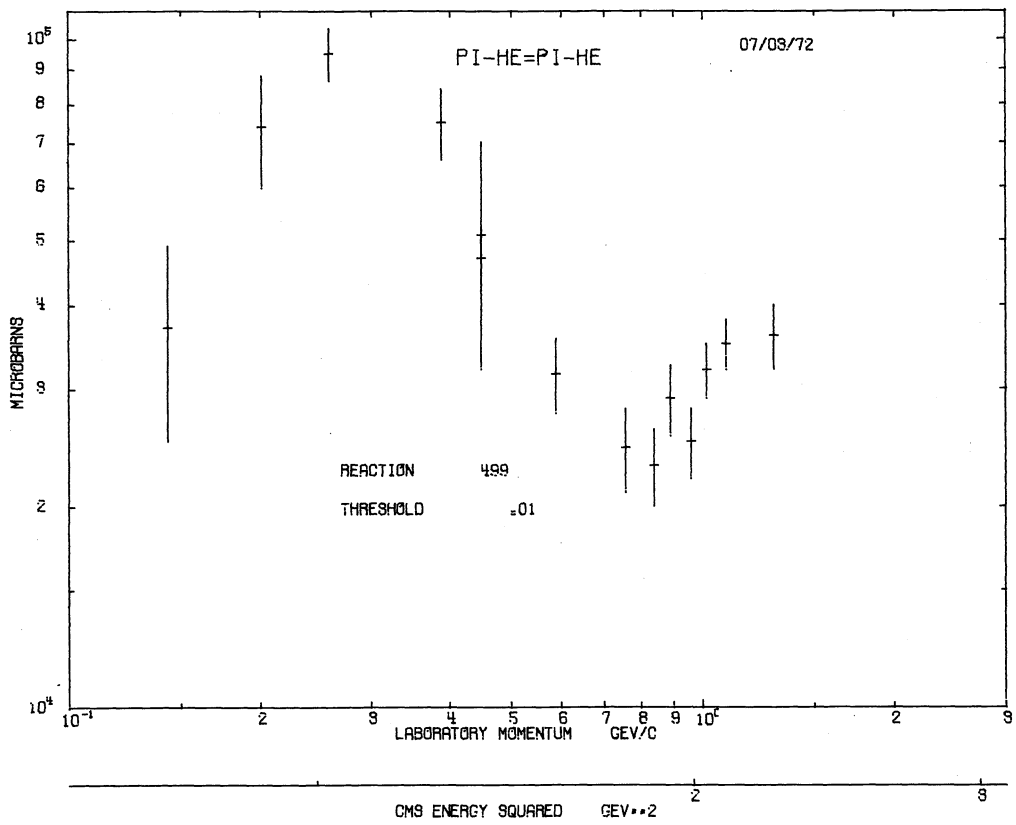

PI+P=Y*01385KO
07/09/72
MICROBARNS
REACTION 419
THRESHOLD 1.40
EXPONENT, N -1.40
DELTA N .57
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

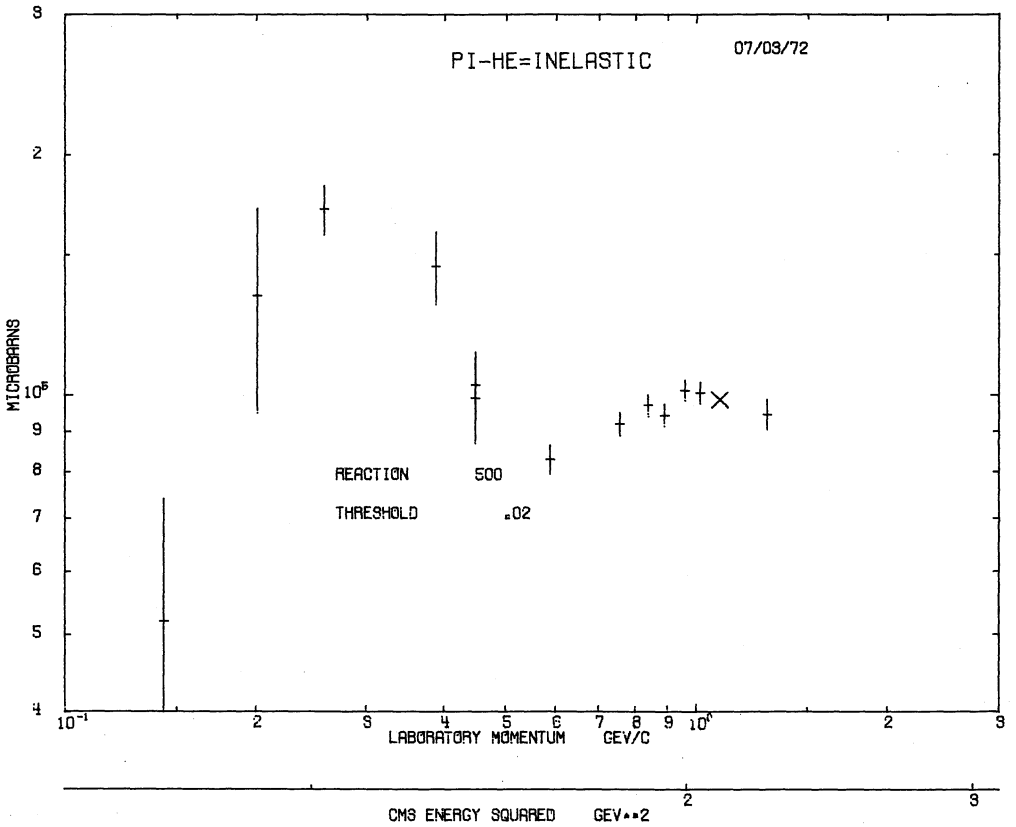

PI-P=PI+PI-ZO
07/08/72
MICROBARNS
REACTION 456
THRESHOLD .71
EXPONENT, N -.58
DELTA N .04
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2


PI-N=TOTAL
07/08/72
MICROBARNS
REACTION 472
THRESHOLD .01
EXPONENT, N -.01
DELTA N .09
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2


PI-DE=TOTAL
07/09/72
MICROBARNS
REACTION 482
THRESHOLD .01
EXPONENT.N -.01
DELTA N .02
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2


PI-HE=TOTAL
07/09/72
MICROBARNS
REACTION 498
THRESHOLD .01
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2


PI-HE=PI-HE
07/03/72
MICROBARNS
REACTION 499
THRESHOLD .01
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2


PI-HE=INELASTIC
07/03/72
MICROBARNS
REACTION 500
THRESHOLD .02
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

21/02/72

TABLE 7
LIST OF REACTIONS

REACTION NUMBER		REACTION
1	----------	PI+P=TOTAL
2	----------	PI+P=PI+P
3	----------	PI+P=MPI
4	----------	PI+P=STRANGE PARTICLES
5	----------	PI+P=V0
6	----------	PI+P=2 PRONGS
7	----------	PI+P=2 PRONGS (NON STRANGE)
8	----------	PI+P=2 PRONGS,Z0
9	----------	PI+P=4 PRONGS
10	----------	PI+P=4 PRONGS,V0
11	----------	PI+P=4 PRONGS,LZ0
12	----------	PI+P=4 PRONGS,S-Z0
13	----------	PI+P=4 PRONGS,K0Z0
14	----------	PI+P=6 PRONGS
15	----------	PI+P=6 PRONGS,LZ0
16	----------	PI+P=8 PRONGS
17	----------	PI+P=10 PRONGS
18	----------	PI+P=4 BODY
19	----------	PI+P=INELASTIC
20	----------	PI+P=(P/PI+)PI+Z0
21	----------	PI+P=(P/PI+)3PI+2PI-Z0
22	----------	PI+P=(P/PI+)4PI+3PI-Z0
23	----------	PI+P=PPPI+AP
24	----------	PI+P=PPI+PI+PI-
25	----------	PI+P=PPI+PI+PI-(NON RESONANT)
26	----------	PI+P=PPI+PI+PI-PI0
27	----------	PI+P=PPI+PI+PI-PI0 (NON RES.)
28	----------	PI+P=PPI+PI+PI-Z0
29	----------	PI+P=PPI+PI0
30	----------	PI+P=PPI+PI0 (NON RESONANT)
31	----------	PI+P=DIFF DISS=PPI+PI0
32	----------	PI+P=PPI+PI0PI0
33	----------	PI+P=PPI+PI0PI0PI0
34	----------	PI+P=PPI+Z0
35	----------	PI+P=P3PI+2PI-
36	----------	PI+P=P3PI+2PI-PI0
37	----------	PI+P=P3PI+2PI-Z0
38	----------	PI+P=P4PI+3PI-
39	----------	PI+P=P4PI+3PI-PI0
40	----------	PI+P=P4PI+3PI-Z0
41	----------	PI+P=P5PI+4PI-
42	----------	PI+P=P5PI+4PI-PI0
43	----------	PI+P=P5PI+4PI-Z0
44	----------	PI+P=PK+K-PI+
45	----------	PI+P=PK+K-PI+PI0
46	----------	PI+P=PK+K0
47	----------	PI+P=PK+K0PI+PI-
48	----------	PI+P=PK+K0PI+PI-PI0
49	----------	PI+P=PK+K0PI0
50	----------	PI+P=PK+K0Z0
51	----------	PI+P=PK+KS
52	----------	PI+P=PK-K0PI+PI+
53	----------	PI+P=PK-K0PI+PI+PI0
54	----------	PI+P=PK0K0PI+
55	----------	PI+P=PK0K0PI+PI0
56	----------	PI+P=PK0K0PI+Z0
57	----------	PI+P=PKSKSPI+
58	----------	PI+P=PKSKSPI+PI0
59	----------	PI+P=PKSKLPI+
60	----------	PI+P=PETPI+
61	----------	PI+P=PETPI+=PPI+PI+PI-PI0
62	----------	PI+P=PETPI+=PPI+Z0
63	----------	PI+P=PET2PI+PI-
64	----------	PI+P=PET2PI+PI-=P2PI+PI-Z0
65	----------	PI+P=PET2PI+PI-=P3PI+2PI-PI0
66	----------	PI+P=PRH+
67	----------	PI+P=PRH+PI+PI-
68	----------	PI+P=PRH+2PI+2PI-
69	----------	PI+P=PRH+RH0
70	----------	PI+P=PRH-PI+PI+
71	----------	PI+P=PRH-3PI+PI-
72	----------	PI+P=PRH0PI+
73	----------	PI+P=PRH0PI+PI0
74	----------	PI+P=PRH02PI+PI-
75	----------	PI+P=PRH02PI+PI-PI0
76	----------	PI+P=POMPI+
77	----------	PI+P=POMPI+=PPI+PI+PI-PI0
78	----------	PI+P=POMPI+=PPI+Z0
79	----------	PI+P=POMPI+PI+PI-
80	----------	PI+P=PK*+890K0=PK+K0PI0
81	----------	PI+P=PK*+890K0=PK0K0PI+
82	----------	PI+P=PK*0890K+
83	----------	PI+P=PK*0890K+=PK+K0PI+
84	----------	PI+P=PX0PI+
85	----------	PI+P=PX0PI+=P3PI+2PI-PI0
86	----------	PI+P=PPHIPI+
87	----------	PI+P=PPHIPI+=PK+K-PI+
88	----------	PI+P=PPHIPI+=PKSKLPI+
89	----------	PI+P=PA1+
90	----------	PI+P=PA1+=PK+K0
91	----------	PI+P=PA1+=PRH0PI+
92	----------	PI+P=PA1+PI+PI-=P3PI+2PI-
93	----------	PI+P=PA1+PI+PI-PI0=P3PI+2PI-PI
94	----------	PI+P=PA1(+,-)PI+PI=PRH03PI
95	----------	PI+P=PA1+PI0=PRH0PI+PI0
96	----------	PI+P=PA1-PI+PI+=P3PI+2PI-
97	----------	PI+P=PA1-PI+PI+PI0=P3PI+2PI-PI
98	----------	PI+P=PA10PI+PI+PI-=P3PI+2PI-PI
99	----------	PI+P=PB+
100	----------	PI+P=PB+ (BACKWARD)
101	----------	PI+P=PB+=POMPI+
102	----------	PI+P=PB+=POMPI+=PPI+PI+PI-PI0
103	----------	PI+P=PB+PI+PI-=P3PI+2PI-PI0
104	----------	PI+P=PB(+,-)PI+PI(-,+)=POM3PI
105	----------	PI+P=PB-PI+PI+=P3PI+2PI-PI0
106	----------	PI+P=PFPI+
107	----------	PI+P=PFPI+=PPI+PI+PI-
108	----------	PI+P=PFPI+=PK+K-PI+
109	----------	PI+P=PF2PI+PI-=P3PI+2PI-
110	----------	PI+P=PF2PI+PI-PI0=P3PI+2PI-PI0
111	----------	PI+P=PD0PI+=P3PI+2PI-
112	----------	PI+P=PD0PI+=PETPI+PI+PI-
113	----------	PI+P=PA2+
114	----------	PI+P=PA2+=PPI+PI+PI-
115	----------	PI+P=PA2+=PK+K0
116	----------	PI+P=PA2+=PETPI+
117	----------	PI+P=PA2+=PRH0PI+
118	----------	PI+P=PA2+=P(RHPI)+
119	----------	PI+P=PA2+=PX0PI+
120	----------	PI+P=PA2+PI+PI-=P3PI+2PI-
121	----------	PI+P=PA2+PI+PI-PI0=P3PI+2PI-PI
122	----------	PI+P=PA2(+,-)PI+PI=PRH03PI
123	----------	PI+P=PA2+PI0=PRH0PI+PI0
124	----------	PI+P=PA2-PI+PI+=P3PI+2PI-
125	----------	PI+P=PA2-PI+PI+PI0=P3PI+2PI-PI
126	----------	PI+P=PA20PI+
127	----------	PI+P=PA20PI+PI+PI-=P3PI+2PI-PI
128	----------	PI+P=PF*PI+
129	----------	PI+P=PF*PI+=PKSKSPI+
130	----------	PI+P=PA3+
131	----------	PI+P=PG+
132	----------	PI+P=PG+=PPI+PI0
133	----------	PI+P=PR+1700=PPI+PI+PI-PI0
134	----------	PI+P=PS1975=PPI+PI0
135	----------	PI+P=PT2200=PPI+PI0
136	----------	PI+P=NPI+PI+
137	----------	PI+P=NPI+PI+ (NON RESONANT)
138	----------	PI+P=DIFF DISS=NPI+PI+
139	----------	PI+P=NPI+PI+PI+PI-
140	----------	PI+P=NPI+PI+PI+PI-Z0
141	----------	PI+P=NPI+PI+PI0
142	----------	PI+P=NPI+PI+Z0
143	----------	PI+P=NK+K-PI+PI+
144	----------	PI+P=NK+K0PI+
145	----------	PI+P=NK+K0PI+PI+PI-
146	----------	PI+P=NK+K0PI+Z0
147	----------	PI+P=NK+K0PI-
148	----------	PI+P=NK-K0PI+PI+PI+
149	----------	PI+P=NK0K0PI+PI+
150	----------	PI+P=NKSKSPI+PI+
151	----------	PI+P=N4PI+2PI-
152	----------	PI+P=N4PI+2PI-PI0
153	----------	PI+P=N4PI+2PI-Z0
154	----------	PI+P=N5PI+3PI-
155	----------	PI+P=N6PI+4PI-
156	----------	PI+P=N***1640PI-
157	----------	PI+P=N***1236
158	----------	PI+P=N***1236PAP
159	----------	PI+P=N***1236PI+PI+PI-PI-
160	----------	PI+P=N***1236PI+PI+PI-PI-PI0
161	----------	PI+P=N***12362PI+2PI-PI0(NR)
162	----------	PI+P=N***1236PI+PI-
163	----------	PI+P=N***1236PI+PI-PI0
164	----------	PI+P=N***PI+PI-PI0(NON RES.)
165	----------	PI+P=N**1236PI+=(PPI0/NPI+)PI+
166	----------	PI+P=N*3PI+PI-PI0=P3PI+2PI-PI0
167	----------	PI+P=N***1236PI0
168	----------	PI+P=N***1236Z0
169	----------	PI+P=N**1236K+K-
170	----------	PI+P=N***1236K0K0
171	----------	PI+P=N***1236KSKS
172	----------	PI+P=N***1236KSKL
173	----------	PI+P=N***1236ET
174	----------	PI+P=N***1236ET (BACKWARD)
175	----------	PI+P=N***1236ET=PPI+PI+PI-PI0
176	----------	PI+P=N***1236RH0
177	----------	PI+P=N***1236RH0 (BACKWARD)
178	----------	PI+P=N***1236RH0RH0
179	----------	PI+P=N***1236OM
180	----------	PI+P=N***1236OM (BACKWARD)
181	----------	PI+P=N***1236OM=PPI+PI+PI-PI0
182	----------	PI+P=N***1236OMPI+PI-
183	----------	PI+P=N***1236OMRH0
184	----------	PI+P=N***1236X0
185	----------	PI+P=N***1236X0=N*2PI+2PI-PI0
186	----------	PI+P=N***1236H=PPI+PI+PI-PI0
187	----------	PI+P=N***1236PHI
188	----------	PI+P=N***1236PHI=PKSKLPI+
189	----------	PI+P=N***1236F
190	----------	PI+P=N***1236F=PPI+PI+PI-
191	----------	PI+P=N***1236F=PK+K-PI+
192	----------	PI+P=N***1236F=PKSKSPI+
193	----------	PI+P=N***1236D0=PETPI+PI+PI-
194	----------	PI+P=N***1236A20
195	----------	PI+P=N***1236A20=P2PI+PI-PI0
196	----------	PI+P=N***1236A20=PK+K-PI+
197	----------	PI+P=N***1236A20=PKSKSPI+
198	----------	PI+P=N***1236A20=N***1236(KK)0
199	----------	PI+P=N***1236A20=N***1236ETPI0
200	----------	PI+P=N***A20=N***(RHPI)0
201	----------	PI+P=N***1236G0
202	----------	PI+P=N**1236PI+
203	----------	PI+P=N**1236PI+=PPI+PI0
204	----------	PI+P=N**1236PI+=NPI+PI+
205	----------	PI+P=N**1236PI+PI+PI-
206	----------	PI+P=N**3PI+2PI-=P3PI+2PI-PI0
207	----------	PI+P=N**1236K+K0
208	----------	PI+P=N*01236PI+PI+
209	----------	PI+P=N*03PI+PI-=P3PI+2PI-
210	----------	PI+P=N+1400PI+

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211 ----------  PI+P=N+1525PI+
212 ----------  PI+P=N+++1670K0K0=PK0K0PI+
213 ----------  PI+P=N+1688PI+
214 ----------  PI+P=N+1688PI+=PPI+PI0
215 ----------  PI+P=N+1688PI+=NPI+PI+
216 ----------  PI+P=N+1688PI+=LK+PI+
217 ----------  PI+P=N+1710PI+=LK+PI+
218 ----------  PI+P=(N1710PI)+PI+=(LKPI)+PI+
219 ----------  PI+P=YK
220 ----------  PI+P=Y0K
221 ----------  PI+P=Y0
222 ----------  PI+P=YK*890PI=YKPIPI
223 ----------  PI+P=L(K/PI)+PI+Z0
224 ----------  PI+P=SK
225 ----------  PI+P=LK+
226 ----------  PI+P=LK+PI+
227 ----------  PI+P=LK+PI+PI+PI+PI-PI-
228 ----------  PI+P=LK+PI+PI+PI+PI-PI-PI0
229 ----------  PI+P=LK+PI+PI+PI-
230 ----------  PI+P=LK+PI+PI+PI-PI0
231 ----------  PI+P=LK+PI+PI0
232 ----------  PI+P=LK0
233 ----------  PI+P=LK0PI+PI+
234 ----------  PI+P=LK0PI+PI+PI+PI-
235 ----------  PI+P=LK0PI+PI+PI+PI-PI0
236 ----------  PI+P=LK0PI+PI+PI+PI-Z0
237 ----------  PI+P=LK0PI+PI+PI0
238 ----------  PI+P=LK0PI+PI+Z0
239 ----------  PI+P=LK04PI+2PI-
240 ----------  PI+P=LK++890PI+
241 ----------  PI+P=LK++890PI+=LK+PI+PI0
242 ----------  PI+P=LK++890PI+=LK0PI+PI+
243 ----------  PI+P=LK++890PI+PI0=LK02PI+PI0
244 ----------  PI+P=(L/S0)
245 ----------  PI+P=(L/S0)K+PI+
246 ----------  PI+P=(L/S0)K+PI+PI+PI-
247 ----------  PI+P=(L/S0)K+PI+PI+PI-PI0
248 ----------  PI+P=(L/S0)K+PI+PI+PI-Z0
249 ----------  PI+P=(L/S0)K+PI+PI0
250 ----------  PI+P=(L/S0)K+PI+Z0
251 ----------  PI+P=(L/S0)K0PI+PI+
252 ----------  PI+P=(L/S0)K0PI+PI+PI0
253 ----------  PI+P=(L/S0)K0PI+PI+Z0
254 ----------  PI+P=S+
255 ----------  PI+P=S+K+
256 ----------  PI+P=S+K+ (BACKWARD)
257 ----------  PI+P=S+K+PI+PI-
258 ----------  PI+P=S+K+PI+PI-PI0
259 ----------  PI+P=S+K+PI+PI-Z0
260 ----------  PI+P=S+K+PI0
261 ----------  PI+P=S+K+Z0
262 ----------  PI+P=S+K0PI+
263 ----------  PI+P=S+K0PI+PI+PI-
264 ----------  PI+P=S+K0PI+PI+PI-Z0
265 ----------  PI+P=S+K0PI+PI0
266 ----------  PI+P=S+K0PI+Z0
267 ----------  PI+P=S+K*+890
268 ----------  PI+P=S+K*+890 (BACKWARD)
269 ----------  PI+P=S-
270 ----------  PI+P=S-K+PI+PI+
271 ----------  PI+P=S-K+PI+PI+PI0
272 ----------  PI+P=S-K0PI+PI+PI+
273 ----------  PI+P=S0K+PI+
274 ----------  PI+P=Y*+1385K+
275 ----------  PI+P=Y*+1385K+=LK+PI+
276 ----------  PI+P=Y*+1385K+=(L/S0)K+PI+
277 ----------  PI+P=Y*+1385K+=S0K+PI+
278 ----------  PI+P=Y*+1385K+PI0
279 ----------  PI+P=Y*+1385K+PI0=(L/S0)K+PIPI
280 ----------  PI+P=Y*+1385K+PI0=LK+PI+PI0
281 ----------  PI+P=Y*+(K/PI)+Z0=L(K/PI)PI+Z0
282 ----------  PI+P=Y*+1385K0PI+
283 ----------  PI+P=Y*+1385K0PI+=LK0PI+PI+
284 ----------  PI+P=Y*+1385K0PI+PI0=LK02PI+PI
285 ----------  PI+P=Y*+1385K*+890=LK+PI+PI0
286 ----------  PI+P=Y*+1385K*+890=LK0PI+PI+
287 ----------  PI+P=Y*+1385K*+890=L(KPI)+PI+
288 ----------  PI+P=Y*01385K+PI+
289 ----------  PI+P=Y*+1475K+
290 ----------  PI+P=Y*+1475K+=PK+K0
291 ----------  PI+P=Y*+1475K+=LK+PI+
292 ----------  PI+P=Y*+1475K+=S0K+PI+
293 ----------  PI+P=Y*+1690PI+=LK+PI+
294 ----------  PI+P=Y*+1690K+=LK+PI+
295 ----------  PI+P=PI+PI+PI+PI-Z0
296 ----------  PI+P=PI+PI+Z0
297 ----------  PI+P=K0K0
298 ----------  PI+P=KAK
299 ----------  PI+P=4PI+2PI-Z0
300 ----------  PI+P=5PI+3PI-Z0
301 ----------  PI+P=6PI+4PI-Z0
302 ----------  PI+N=TOTAL
303 ----------  PI+N=PPI+PI+PI-PI-
304 ----------  PI+N=PPI+PI+PI-PI-PI0
305 ----------  PI+N=PPI+PI-
306 ----------  PI+N=PPI+PI- (NON RESONANT)
307 ----------  PI+N=PPI+PI-PI0
308 ----------  PI+N=PPI+PI-Z0
309 ----------  PI+N=PPI0
310 ----------  PI+N=PPI0PI0
311 ----------  PI+N=PK+K-
312 ----------  PI+N=PK+K0PI-
313 ----------  PI+N=PK-K0PI+
314 ----------  PI+N=PKSKS
315 ----------  PI+N=PKSKL
316 ----------  PI+N=PET
317 ----------  PI+N=PET=PPI+PI-PI0
318 ----------  PI+N=PRH+PI-
319 ----------  PI+N=PRH-PI+
320 ----------  PI+N=PRH0
321 ----------  PI+N=PRH0PI0
322 ----------  PI+N=POM
323 ----------  PI+N=POM=PPI+PI-PI0
324 ----------  PI+N=PX0
325 ----------  PI+N=PX0=PGAMGAM
326 ----------  PI+N=PX0=PETPI0PI0
327 ----------  PI+N=PPHI
328 ----------  PI+N=PPHI=PPI+PI-
329 ----------  PI+N=PS*=PK+K-
330 ----------  PI+N=PA10
331 ----------  PI+N=PA10=PPI+PI-PI0
332 ----------  PI+N=PF
333 ----------  PI+N=PF=PPI+PI-
334 ----------  PI+N=PF=PZ0
335 ----------  PI+N=PA20
336 ----------  PI+N=PA20=PPI+PI-PI0
337 ----------  PI+N=PG0
338 ----------  PI+N=PG0=PPI+PI-
339 ----------  PI+N=PPHI1650=PPI+PI-PI0
340 ----------  PI+N=NK+K0
341 ----------  PI+N=NRH0PI+
342 ----------  PI+N=N*++1236PI-PI0
343 ----------  PI+N=N*+1236PI+PI-
344 ----------  PI+N=N*+1236PI+PI-=PPI+PI-PI0
345 ----------  PI+N=N*+1236RH0=PRH0PI0
346 ----------  PI+N=N*-1236PI+PI+
347 ----------  PI+N=N*01236PI+
348 ----------  PI+N=N*01236PI+PI-=PPI+PI-PI-
349 ----------  PI+N=N*01236PI+PI0
350 ----------  PI+N=N*01236RH+=PRH+PI-
351 ----------  PI+N=LK+
352 ----------  PI+N=LK+PI+PI-
353 ----------  PI+N=LK+PI0
354 ----------  PI+N=LK0PI+
355 ----------  PI+N=LK0PI+PI0
356 ----------  PI+N=S+K+PI-
357 ----------  PI+N=S+K+PI-PI0
358 ----------  PI+N=S+K0
359 ----------  PI+N=S+K0PI+PI-
360 ----------  PI+N=S+K0PI0
361 ----------  PI+N=S-K+PI+
362 ----------  PI+N=S-K+PI+PI0
363 ----------  PI+N=S-K0PI+PI+
364 ----------  PI+N=S0K+
365 ----------  PI+N=S0K+PI+PI-
366 ----------  PI+N=S0K0PI+
367 ----------  PI+DE=TOTAL
368 ----------  PI+DE=PP
369 ----------  PI+DE=PI+DE
370 ----------  PI+DE=DE*02190PI+PI+
371 ----------  PI+DE=DE*2190RH
372 ----------  PI+DE=DE*++2190F
373 ----------  PI+DE=DEPI+PI+PI-
374 ----------  PI+DE=DEPI+PI+PI- (NON RES.)
375 ----------  PI+DE=DERH0PI+
376 ----------  PI+DE=PPPI+PI-
377 ----------  PI+DE=PPPI+PI-PI0
378 ----------  PI+DE=PP2PI+2PI-(PI0/GAM)
379 ----------  PI+DE=PPPI+PI-Z0
380 ----------  PI+DE=PPPI0
381 ----------  PI+DE=PP2PI+2PI-
382 ----------  PI+DE=PP2PI+2PI-PI0
383 ----------  PI+DE=PP2PI+2PI-Z0
384 ----------  PI+DE=PPZ0
385 ----------  PI+DE=PPKSKS
386 ----------  PI+DE=PPKSKL
387 ----------  PI+DE=PPET
388 ----------  PI+DE=PPRH0
389 ----------  PI+DE=PP0M
390 ----------  PI+DE=PP0M=PPPI+PI-PI0
391 ----------  PI+DE=PPX0
392 ----------  PI+DE=PPX0=PPZ0
393 ----------  PI+DE=PPX0=PPPI+PI+PI-PI-PI0
394 ----------  PI+DE=PPA10=PPPI+PI-PI0
395 ----------  PI+DE=PPF=PPPI+PI-
396 ----------  PI+DE=PPF=PPPI0PI0
397 ----------  PI+DE=PPF=PPZ0
398 ----------  PI+DE=PPD0=PPDELPI=PPET2PI
399 ----------  PI+DE=PPA20
400 ----------  PI+DE=PPA20=PPPI+PI-PI0
401 ----------  PI+DE=PPA30
402 ----------  PI+DE=PPA30=PPPI+PI-PI0
403 ----------  PI+DE=PPG0
404 ----------  PI+DE=PPG0=PPPI+PI-
405 ----------  PI+DE=PNPI+PI+PI-
406 ----------  PI+DE=PN3PI+2PI-
407 ----------  PI+DE=PN3PI+2PI-Z0
408 ----------  PI+DE=PNK+K0
409 ----------  PI+DE=PPHI
410 ----------  PI+DE=LPK+
411 ----------  PI+DE=LPK+PI+PI-
412 ----------  PI+DE=LPK+PI0
413 ----------  PI+DE=LPK0PI+
414 ----------  PI+DE=LPK0PI+PI0
415 ----------  PI+DE=LNK+PI+
416 ----------  PI+DE=(L/S0)PK+
417 ----------  PI+DE=S+PK0
418 ----------  PI+DE=S+NK+
419 ----------  PI+DE=S+NK0PI+
420 ----------  PI+DE=S0PK+
421 ----------  PI+DE=S0PK0PI+
422 ----------  PI+DE=Y*+1385PK0=LPK0PI+
423 ----------  PI+DE=Y*+1385NK+=LNK+PI+
424 ----------  PI+DE=Y*01385PK+=LPK+PI0
425 ----------  PI+HE=PI+HE
426 ----------  PIHE=TOTAL
427 ----------  PIHE=PIHE
```

TABLE 8

Description

The heading gives the date of printing, the number assigned to the reaction, the initial state and the final state.

In the table the first three columns describe the initial system, they are labelled, s, KIN. ENERGY, and P LAB, and represent, respectively, the total c.m. energy squared in GeV^2, the kinetic energy in GeV of the incident particle and the laboratory momentum in GeV/c of the incident particle. In the fourth column, labelled SIGMA, is the cross section in millibarns unless otherwise stated. In the fifth column, headed ERROR is the error on the cross section in the same units; however if the error quoted is asymmetric, the plus error is given in the fifth column and the negative error in the sixth (which does not have a heading). In the next section is given the reference which is so entitled. Should a foot note be required a symbol is printed in the last column and then is reprinted and explained below the set of values under the heading = FOOTNOTES".

Finally, if there are sufficient data points a fit of the formula

$$\sigma = K \; p_{LAB}^{+N}$$

is made and the results of this fit are given, that is the values and errors of K and N are quoted together with the number of points fitted, the χ^2-value and the probability of the fit. The fit is made to all data values above a certain lower limit of p_{LAB} and the value of the lower limit is also printed.

PI+P

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 1 ..... TOTAL								
	1.221	.032	.099	6.1500	.1200		KNAPP PR131,1822-63	
	1.224	.033	.102	6.4000	2.1000		LEONARD PR93,568-54	
	1.244	.044	.119	9.8000	1.5000		LEONARD PR93,568-54	
	1.246	.045	.121	12.0000	3.0000		OREAR PR93,575-54	
	1.267	.056	.137	20.0000	10.0000		ANDERSON PR85,936-52	
	1.267	.056	.137	17.6000	2.2000		LEONARD PR93,568-54	
	1.271	.058	.140	15.8000	2.1000		BODANSKY PR93,1367-54	
	1.284	.065	.150	20.4000	2.4000		BODANSKY PR93,1367-54	
	1.293	.070	.156	19.0000	2.6000		LEONARD PR93,568-54	
	1.295	.071	.158	26.0900	.5200		CARTER,NPB26,445-71	
	1.308	.078	.167	31.0000	3.0000		ANDERSON PR91,155-53	
	1.308	.078	.167	45.0000	13.0000		ANDERSON PR91,155-53	
	1.315	.082	.172	50.0000	13.0000		ANDERSON PR85,936-52	
	1.344	.097	.191	54.6800	.2800		CARTER,NPB26,445-71	
	1.368	.110	.207	77.0000	6.0000		ANDERSON PR91,155-53	
	1.368	.110	.207	82.0000	8.0000		ANDERSON PR91,155-53	
	1.382	.118	.216	91.0000	6.0000		ANDERSON PR85,936-52	
	1.386	.119	.218	96.2500	.4700		CARTER,NPB26,445-71	
	1.387	.120	.219	101.0400	1.0100		CARTER,NPB26,445-71	
	1.401	.128	.228	122.0000	8.0000		ASHKIN PR96,1104-54	
	1.414	.135	.236	126.0000	4.0000		ASHKIN PR96,1104-54	
	1.414	.135	.236	126.0000	20.0000		ANDERSON PR91,155-53	
	1.414	.135	.236	149.0000	14.0000		ANDERSON PR91,155-53	
	1.418	.136	.238	141.1900	.5700		CARTER,NPB26,445-71	
	1.422	.139	.241	148.6000	.5500		CARTER,NPB26,445-71	
	1.424	.140	.242	133.0000	8.0000		IGNATENKO JETP3,10-56	
	1.429	.142	.245	150.0000	8.0000		ASHKIN PR96,1104-54	
	1.431	.143	.246	140.5000	5.0000		LINDENB.PR111,1380-58	
	1.432	.144	.247	151.0000	4.0000		IGNATENKO JETP3,10-56	
	1.435	.146	.249	150.0000	7.0000		LINDENB.PR100,306-55	
	1.444	.150	.254	164.5000	4.6000		ASHKIN PR101,1149-56	
	1.444	.150	.254	166.6000	5.0000		ASHKIN PR101,1149-56	
	1.445	.151	.255	151.0000	19.0000		GRANDEY PR97,791-55	
	1.447	.152	.256	175.0000	6.0000		ASHKIN PR96,1104-54	
	1.454	.156	.260	189.6600	.6400		CARTER,NPB26,445-71	
	1.455	.156	.261	170.0000	5.0000		ASHKIN PR96,1104-54	
	1.457	.157	.262	162.0000	7.0000		LINDENB.PR100,306-55	
	1.465	.162	.267	170.5000	3.5000		LINDENB.PR111,1380-58	
	1.470	.164	.270	169.0000	5.0000		IGNATENKO JETP3,10-56	
	1.472	.165	.271	188.2000	5.4000		ANDERSON PR100,268-55	
	1.472	.165	.271	199.0000	11.0000		ANDERSON PR100,268-55	
	1.473	.166	.272	187.0000	7.0000		ASHKIN PR96,1104-54	
	1.473	.166	.272	176.0000	7.0000		LINDENB.PR100,306-55	
	1.473	.166	.272	194.0000	12.0000		ASHKIN PR96,1104-54	
	1.473	.166	.272	188.0000	11.0000		ASHKIN PR96,1104-54	
	1.473	.166	.272	182.0000	6.0000		LINDENB.PR100,306-55	
	1.477	.168	.274	204.2400	.6500		CARTER,NPB26,445-71	
	1.480	.170	.276	201.6000	6.0000		ASHKIN PR101,1149-56	
	1.480	.170	.276	194.9000	5.5000		ASHKIN PR101,1149-56	
	1.480	.170	.276	198.0000	3.5000		LINDENB.PR111,1380-58	
	1.482	.171	.277	205.0000	6.0000		ASHKIN PR96,1104-54	
	1.482	.171	.277	196.0000	6.0000		ASHKIN PR96,1104-54	
	1.482	.171	.277	210.0000	12.0000		ASHKIN PR96,1104-54	
	1.482	.171	.277	204.0000	6.0000		LINDENB.PR100,306-55	
	1.487	.173	.280	205.0000	6.0000		LINDENB.PR100,306-55	
	1.487	.173	.280	193.5000	3.5000		LINDENB.PR111,1380-58	
	1.489	.174	.281	193.0000	6.0000		IGNATENKO JETP3,10-56	
	1.492	.176	.283	193.0000	6.0000		MUKHIN JETP4,237-57	
	1.492	.176	.283	199.4000	4.9000		MUKHIN JETP4,237-57	
	1.494	.177	.284	198.0000	5.0000		LINDENB.PR111,1380-58	
	1.502	.181	.289	187.0000	7.0000		LINDENB.PR100,306-55	
	1.504	.182	.290	202.9100	.6700		CARTER,NPB26,445-71	
	1.504	.182	.290	166.0000	20.0000		ASHKIN PR96,1104-54	
	1.505	.183	.291	192.0000	3.5000		LINDENB.PR111,1380-58	
	1.507	.184	.292	196.0000	6.0000		IGNATENKO JETP3,10-56	
	1.509	.185	.293	188.0000	8.0000		ASHKIN PR96,1104-54	
	1.516	.189	.297	194.1000	5.2000		ANDERSON PR100,279-55	
	1.517	.189	.298	182.0000	7.0000		LINDENB.PR100,306-55	
	1.526	.194	.303	200.0000	6.0000		IGNATENKO JETP3,10-56	
	1.528	.195	.304	174.0000	4.0000		LINDENB.PR111,1380-58	
	1.529	.196	.305	202.0000	14.0000		ASHKIN PR96,1104-54	
	1.538	.200	.310	177.9000	3.7000		MUKHIN JETP4,237-57	
	1.546	.205	.315	173.4600	.5900		CARTER,NPB26,445-71	
	1.546	.205	.315	178.0000	4.5000		LINDENB.PR111,1380-58	
	1.553	.209	.319	179.0000	6.0000		IGNATENKO JETP3,10-56	
	1.557	.210	.321	148.0000	20.0000		LINDENB.PR100,306-55	
	1.564	.214	.325	141.0000	7.0000		LINDENB.PR100,306-55	
	1.569	.217	.328	150.9000	17.5000		TAFT PR101,1116-56	
	1.572	.219	.330	156.0000	7.0000		IGNATENKO JETP3,10-56	
	1.574	.220	.331	140.9000	4.2000		ASHKIN PR105,724-57	
	1.579	.222	.334	148.0000	7.0000		LINDENB.PR100,306-55	
	1.591	.229	.341	132.0000	7.0000		IGNATENKO JETP3,10-56	
	1.591	.229	.341	134.8100	.4400		CARTER,NPB26,445-71	
	1.612	.240	.353	127.2000	3.6000		MUKHIN JETP4,237-57	
	1.612	.240	.353	125.6000	2.5000		MUKHIN JETP4,237-57	
	1.626	.247	.361	114.5000	2.9000		TROKA PR144,1115-66	
	1.638	.254	.368	100.6300	.3600		CARTER,NPB26,445-71	
	1.654	.262	.377	111.0000	7.0000		LINDENB.PR100,306-55	
	1.656	.263	.378	107.0000	7.0000		LINDENB.PR100,306-55	
	1.668	.270	.385	81.3000	3.1000		MUKHIN JETP4,237-57	
	1.668	.270	.385	85.2000	3.0000		MUKHIN JETP4,237-57	
	1.688	.280	.396	88.0000	11.0000		LINDENB.PR100,306-55	
	1.693	.283	.399	73.8200	.3000		CARTER,NPB26,445-71	
	1.721	.298	.415	75.0000	5.0000		LINDENB.PR100,306-55	
	1.737	.307	.424	65.7000	2.2000		MUKHIN JETP4,237-57	
	1.737	.307	.424	68.5000	2.4000		MUKHIN JETP4,237-57	
	1.743	.310	.427	60.3000	1.2000		BIZARD NC44A,999-66	
	1.759	.318	.436	58.9200	1.1600		BIZARD NC44A,999-66	
	1.791	.335	.454	53.0000	5.0000		LINDENB.PR100,306-55	
	1.800	.340	.459	48.0000	9.0000		LINDENB.PR100,306-55	
	1.809	.345	.464	41.2300	.9000		CARTER PR168,1457-68	
	1.814	.348	.467	45.2200	.8400		BIZARD NC44A,999-66	
	1.852	.368	.488	40.6900	.7400		BIZARD NC44A,999-66	
	1.854	.369	.489	35.3200	.7500		CARTER PR168,1457-68	
	1.856	.370	.490	39.3000	.8000		BIZARD NC44,999-66	

PI+P

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 1								
TOTAL	1.867	.376	.496	40.3900	1.6200		BRISSON NC19,210-61	
(CONTINUATION)	1.879	.382	.503	40.7800	1.6200		BRISSON PRL3,561-61	
	1.896	.391	.512	31.1500	.6000		CARTER PR168,1457-68	1
	1.908	.398	.519	34.5800	.6400		BIZARD NC44A,999-66	
	1.932	.410	.532	31.4000	.8000		BIZARD NC44A,999-66	
	1.946	.418	.540	27.1100	.5500		CARTER PR168,1457-68	
	1.946	.418	.540	29.0400	.5500		BIZARD NC44A,999-66	
	1.983	.438	.560	26.5300	.5200		BIZARD NC44A,999-66	
	1.992	.442	.565	24.3600	.4200		CARTER PR168,1457-68	1
	2.005	.449	.572	24.8000	2.4000		COOL PR103,1082-56	
	2.006	.450	.573	27.5000	6.0000		LINDENB.PR100,306-55	
	2.006	.450	.573	25.7000	.5000		BIZARD NC44A,999-66	
	2.019	.457	.580	29.4400	1.6000		DEVLIN PR125,696-62	
	2.019	.457	.580	29.4400	1.6300		DEVLIN PR125,696-62	
	2.021	.458	.581	23.7900	.8400		BIZARD NC44A,999-66	
	2.041	.469	.592	23.4700	1.0800		BRISSON NC19,210-61	
	2.045	.471	.594	21.4500	.3800		CARTER PR168,1457-68	
	2.056	.476	.600	16.0600	.8000		BARLOUT.NC26,1409-62	
	2.056	.476	.600	23.6700	1.0800		BRISSON PRL3,561-61	
	2.059	.478	.602	22.2300	.7800		BIZARD NC44A,999-66	
	2.059	.478	.602	21.7800	.5900		BIZARD NC44A,999-66	
	2.081	.490	.614	21.5000	.7000		BIZARD NC44A,999-66	
	2.094	.497	.621	23.8000	1.1000		DEVLIN PRL14,1031-65	
	2.102	.501	.625	18.9500	.2700		CARTER PR168,1457-68	
	2.111	.506	.630	24.1400	2.1100		DEVLIN PR125,690-62	
	2.114	.508	.632	19.3700	.5300		BIZARD NC44A,999-66	
	2.147	.525	.650	20.3400	.5000		STIRLING CEA-R2838-66	
	2.155	.529	.654	17.1100	.2400		CARTER PR168,1457-68	
	2.155	.529	.654	22.8700	1.8000		DEVLIN PR125,690-62	
	2.162	.533	.658	18.1000	.7000		BIZARD NC44A,999-66	
	2.184	.545	.670	16.1000	2.5000		COOL PR103,1082-56	
	2.208	.558	.683	14.9300	.4100		BIZARD NC44A,999-66	
	2.210	.559	.684	14.9300	.4100		BIZARD NC44A,999-66	
	2.212	.559	.685	16.0100	.2200		CARTER PR168,1457-68	
	2.226	.567	.693	17.2600	.8200		BRISSON NC19,210-61	
	2.239	.574	.700	17.3700	.8200		BRISSON PRL3,561-61	
	2.250	.580	.706	16.2000	.8000		BIZARD NC44A,999-66	
	2.259	.585	.711	15.1600	.2100		CARTER PR168,1457-68	1
	2.280	.596	.722	18.6000	1.0000		DEVLIN PRL14,1031-65	
	2.287	.600	.726	15.7000	.6000		BIZARD NC44A,999-66	
	2.287	.600	.726	16.0600	.8000		BARLOUT.NC26,1409-62	
	2.294	.604	.730	15.0000	.2100		CARTER PR168,1457-68	
	2.326	.620	.747	16.2800	.3000		STIRLING CEA-R2838-66	
	2.337	.626	.753	15.1100	.7200		BRISSON NC19,210-61	
	2.350	.633	.760	15.1600	.7200		BRISSON PRL3,561-61	
	2.357	.637	.764	14.7100	.2000		CARTER PR168,1457-68	
	2.381	.650	.777	15.1000	.5000		BIZARD NC44A,999-66	
	2.383	.651	.778	17.9500	1.3400		DEVLIN PR125,690-62	
	2.392	.656	.783	16.1000	.8000		DEVLIN PRL14,1031-65	
	2.407	.664	.791	14.7500	.6700		BRISSON NC19,210-61	
	2.413	.667	.794	15.2100	.1800		CARTER PR168,1457-68	
	2.418	.670	.797	15.4700	.3000		STIRLING CEA-R2838-66	
	2.424	.673	.800	14.5000	2.0000		COOL PR103,1082-56	
	2.426	.673	.801	14.7700	.6700		BRISSON PRL3,561-61	
	2.446	.684	.812	15.7500	.1800		CARTER PR168,1457-68	
	2.457	.690	.818	15.9600	.1800		CARTER PR168,1457-68	
	2.466	.695	.823	18.0000	.7000		DEVLIN PRL14,1031-65	
	2.472	.698	.826	16.6000	.5000		BIZARD NC44A,999-66	
	2.475	.700	.828	17.0000	3.0000		LINDENB.PR100,306-55	
	2.494	.710	.838	16.8900	.1800		CARTER PR168,1457-68	
	2.513	.720	.848	17.9000	.3000		STIRLING CEA-R2838-66	
	2.550	.740	.868	18.6000	.1800		CARTER PR168,1457-68	
	2.559	.745	.873	18.6600	.3000		STIRLING CEA-R2838-66	
	2.568	.749	.878	21.5800	.6500		DEVLIN PR125,690-62	
	2.579	.755	.884	20.7000	.7000		DEVLIN PRL14,1031-65	
	2.600	.766	.895	20.9700	.0500		BAKER,NPB18,29-70	
	2.603	.768	.897	20.3800	.1800		CARTER PR168,1457-68	1
	2.607	.770	.899	19.4400	.8000		BRISSON NC19,210-61	
	2.607	.770	.899	20.6800	.3500		STIRLING CEA-R2838-66	
	2.609	.771	.900	20.9700	ERROR NOT GIVEN		GIACOMELLI PC-67	
	2.622	.778	.907	19.4400	.8000		BRISSON PRL3,561-61	
	2.646	.791	.920	19.5000	2.0000		COOL PR103,1082-56	
	2.653	.795	.924	23.0000	.6000		DEVLIN PRL14,1031-65	
	2.666	.802	.931	22.2900	.1800		CARTER PR168,1457-68	
	2.672	.805	.934	24.9800	.7400		DEVLIN PR125,690-62	
	2.692	.816	.945	23.7400	.0500		BAKER,NPB18,29-70	
	2.692	.816	.945	23.4300	.6100		BRISSON NC19,210-61	
	2.696	.818	.947	21.4000	.8100		BRISSON NC19,210-61	
	2.700	.820	.949	21.4000	ERROR NOT GIVEN		BARLOUTA. NC27,238-63	
	2.700	.820	.949	23.5000	.4000		STIRLING CEA-R2838-66	
	2.702	.821	.950	23.7400	ERROR NOT GIVEN		GIACOMELLI PC-67	
	2.715	.828	.957	21.3600	.8100		BRISSON PRL3,561-61	
	2.724	.832	.962	23.3800	.1800		CARTER PR168,1457-68	1
	2.729	.835	.965	24.4000	.4000		DEVLIN PRL14,1031-65	S
	2.735	.838	.968	22.4900	.8300		BRISSON NC19,210-61	
	2.752	.847	.977	22.4200	.8300		BRISSON PRL3,561-61	
	2.765	.854	.984	25.1000	.4000		DEVLIN PRL14,1031-65	S
	2.778	.861	.991	27.1000	.5000		DEVLIN PR125,690-62	
	2.780	.862	.992	24.1000	.1700		CARTER PR168,1457-68	
	2.782	.863	.993	21.8800	.8600		BRISSON NC19,210-61	
	2.785	.865	.995	25.2900	.0500		BAKER,NPB18,29-70	
	2.787	.866	.996	23.3700	.6800		BRISSON NC19,210-61	
	2.795	.870	1.000	24.4300	.4000		STIRLING CEA-R2838-66	
	2.798	.872	1.002	21.8500	.8600		BRISSON PRL3,561-61	
	2.821	.884	1.014	25.3500	.5000		STIRLING CEA-R2838-66	
	2.832	.890	1.020	25.7900	.3900		DEVLIN PR125,690-62	
	2.832	.890	1.020	24.5800	.1700		CARTER PR168,1457-68	1
	2.841	.895	1.025	25.9000	.5000		DEVLIN PRL14,1031-65	S
	2.850	.900	1.030	23.2000	ERROR NOT GIVEN		BARLOUTA. NC27,238-63	
	2.861	.906	1.036	27.0400	.8000		DEVLIN PR125,690-62	
	2.869	.910	1.040	26.1100	.0500		BAKER,NPB18,29-70	
	2.871	.911	1.041	25.9000	.8000		FOELSCHE,36,CERN62	
	2.878	.915	1.045	23.1200	.7400		BRISSON NC19,210-61	
	2.886	.919	1.049	25.3000	.1700		CARTER PR168,1457-68	
	2.887	.920	1.050	25.2800	.4500		STIRLING CEA-R2838-66	

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA
S=STATISTICAL ERROR ONLY

********** PI+P **********

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 1								
TOTAL								
(CONTINUATION)	2.887	.920	1.050	26.1100	.0600		GIACOMELLI PC-67	
	2.895	.924	1.054	26.5000	.4000		DEVLIN PRL14,1031-65	S
	2.949	.952	1.083	26.9800	.6600		DEVLIN PR125,690-62	
	2.951	.953	1.084	26.5000	.5000		DEVLIN PRL14,1031-65	S
	2.962	.959	1.090	25.9700	.1800		CARTER PR168,1457-68	
	2.973	.965	1.096	23.8000	.7800		BRISSON NC19,210-61	
	2.981	.969	1.100	26.9300	.0600		GIACOMELLI PC-67	
	2.982	.970	1.101	26.2800	.4500		STIRLING CEA-R2838-66	
	3.025	.993	1.124	26.5000	.5000		DEVLIN PRL14,1031-65	S
	3.035	.998	1.129	28.9000	.5800		DEVLIN PR125,690-62	
	3.036	.999	1.130	23.5000	1.4000		COOL PR103,1082-56	
	3.038	1.000	1.131	27.1500	.1800		CARTER PR168,1457-68	1
	3.064	1.014	1.145	25.8500	.8400		BRISSON NC19,210-61	
	3.074	1.019	1.150	27.9500	.0600		GIACOMELLI PC-67	
	3.075	1.020	1.151	28.0500	.5000		STIRLING CEA-R2838-66	
	3.102	1.034	1.165	27.8000	.4000		DEVLIN PRL14,1031-65	S
	3.111	1.039	1.170	28.5700	.1900		CARTER PR168,1457-68	1
	3.116	1.042	1.173	29.6900	.4400		DEVLIN PR125,690-62	
	3.131	1.050	1.181	26.5000	ERROR NOT GIVEN		BARLOUTA. NC27,238-63	
	3.139	1.054	1.185	29.0000	.4000		DEVLIN PRL14,1031-65	S
	3.146	1.058	1.189	30.4000	.5000		STIRLING CEA-R2838-66	
	3.157	1.064	1.195	26.7800	.9400		BRISSON NC19,210-61	
	3.167	1.069	1.200	27.3000	3.7000		COOL PR103,1082-56	
	3.167	1.069	1.200	29.9400	.1900		CARTER PR168,1457-68	1
	3.167	1.069	1.200	29.4800	.0600		GIACOMELLI PC-67	
	3.169	1.070	1.201	31.4400	.6000		STIRLING CEA-R2838-66	
	3.208	1.090	1.222	30.9000	1.0000		FOELSCHE,36,CERN62	
	3.208	1.090	1.222	30.1000	1.6000		STONEHILL PRL6,624-61	
	3.213	1.093	1.225	31.0000	.5000		DEVLIN PRL14,1031-65	S
	3.223	1.098	1.230	31.4500	.1900		CARTER PR168,1457-68	1
	3.226	1.100	1.232	31.8000	.4400		DEVLIN PR125,690-62	
	3.253	1.114	1.246	27.5100	1.0700		BRISSON NC19,210-61	
	3.260	1.118	1.250	31.7400	.0600		GIACOMELLI PC-67	
	3.264	1.120	1.252	32.5600	.6000		STIRLING CEA-R2838-66	
	3.277	1.127	1.259	33.2000	.1900		CARTER PR168,1457-68	
	3.312	1.146	1.278	35.7000	.5800		DEVLIN PR125,690-62	
	3.312	1.146	1.278	34.5400	.1900		CARTER PR168,1457-68	
	3.316	1.148	1.280	31.3000	1.7000		COOL PR103,1082-56	
	3.327	1.154	1.286	33.7000	.4000		DEVLIN PRL14,1031-65	S
	3.333	1.157	1.289	35.0000	.5500		STIRLING CEA-R2838-66	
	3.346	1.164	1.296	30.6500	1.1900		BRISSON NC19,210-61	
	3.351	1.167	1.299	35.8500	.1900		CARTER PR168,1457-68	
	3.353	1.168	1.300	34.4400	.0600		GIACOMELLI PC-67	
	3.357	1.170	1.302	35.9300	.7000		STIRLING CEA-R2838-66	
	3.381	1.183	1.315	36.7600	.4100		DEVLIN PR125,690-62	
	3.400	1.193	1.325	36.1000	.4000		DEVLIN PRL14,1031-65	S
	3.422	1.205	1.337	38.3300	.1800		CARTER PR168,1457-68	1
	3.426	1.207	1.339	38.3000	.5500		STIRLING CEA-R2838-66	
	3.437	1.213	1.345	35.2700	1.3700		BRISSON NC19,210-61	
	3.447	1.218	1.350	37.8000	.0600		GIACOMELLI PC-67	
	3.476	1.234	1.366	38.1000	.6000		DEVLIN PRL14,1031-65	S
	3.488	1.240	1.372	39.5300	.7200		DEVLIN PR125,696-62	
	3.490	1.240	1.373	39.5300	.7200		DEVLIN PR125,690-62	
	3.499	1.245	1.378	40.0500	.1600		CARTER PR168,1457-68	
	3.503	1.247	1.380	38.8000	2.5000		COOL PR103,1082-56	
	3.512	1.252	1.385	39.9000	.4000		DEVLIN PRL14,1031-65	S
	3.527	1.260	1.393	40.5000	1.3000		FOELSCHE,36,CERN62	
	3.532	1.263	1.396	36.6400	1.5600		BRISSON NC19,210-61	
	3.540	1.267	1.400	39.9700	.0600		GIACOMELLI PC-67	
	3.540	1.267	1.400	39.4000	.6000		LONGO PRL3,568-59	
	3.546	1.270	1.403	40.9200	.1600		CARTER PR168,1457-68	1
	3.546	1.270	1.403	41.3000	.8700		STIRLING CEA-R2838-66	
	3.566	1.281	1.414	41.2500	.6000		STIRLING CEA-R2838-66	
	3.577	1.287	1.420	39.5000	.5000		LONGO PR125,701-62	
	3.579	1.288	1.421	37.3700	1.4500		BRISSON NC19,210-61	
	3.587	1.292	1.425	40.6000	.4000		DEVLIN PRL14,1031-65	S
	3.603	1.301	1.434	41.4600	.1600		CARTER PR168,1457-68	1
	3.626	1.313	1.446	38.0700	1.4700		BRISSON NC19,210-61	
	3.633	1.317	1.450	40.8600	.0600		GIACOMELLI PC-67	
	3.639	1.320	1.453	41.5500	.9000		STIRLING CEA-R2838-66	
	3.652	1.327	1.460	39.1000	.8000		LONGO PRL3,568-59	
	3.669	1.336	1.469	41.5600	.5800		DEVLIN PR125,690-62	
	3.673	1.338	1.471	37.6500	1.5400		BRISSON NC19,210-61	
	3.680	1.342	1.475	40.9000	.4000		DEVLIN PRL14,1031-65	S
	3.682	1.343	1.476	41.0200	.1600		CARTER PR168,1457-68	
	3.706	1.356	1.489	41.4000	.6000		STIRLING CEA-R2838-66	
	3.719	1.363	1.496	36.1600	1.5600		BRISSON NC19,210-61	
	3.727	1.367	1.500	40.2100	.0500		GIACOMELLI PC-67	
	3.732	1.370	1.503	42.5200	1.0000		STIRLING CEA-R2838-66	
	3.738	1.373	1.506	40.2500	.1800		CARTER PR168,1457-68	
	3.745	1.377	1.510	41.4000	3.0000		COOL PR103,1082-56	
	3.758	1.384	1.517	40.0800	.1800		CARTER PR168,1457-68	
	3.773	1.392	1.525	39.5000	.5000		DEVLIN PRL14,1031-65	S
	3.811	1.412	1.545	36.5300	1.6000		BRISSON NC19,210-61	
	3.820	1.417	1.550	38.5700	.0500		GIACOMELLI PC-67	
	3.831	1.423	1.556	38.3200	.1800		CARTER PR168,1457-68	1
	3.848	1.432	1.565	38.2000	.4000		DEVLIN PRL14,1031-65	S
	3.863	1.440	1.573	39.5300	.5000		DEVLIN PR125,690-62	
	3.874	1.446	1.579	38.0000	.6000		STIRLING CEA-R2838-66	
	3.904	1.462	1.595	34.1000	1.5900		BRISSON NC19,210-61	
	3.914	1.466	1.600	36.5200	.0500		GIACOMELLI PC-67	
	3.914	1.466	1.600	40.0000	.4000		DARONIAN NC41A,503-66	
	3.914	1.466	1.600	36.5000	.9700		LONGO PR125,701-62	
	3.923	1.471	1.605	36.0500	.1700		CARTER PR168,1457-68	1
	3.958	1.490	1.624	36.1000	.5000		DEVLIN PRL14,1031-65	S
	3.970	1.496	1.630	35.3000	2.5000		COOL PR103,1082-56	
	3.988	1.506	1.640	34.9000	.4700		DIDDENS PRL10,262-63	
	3.996	1.510	1.644	39.2700	.7400		DEVLIN PR125,690-62	
	4.007	1.516	1.650	34.7600	.0500		GIACOMELLI PC-67	
	4.015	1.520	1.654	34.5700	.2000		CARTER PR168,1457-68	1
	4.035	1.531	1.665	34.4000	.4000		DEVLIN PRL14,1031-65	S
	4.080	1.555	1.689	33.8500	.5500		STIRLING CEA-R2838-66	
	4.101	1.566	1.700	33.1100	.0500		GIACOMELLI PC-67	
	4.140	1.587	1.721	32.2000	.2300		CARTER PR168,1457-68	
	4.145	1.590	1.724	32.7000	.4000		DEVLIN PRL14,1031-65	S

FOOTNOTES

S=STATISTICAL ERROR ONLY
1=AVERAGE VALUE OVER A BAND OF MOMENTA

PI+P

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR + -	REFERENCE	FOOT-NOTES
..... REACTION 1							
TOTAL	4.157	1.596	1.730	30.3000	.4200	LONGO PR125,701-62	
(CONTINUATION)	4.194	1.616	1.750	31.7800	.0500	GIACOMELLI PC-67	
	4.222	1.631	1.765	31.5000	.4000	DEVLIN PRL14,1031-65	S
	4.260	1.651	1.785	31.0700	.2500	CARTER PR168,1457-68	
	4.267	1.655	1.789	31.4000	.5500	STIRLING CEA-R2838-66	
	4.288	1.666	1.800	32.6000	1.8000	COOL PR103,1082-56	
	4.288	1.666	1.800	30.9300	.0500	GIACOMELLI PC-67	
	4.334	1.691	1.825	30.2000	.4000	DEVLIN PRL14,1031-65	S
	4.344	1.696	1.830	30.6200	.4700	DIDDENS PRL10,262-63	
	4.381	1.716	1.850	30.1300	.0500	GIACOMELLI PC-67	
	4.383	1.717	1.851	30.1500	.2600	CARTER PR168,1457-68	1
	4.456	1.756	1.890	29.0000	.7500	LONGO PR125,701-62	
	4.475	1.766	1.900	29.5900	.0500	GIACOMELLI PC-67	
	4.475	1.766	1.900	31.7000	2.4000	COOL PR103,1082-56	
	4.520	1.789	1.924	29.9000	.3000	DEVLIN PRL14,1031-65	S
	4.529	1.794	1.929	29.5300	.2800	CARTER PR168,1457-68	
	4.568	1.815	1.950	29.2000	.0500	GIACOMELLI PC-67	
	4.576	1.819	1.954	29.4000	.2900	CARTER PR168,1457-68	
	4.643	1.855	1.990	29.2300	.4400	DIDDENS PRL10,262-63	
	4.662	1.865	2.000	29.0700	.0400	GIACOMELLI PC-67	
	4.669	1.869	2.004	29.3300	.3000	CARTER PR168,1457-68	
	4.737	1.905	2.040	29.3100	.4300	DIDDENS PRL10,262-63	
	4.741	1.907	2.042	29.2800	.3200	CARTER PR168,1457-68	
	4.756	1.915	2.050	28.3000	.6300	LONGO PR125,701-62	
	4.761	1.918	2.053	29.2100	.3200	CARTER PR168,1457-68	
	4.806	1.942	2.077	28.7500	1.0000	JAMES PR142,896-66	
	4.849	1.965	2.100	29.1100	.0400	GIACOMELLI PC-67	
	4.851	1.966	2.101	29.2800	.3400	CARTER PR168,1457-68	
	4.868	1.975	2.110	29.1700	.0400	CITRON PR144,1101-66	
	4.924	2.005	2.140	29.0700	.3000	DIDDENS PRL10,262-63	
	5.036	2.065	2.200	29.4200	.0400	GIACOMELLI PC-67	
	5.055	2.075	2.210	29.4140	.0300	CITRON PR144,1101-66	
	5.130	2.115	2.250	30.0100	.2900	DIDDENS PRL10,262-63	
	5.224	2.165	2.300	29.7900	.0400	GIACOMELLI PC-67	
	5.261	2.185	2.320	29.8470	.0200	CITRON PR144,1101-66	
	5.317	2.215	2.350	30.8900	.2700	DIDDENS PRL10,262-63	
	5.411	2.264	2.400	30.1400	.0400	GIACOMELLI PC-67	
	5.449	2.284	2.420	30.4390	.0200	CITRON PR144,1101-66	
	5.523	2.324	2.460	31.1000	.2600	DIDDENS PRL10,262-63	
	5.540	2.333	2.469	30.9900	.4200	CARTER PR168,1457-68	
	5.542	2.334	2.470	29.2000	.5700	LONGO PR125,701-62	
	5.636	2.384	2.520	30.7620	.0200	CITRON PR144,1101-66	
	5.711	2.424	2.560	30.5500	.2700	DIDDENS PRL10,262-63	
	5.786	2.464	2.600	30.6100	.2500	BAKER ,634,SIENNA63	
	5.823	2.484	2.620	30.8240	.0200	CITRON PR144,1101-66	
	5.898	2.524	2.660	30.8900	.2700	DIDDENS PRL10,262-63	
	5.954	2.554	2.690	29.3000	.5000	VOVENKO,385,CERN62	
	6.011	2.584	2.720	30.6180	.0200	CITRON PR144,1101-66	
	6.104	2.634	2.770	29.9900	.2700	DIDDENS PRL10,262-63	
	6.198	2.684	2.820	30.1500	.0200	CITRON PR144,1101-66	
	6.292	2.734	2.870	29.8700	.2600	DIDDENS PRL10,262-63	
	6.385	2.784	2.920	28.7000	.5000	PERL PR132,1252-63	
	6.385	2.784	2.920	29.6610	.0200	CITRON PR144,1101-66	
	6.479	2.834	2.970	29.4900	.2300	DIDDENS PRL10,262-63	
	6.479	2.834	2.970	29.5000	.5300	LONGO PR125,701-62	
	6.535	2.864	3.000	29.1500	.1400	BAKER ,634,SIENNA63	
	6.573	2.884	3.020	29.1670	.0200	CITRON PR144,1101-66	
	6.667	2.934	3.070	28.9600	.3500	DIDDENS PRL10,262-63	
	6.760	2.984	3.120	28.8310	.0150	CITRON PR144,1101-66	
	6.798	3.004	3.140	29.6000	.4000	VOVENKO,385,CERN62	
	6.854	3.033	3.170	28.8400	.2200	DIDDENS PRL10,262-63	
	6.948	3.083	3.220	28.5940	.0150	CITRON PR144,1101-66	
	7.060	3.143	3.280	28.3800	.2700	DIDDENS PRL10,262-63	
	7.135	3.183	3.320	28.4040	.0150	CITRON PR144,1101-66	
	7.285	3.263	3.400	27.8900	.1800	BAKER ,634,SIENNA63	
	7.323	3.283	3.420	28.3160	.0150	CITRON PR144,1101-66	
	7.398	3.323	3.460	29.3000	.4000	VOVENKO,385,CERN62	
	7.510	3.383	3.520	28.2240	.0150	CITRON PR144,1101-66	
	7.548	3.403	3.540	28.4300	.2200	DIDDENS PRL10,262-63	
	7.623	3.443	3.580	28.6000	.4600	LONGO PR125,701-62	
	7.698	3.483	3.620	28.1840	.0150	CITRON PR144,1101-66	
	7.829	3.553	3.690	27.9900	.1600	DIDDENS PRL10,262-63	
	7.848	3.563	3.700	28.4000	1.4000	VOVENKO,385,CERN62	
	7.848	3.563	3.700	30.0000	1.2000	LIKHACH.JETP14,29-62	
	7.885	3.583	3.720	28.0690	.0150	CITRON PR144,1101-66	
	8.035	3.663	3.800	27.7400	.2300	BAKER ,634,SIENNA63	
	8.073	3.683	3.820	27.9960	.0100	CITRON PR144,1101-66	
	8.223	3.763	3.900	27.7000	.2300	DIDDENS PRL10,262-63	
	8.279	3.793	3.930	27.8510	.0100	CITRON PR144,1101-66	
	8.410	3.863	4.000	27.8000	.5300	LONGO PR125,701-62	
	8.467	3.893	4.030	27.7210	.0100	CITRON PR144,1101-66	
	8.617	3.973	4.110	27.3700	.2600	DIDDENS PRL10,262-63	
	8.654	3.993	4.130	27.5590	.0100	CITRON PR144,1101-66	
	8.786	4.063	4.200	27.4500	.1400	BAKER ,634,SIENNA63	
	8.842	4.093	4.230	27.3920	.0100	CITRON PR144,1101-66	
	9.011	4.183	4.320	27.8400	.2300	DIDDENS PRL10,262-63	
	9.029	4.193	4.330	27.2430	.0100	CITRON PR144,1101-66	
	9.067	4.213	4.350	26.1000	.9000	VOVENKO,385,CERN62	
	9.217	4.293	4.430	27.0910	.0100	CITRON PR144,1101-66	
	9.348	4.363	4.500	27.6000	.3000	V. DARDEL PRL7,127-61	
	9.404	4.393	4.530	27.2200	.2300	DIDDENS PRL10,262-63	
	9.404	4.393	4.530	26.9710	.0100	CITRON PR144,1101-66	
	9.536	4.463	4.600	26.5300	.1800	BAKER ,634,SIENNA63	
	9.592	4.493	4.630	26.8660	.0100	CITRON PR144,1101-66	
	9.780	4.592	4.730	26.7740	.0100	CITRON PR144,1101-66	
	9.817	4.612	4.750	27.4000	.5000	VOVENKO,385,CERN62	
	9.817	4.612	4.750	33.3000	1.3000	LIKHACH.JETP14,29-62	
	9.967	4.692	4.830	26.6700	.0100	CITRON PR144,1101-66	
	10.155	4.792	4.930	26.5940	.0100	CITRON PR144,1101-66	
	10.286	4.862	5.000	26.4900	.1400	BAKER ,634,SIENNA63	
	10.342	4.892	5.030	26.4830	.0100	CITRON PR144,1101-66	
	10.530	4.992	5.130	26.4170	.0100	CITRON PR144,1101-66	
	10.717	5.092	5.230	26.3050	.0100	CITRON PR144,1101-66	
	10.905	5.192	5.330	26.2320	.0100	CITRON PR144,1101-66	
	11.036	5.262	5.400	25.8500	.2000	BAKER ,634,SIENNA63	

FOOTNOTES

S=STATISTICAL ERROR ONLY
1=AVERAGE VALUE OVER A BAND OF MOMENTA

********** PI+P **********

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 1								
TOTAL	11.111	5.302	5.440	26.1150	.0100		CITRON PR144,1101-66	
(CONTINUATION)	11.299	5.402	5.540	26.0480	.0100		CITRON PR144,1101-66	
	11.487	5.502	5.640	25.9700	.0250		CITRON PR144,1101-66	
	11.674	5.602	5.740	25.9220	.0250		CITRON PR144,1101-66	
	11.693	5.612	5.750	26.9000	.4000		V. DARDEL PRL7,127-61	
	11.787	5.662	5.800	25.7500	.1600		BAKER ,634,SIENNA63	
	11.862	5.702	5.840	25.7950	.0250		CITRON PR144,1101-66	
	12.049	5.802	5.940	25.7440	.0250		CITRON PR144,1101-66	
	12.162	5.862	6.000	26.2000	.2000		GALBR.PR138B,913-65	
	12.237	5.902	6.040	25.6310	.0250		CITRON PR144,1101-66	
	12.425	6.002	6.140	25.6100	.0250		CITRON PR144,1101-66	
	12.612	6.102	6.240	25.4910	.0250		CITRON PR144,1101-66	
	12.987	6.302	6.440	25.2930	.0250		CITRON PR144,1101-66	
	13.363	6.502	6.640	25.1870	.0250		CITRON PR144,1101-66	
	13.738	6.702	6.840	25.0410	.0250		CITRON PR144,1101-66	
	14.038	6.862	7.000	26.1000	.3000		V. DARDEL PRL7,127-61	
	15.408	7.592	7.730	25.5640	.0840		FOLEY PRL19,330-67	
	15.914	7.862	8.000	25.1000	.2000		GALBR.PR138B,913-65	
	19.367	9.701	9.840	24.9210	.0790		FOLEY PRL19,330-67	
	19.667	9.861	10.000	25.0000	.5000		V. DARDEL PRL8,173-62	
	19.667	9.861	10.000	25.2000	.4000		V. DARDEL PRL7,127-61	
	19.667	9.861	10.000	24.8000	.2000		GALBR.PR138B,913-65	
	23.232	11.761	11.900	24.5170	.0780		FOLEY PRL19,330-67	
	23.419	11.861	12.000	24.8000	.3000		V. DARDEL PRL8,173-62	
	23.419	11.861	12.000	24.2000	.2000		GALBR.PR138B,913-65	
	27.172	13.861	14.000	23.9000	.2000		GALBR.PR138B,913-65	
	27.172	13.861	14.000	24.7000	.3000		V. DARDEL PRL8,173-62	
	27.304	13.931	14.070	24.1870	.0810		FOLEY PRL19,330-67	
	30.850	15.821	15.960	24.0250	.0760		FOLEY PRL19,330-67	
	29.049	14.861	15.000	24.0800	.1200		DENISOV,PL36B,415-71	S5
	30.925	15.861	16.000	23.4000	.2000		GALBR.PR138B,913-65	
	32.802	16.861	17.000	24.6000	.2000		V. DARDEL PRL8,173-62	
	34.678	17.861	18.000	23.5000	.2000		GALBR.PR138B,913-65	
	34.716	17.881	18.020	23.8050	.0810		FOLEY PRL19,330-67	
	35.616	18.361	18.500	23.1000	.7000		HONES,PR2,827-70	
	38.431	19.861	20.000	24.1000	.5000		V. DARDEL PRL8,173-62	
	38.431	19.861	20.000	23.4000	.2000		GALBR.PR138B,913-65	
	38.431	19.861	20.000	23.5200	.1100		DENISOV,PL36B,415-71	S5
	38.975	20.151	20.290	23.7310	.0790		FOLEY PRL19,330-67	
	42.372	21.961	22.100	23.4220	.0980		FOLEY PRL19,330-67	
	47.813	24.861	25.000	23.4300	.1100		DENISOV,PL36B,415-71	S5
	57.196	29.861	30.000	23.3200	.1100		DENISOV,PL36B,415-71	S5
	66.578	34.861	35.000	23.0600	.1100		DENISOV,PL36B,415-71	S5
	75.961	39.861	40.000	23.0800	.1100		DENISOV,PL36B,415-71	S5
	85.343	44.861	45.000	23.1400	.1200		DENISOV,PL36B,415-71	S5
	94.726	49.861	50.000	23.1100	.1200		DENISOV,PL36B,415-71	S5
	104.108	54.861	55.000	23.1400	.1200		DENISOV,PL36B,415-71	S5
	113.491	59.861	60.000	23.3300	.2000		DENISOV,PL36B,415-71	S5
THRESHOLD	1.16	0.00	0.00				468 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

13 DATA POINTS USED ABOVE 20.0 GEV/C , PROB. = .98
K = 25.30 +- .67 N = -.02 +- .01
29 DATA POINTS USED ABOVE 10.0 GEV/C , PROB. = .86
K = 26.87 +- .35 N = -.04 +- .00

..... REACTION 2								
PI+P	1.745	.311	.428	60.1900	1.4100		OGDEN PR137B,1115-65	
	1.856	.370	.490	38.7400	.7300		OGDEN PR137B,1115-65	
	1.932	.410	.532	30.5900	.6600		OGDEN PR137B,1115-65	
	2.006	.450	.573	24.3100	.4900		OGDEN PR137B,1115-65	
	2.006	.450	.573	28.1600	1.6000		POIRIER PR143,1092-66	
	2.039	.468	.591	20.6300	.2700		BOWLER NPB17,331-70	
	2.081	.490	.614	19.5500	.4600		OGDEN PR137B,1115-65	
	2.102	.501	.625	18.5000	.9000		DEBAIS.NP63,273-65	
	2.109	.505	.629	17.2000	3.0000		WILLIS PR116,753-59	
	2.138	.520	.645	14.8500	.4200		BOWLER NPB17,331-70	
	2.162	.533	.658	15.3200	.4700		HELLA. PR134B,1062-63	
	2.193	.550	.675	14.3800	.1900		OGDEN PR137B,1115-65	
	2.236	.572	.698	12.9300	.2400		BOWLER NPB17,331-70	
	2.252	.581	.707	12.1700	.5700		HELLA. PR134B,1062-63	
	2.287	.600	.726	11.0600	.1800		OGDEN PR137B,1115-65	
	2.287	.600	.726	11.6000	.6000		NEWCOMB PR132,1283-63	
	2.287	.600	.726	11.5000	.8000		BARLOUT.NC26,1409-62	
	2.335	.625	.752	10.5500	.2800		BOWLER NPB17,331-70	
	2.381	.650	.777	8.8200	.2200		OGDEN PR137B,1115-65	
	2.440	.681	.809	8.9700	.2900		BOWLER NPB17,331-70	
	2.472	.698	.826	8.0200	.2200		HELLA. PR134B,1062-63	
	2.516	.722	.850	8.3800	.3400		DEBAISIE. NPB5,147-68	
	2.600	.766	.895	8.3700	.1800		BAKKER NPB18,29-70	
	2.627	.781	.910	9.3000	.5000		TILGER PR142,972-66	
	2.683	.811	.940	10.6300	.2000		DELER THESIS-67	
	2.692	.816	.945	10.3200	.1800		BAKKER NPB18,29-70	
	2.700	.820	.949	9.1000	.6000		BARLOUTA. NC27,238-63	
	2.785	.865	.995	11.7000	.2300		BAKKER NPB18,29-70	
	2.795	.870	1.000	12.0000	ERROR NOT GIVEN		BIDAN NC24,334-62	
	2.800	.873	1.003	12.0500	.4500		HELLA. PR134B,1062-63	
	2.850	.900	1.030	12.3900	.4000		BERTHON CEA-R3401-67	
	2.850	.900	1.030	11.1000	.6000		BARLOUTA. NC27,238-63	
	2.869	.910	1.040	12.3700	.2000		BAKKER NPB18,29-70	
	2.871	.911	1.041	12.0000	.4000		FOELSCHE,36,CERN62	
	2.943	.949	1.080	11.1000	.4700		METZGER PR164,1680-67	
	3.020	.990	1.121	15.3000	1.5000		KOPP PR123,301-61	
	3.020	.990	1.121	14.5400	.3100		HELLA. PR134B,1062-63	
	3.130	1.049	1.180	12.8000	.7000		BARLOUTA. NC27,238-63	
	3.208	1.090	1.222	14.5000	.4000		FOELSCHE,36,CERN62	
	3.527	1.260	1.393	17.9000	.5000		FOELSCHE,36,CERN62	
	3.596	1.297	1.430	19.2200	.3400		DELER THESIS-67	
	3.622	1.311	1.444	19.3100	.6100		HELLA. PR134B,1062-63	
	3.727	1.367	1.500	13.8000	2.0000		COOK PR130,762-63	
	3.914	1.466	1.600	16.7000	.4000		DARONIAN NC41A,503-66	

FOOTNOTES

S5=SYSTEMATIC ERROR IS 0.5 PER CENT

********** PI+P **********

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 2								
PI+P	4.080	1.555	1.689	13.0400	.2800		HELLA. PR134B,1062-63	
(CONTINUATION)	4.662	1.865	2.000	10.6000	1.5000		COOK PR130,762-63	
	4.662	1.865	2.000	9.1000	2.0000	1.3000	DAMOUTH PRL11,287-63	
	4.812	1.945	2.080	9.4600	.4000		JAMES PR142,896-66	
	5.317	2.215	2.350	10.2000	.5000		ALFF PR145,1072-66	
	5.598	2.364	2.500	6.9000	1.0000		COOK PR130,762-63	
	6.067	2.614	2.750	8.2200	.1800		SACLAY-63 TBP NC	
	6.104	2.634	2.770	7.7000	1.3200		YAMAMO. PR173,1302-68	
	6.348	2.764	2.900	8.3000	.7000		ALFF PR145,1072-66	
	6.385	2.784	2.920	5.1000	1.0000		PERL PR132,1252-63	
	7.548	3.403	3.540	4.8600	.5000		ABOLINS PR136B,195-64	
	8.223	3.763	3.900	6.5000	.1000		BASTIEN,PR3,2047-71	S
	8.410	3.863	4.000	6.4200	ERROR NOT GIVEN		ADERH.PR138B,897-65	
	10.286	4.862	5.000	5.8500	.1800		SCHOTANUS,NPB22,45-70	
	13.663	6.662	6.800	5.4700	.1400		FOLEY PRL11,425-63	
	15.989	7.902	8.040	4.9000	.1000		ADERHOLZ NPB8,45-68	
	16.852	8.362	8.500	4.6000	.4200		HARTING NC38,60-65	
	17.415	8.662	8.800	5.0200	.1000		FOLEY PRL11,425-63	
	21.168	10.661	10.800	4.7500	.1000		FOLEY PRL11,425-63	
	24.170	12.261	12.400	3.9200	.3700		HARTING NC38,60-65	
	24.921	12.661	12.800	4.5400	.1300		FOLEY PRL11,425-63	
	28.673	14.661	14.800	4.4600	.1500		FOLEY PRL11,425-63	
	32.239	16.561	16.700	3.9800	.1500		FOLEY PRL11,425-63	
THRESHOLD	1.16	0.00	0.00				67 DATA POINTS LISTED	
				FIT OF SIGMA AGAINST PLAB GEV/C				
				10 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .95				
				K = 9.10 +- 1.17 N = -.28 +- .06				
..... REACTION 3								
MPI	2.287	.600	.726	.3700	.1500		BARLOUTA. NC26,1409-6	2
	2.702	.821	.950	1.1000	.5000		BARLOUTA. NC27,238-63	
	2.850	.900	1.030	1.0000	.5000		BARLOUTA. NC27,238-63	
	2.869	.910	1.040	1.3000	.3000		STONEHILL PRL6,624-61	
	3.130	1.049	1.180	2.6000	.6000		BARLOUTA. NC27,238-63	
	3.208	1.090	1.222	3.9000	.6000		STONEHILL PRL6,624-61	
	3.527	1.260	1.393	6.9000	.9000		STONEHILL PRL6,624-61	
THRESHOLD	1.39	.12	.22				7 DATA POINTS LISTED	
..... REACTION 4								
STRANGE PARTICLES	3.521	1.257	1.390	.4600	.0600		FOELSCHE BNL-YALE-64	
	4.101	1.566	1.700	.7000	.0400		PAN,PR2,449-70	
	4.213	1.626	1.760	.7500	.0700		FOEL. PR161,1384-67PC	
	4.568	1.815	1.950	.7000	.0800		DAGAN PR161,1384-67	
	4.812	1.945	2.080	.8000	.0700		FOEL. PR161,1384-67PC	
	8.410	3.863	4.000	1.5000	.1000		BARTSCH NC43A,1010-66	A
	15.914	7.862	8.000	3.1000	.3000		BRANDT PL22,230-66	
THRESHOLD	3.05	1.00	1.13				7 DATA POINTS LISTED	
..... REACTION 5								
VO	30.925	15.861	16.000	2.1000	.3000		BALLAM SLAC-334-67	A
THRESHOLD	3.05	1.00	1.13					
..... REACTION 6								
2 PRONGS	8.223	3.763	3.900	16.7900	ERROR NOT GIVEN		BASTIEN,PR3,3047-71	
	8.410	3.863	4.000	16.3700	3.2700		ADERH.PR138B,897-65	
	10.286	4.862	5.000	13.6500	.1400		SCHOTANUS,NPB22,45-70	
	15.989	7.902	8.040	11.1500	.1500		ADERHOLZ NPB8,45-68	
	30.925	15.861	16.000	7.6000	.6000		BALLAM,PR3,2606-71	
	30.925	15.861	16.000	8.1600	.1200		ABBCCW COLL,TBP-71	
THRESHOLD	1.17	.00	.03				6 DATA POINTS LISTED	
..... REACTION 7								
2 PRONGS (NON STRANGE)	10.286	4.862	5.000	13.6500	.1400		SCHOTANUS,NPB22,45-70	
THRESHOLD	1.17	.00	.03					
..... REACTION 8								
2 PRONGS,ZO	2.943	.949	1.080	.7200	.0800		METZGER PR164,1680-67	
THRESHOLD	1.82	.35	.47					
..... REACTION 9								
4 PRONGS	2.850	.900	1.030	.6000	ERROR NOT GIVEN		GENSOLLEN,84,SIE63	
	8.410	3.863	4.000	9.6500	1.9300		ADERH.PR138B,897-65	
	10.286	4.862	5.000	10.0600	.0600		POLS,NPB25,109-71	C
	15.989	7.902	8.040	9.6500	.1200		ADERHOLZ NPB8,45-68	
	30.925	15.861	16.000	8.6000	.6000		BALLAM,PR3,2606-71	
	30.925	15.861	16.000	8.8600	.0900		ABBCCW COLL,TBP-71	
THRESHOLD	1.84	.36	.48				6 DATA POINTS LISTED	
..... REACTION 10								
4 PRONGS,VO	7.473	3.363	3.500	.0170	ERROR NOT GIVEN		ABOLINS PC	
THRESHOLD	4.10	1.57	1.70					
..... REACTION 11								
4 PRONGS,LZO	15.989	7.902	8.040	.0750	.0110		ADERHOLZ NPB11,259-69	
THRESHOLD	5.27	2.19	2.32					
..... REACTION 12								
4 PRONGS,S-ZO	8.410	3.863	4.000	5.0000 MICROB	3.0000		BARTSCH NC43A,1010-66	
THRESHOLD	4.97	2.03	2.17					

FOOTNOTES

S=STATISTICAL ERROR ONLY
2=CROSS SECTION NOT CORRECTED FOR SCREENING IN THE DEUTERON
A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES
C=CROSS SECTION CORRECTED FOR UNSEEN KO DECAYS

PI+P

	S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 13									
4 PRONGS,KOZO	8.410	3.863	4.000	4.0000	MICROB	4.0000		BARTSCH NC43A,1010-66	
THRESHOLD	6.10	2.63	2.77						
..... REACTION 14									
6 PRONGS	8.410	3.863	4.000	.6400		.0830		BONDAR NC44A,530-66	
	10.286	4.862	5.000	1.3300		.0500		DREVERM.PR161,1356-67	
	15.989	7.902	8.040	2.8900		.0600		ADERHOLZ NPB8,45-68	
	30.925	15.861	16.000	4.5000		.5000		BALLAM SLAC-334-67	
	30.925	15.861	16.000	5.1800		.0700		ABBCCW COLL,TBP-71	
THRESHOLD	2.68	.81	.94					5 DATA POINTS LISTED	
..... REACTION 15									
6 PRONGS,LZO	15.989	7.902	8.040	6.0000	MICROB	4.0000		ADERHOLZ NPB11,259-69	
THRESHOLD	6.63	2.91	3.05						
..... REACTION 16									
8 PRONGS	15.989	7.902	8.040	.3000		.0200		ADERHOLZ NPB8,45-68	
	30.925	15.861	16.000	1.1000		.3000		BALLAM SLAC-334-67	
	30.925	15.861	16.000	1.5200		.0400		ABBCCW COLL,TBP-71	
THRESHOLD	3.68	1.34	1.47					3 DATA POINTS LISTED	
..... REACTION 17									
10 PRONGS	15.989	7.902	8.040	.0110		.0030		ADERHOLZ NPB8,45-68	
	30.925	15.861	16.000	.1000		.0500		BALLAM SLAC-334-67	
	30.925	15.861	16.000	.2200		.0200		ABBCCW COLL,TBP-71	
THRESHOLD	4.83	1.96	2.09					3 DATA POINTS LISTED	
..... REACTION 18									
4 BODY	2.335	.625	.752	.0500		.0200		BOWLER,NPB17,331-70	
	2.440	.681	.809	.2200		.0500		BOWLER,NPB17,331-70	
THRESHOLD	1.84	.36	.48					2 DATA POINTS LISTED	
..... REACTION 19									
INELASTIC	2.039	.468	.591	.9800		.0600		BOWLER NP B17,331-70	
	2.138	.520	.645	1.7400		.1600		BOWLER NP B17,331-70	
	2.236	.572	.698	2.5400		.1000		BOWLER NP B17,331-70	
	2.335	.625	.752	4.3400		.1700		BOWLER NP B17,331-70	
	2.440	.681	.809	6.8300		.2500		BOWLER NP B17,331-70	
	2.700	.820	.949	12.3000		.6000		BARLOUTA. NC27,238-63	
	2.850	.900	1.030	12.1000		.6000		BARLOUTA. NC27,238-63	
	3.020	.990	1.121	12.6000		3.3000		KOPP PR123,301-61	
	3.131	1.050	1.181	13.7000		.8000		BARLOUTA. NC27,238-63	
THRESHOLD	1.48	.17	.28					9 DATA POINTS LISTED	
..... REACTION 20									
(P/PI+)PI+ZO	2.850	.900	1.030	.8000		ERROR NOT GIVEN		GENSOLLEN,84,SIE63	
	8.410	3.863	4.000	1.3800		.2800		ADERH.PR138B,897-65	
THRESHOLD	1.82	.35	.47					2 DATA POINTS LISTED	
..... REACTION 21									
(P/PI+)3PI+2PI-ZO	15.914	7.862	8.000	1.2500		.1400		ADERHOLZ NPB8,45-68	
THRESHOLD	3.68	1.34	1.47						
..... REACTION 22									
(P/PI+)4PI+3PI-ZO	15.914	7.862	8.000	.0870		.0230		ADERHOLZ NPB8,45-68	
THRESHOLD	4.83	1.96	2.09						
..... REACTION 23									
PPPI+AP	15.989	7.902	8.040	.0160		.0040		ADERHOLZ NPB14,255-69	
	30.925	15.861	16.000	.0200		.0020		ABBCCW COLL,TBP-71	
THRESHOLD	8.73	4.03	4.17					2 DATA POINTS LISTED	
..... REACTION 24									
PPI+PI+PI-	2.102	.501	.625	.0200		ERROR NOT GIVEN		DEBAIS.NP63,273-65	
	2.516	.722	.850	.2100		.0400		DEBAISIE. NPB5,147-68	
	2.627	.781	.910	.4300		.0600		BRODER. PR158,1331-67	
	2.869	.910	1.040	.3400		.0600		FOELSC.PR134B,1138-64	
	3.020	.990	1.121	.7800		.1400		KOPP PR123,301-61	
	3.204	1.088	1.220	1.0400		.0500		FOELSC.PR134B,1138-64	
	3.521	1.257	1.390	2.1800		.1400		FOELSC.PR134B,1138-64	
	3.876	1.447	1.580	3.3000		.1000		DARONIAN NC41A,503-66	
	4.258	1.650	1.784	2.8000		.2000		JOHNSON BAPS9,70-64	
	4.568	1.815	1.950	3.0400		.1500		CHAPMAN,PR3,38-71	
	4.812	1.945	2.080	3.4000		.1100		JAMES PR142,896-66	
	5.317	2.215	2.350	3.4400		.1600		ALFF PR145,1072-66	
	5.823	2.484	2.620	3.4900		.2500		ALFF PR145,1072-66	
	6.067	2.614	2.750	3.6000		.1000		ARMENISE NC37,361-65	
	6.104	2.634	2.770	3.1900		.1700		YAMAMO. PR140B,730-65	
	6.348	2.764	2.900	2.9500		.1400		ALFF PR145,1072-66	
	6.442	2.814	2.950	2.9300		.2500		BROWN,PR1,3053-70	
	6.892	3.053	3.190	2.9100		.2100		BROWN,PR1,3053-70	
	7.342	3.293	3.430	3.3000		.3000		ABOLINS PRL11,381-63	
	7.529	3.393	3.530	3.3300		.2400		BROWN,PR1,3053-70	
	7.548	3.403	3.540	3.5000		.2000		ABOLINS PRL11,381-63	
	7.754	3.513	3.650	3.8500		.3000		GOLDHAB. PRL12,336-64	

PI+P

	S	K.ENERGY	PLAB		CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 24									
PPI+PI+PI-	7.848	3.563	3.700		3.5200	.1000		ABRAMS,PRL25,617-70	
(CONTINUATION)	7.923	3.603	3.740		3.3900	.2400		BROWN,PR1,3053-70	
	8.410	3.863	4.000		3.0900	.6400		ADERH.PR138B,897-65	
	8.560	3.943	4.080		2.8300	.2100		BROWN,PR1,3053-70	
	10.286	4.862	5.000		2.7600	.0400		POLS,NPB25,109-71	
	11.224	5.362	5.500		2.2500	.2300		PRENTICE,KIEV-70	
	14.038	6.862	7.000		2.1000	.1000		SLATTERY NC50A,377-67	
	15.989	7.902	8.040		2.0240	.0400		ADERHOLZ NPB14,255-69	
	16.852	8.362	8.500		2.1100	.1800		KUNG NEVIS171-69	
	21.543	10.861	11.000		1.2700	.1600		BRUCKN. SEE VIENNA327	
	22.481	11.361	11.500		1.3800	.2000		EVANS VIENNA327-68	
	22.857	11.561	11.700		1.4500	.1500		DGHMS COLLAB,KIEV-70	
	25.484	12.961	13.100		1.2300	.0400		GAIDOS,PR1,3190-70	
	30.925	15.861	16.000		1.2800	.1500		BALLAM SLAC-334-67	
	30.925	15.861	16.000		1.3300	.0600		ABBCCW COLL,TBP-71	
	35.616	18.361	18.500		1.1900	.1200		MACGAHAN BAPS13,33-68	
THRESHOLD	1.84	.36	.48					38 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C				
					14 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .82				
					K = 8.78 +- .89 N = -.72 +- .05				
..... REACTION 25									
PPI+PI+PI-(NON RESONANT)	7.754	3.513	3.650		.5300	.1000		GOLDHAB. PRL12,336-64	
THRESHOLD	1.84	.36	.48						
..... REACTION 26									
PPI+PI+PI-PIO	2.869	.910	1.040	U	4.0000	MICROB		FOELSC.PR134B,1138-64	
	3.204	1.088	1.220		.0740	.0080		FOELSC.PR134B,1138-64	
	3.521	1.257	1.390		.2200	.0450		FOELSC.PR134B,1138-64	
	3.876	1.447	1.580		.5000	.1000		DARONIAN NC41A,503-66	
	4.258	1.650	1.784		1.6000	.2000		JOHNSON BAPS9,70-64	
	4.568	1.815	1.950		2.0700	.1500		CHAPMAN,PR3,38-71	
	4.812	1.945	2.080		2.4100	.0900		JAMES PR142,896-66	
	5.317	2.215	2.350		3.2600	.1600		ALFF PR145,1072-66	
	5.823	2.484	2.620		3.8600	.2500		ALFF PR145,1072-66	
	6.067	2.614	2.750		3.3500	.1000		ARMENISE NC37,361-65	
	6.104	2.634	2.770		3.8700	.2100		YAMAMO. PR140B,730-65	
	6.348	2.764	2.900		3.8700	.1700		ALFF PR145,1072-66	
	6.442	2.814	2.950		2.9800	.3100		BROWN,PR1,3053-70	
	6.892	3.053	3.190		3.3800	.3100		BROWN,PR1,3053-70	
	7.342	3.293	3.430		3.7000	.3000		ABOLINS PRL11,381-63	
	7.529	3.393	3.530		3.6400	.3400		BROWN,PR1,3053-70	
	7.548	3.403	3.540		3.6000	.2000		ABOLINS PRL11,381-63	
	7.754	3.513	3.650		4.3000	.3500		GOLDHAB. PRL12,336-64	
	7.848	3.563	3.700		3.6200	.1000		ABRAMS,PRL25,617-70	
	7.923	3.603	3.740		3.7900	.3500		BROWN,PR1,3053-70	
	8.223	3.763	3.900		3.4100	.1900		PLESS VIENNA735-68	
	8.410	3.863	4.000		3.4300	.6900		ADERH.PR138B,897-66	
	8.560	3.943	4.080		3.7800	.3600		BROWN,PR1,3053-70	
	10.286	4.862	5.000		2.8800	.0400		POLS,NPB25,109-71	
	11.224	5.362	5.500		1.9400	.1900		PRENTICE,KIEV-70	
	14.038	6.862	7.000		2.2000	.2000		SLATTERY NC50A,377-67	
	15.989	7.902	8.040		1.9100	.0800		ADERHOLZ NPB8,45-68	
	16.852	8.362	8.500		2.1200	.3270		KUNG NEVIS171-69	
	21.543	10.861	11.000		1.3900	.1600		BRUCKN. SEE VIENNA327	
	22.481	11.361	11.500		1.8000	.2000		EVANS VIENNA327-68	
	22.857	11.561	11.700		1.5000	.3000		DGHMS COLLAB,KIEV-70	
	30.925	15.861	16.000		1.2800	.1700		BALLAM,PR3,2606-71	
	30.925	15.861	16.000		1.0500	.1000		ABBCCW COLL,TBP-71	
	35.616	18.361	18.500		1.1300	.1500		HONES,PR2,827-70	
THRESHOLD	2.24	.58	.70					34 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C				
					13 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .96				
					K = 10.17 +- 1.56 N = -.79 +- .09				
..... REACTION 27									
PPI+PI+PI-PIO (NON RES.)	7.754	3.513	3.650		1.0100	.1500		SHEN UCRL16170-65	
THRESHOLD	2.24	.58	.70						
..... REACTION 28									
PPI+PI+PI-ZO	6.067	2.614	2.750		.6700	.0400		ARMENISE NC37,361-65	
	8.410	3.863	4.000		1.2700	.2500		ADERH.PR138B,897-65	
	10.286	4.862	5.000		2.3900	.1700		POLS,NPB25,109-71	
	11.224	5.362	5.500		1.4700	.1500		PRENTICE,KIEV-70	
	15.989	7.902	8.040		2.4700	.1200		ADERHOLZ NPB8,45-68	
	30.925	15.861	16.000		3.4600	.1000		ABBCCW COLL,TBP-71	
THRESHOLD	2.68	.81	.94					6 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C				
					5 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .15				
					K = .89 +- .22 N =+ .49 +- .10				
..... REACTION 29									
PPI+PIO	1.946	.418	.540		.5500	.1400		DETOEUF PRL16,860-66	
	2.001	.447	.570		1.0000	.1300		POIRIER PR143,1092-66	
	2.039	.468	.591		.8000	.0500		BOWLER NPB17,331-70	
	2.102	.501	.625		1.8000	.2000		DEBAIS.NP63,273-65	
	2.129	.515	.640		1.7200	.1400		DETOEUF PRL16,860-66	
	2.138	.520	.645		1.3200	.1400		BOWLER NPB17,331-70	
	2.236	.572	.698		2.0500	.0900		BOWLER NPB17,331-70	
	2.285	.599	.725		3.8000	.3000		NEWCOMB PR132,1283-63	

FOOTNOTES

U=UPPER LIMIT

PI+P

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 29								
PPI+PIO	2.287	.600	.726	3.5500	.5300		BARLOUTA. NC26,1409-6	2
(CONTINUATION)	2.317	.615	.742	3.6300	.1600		DETOEUF PRL16,860-66	
	2.333	.624	.751	9.3000	.5000		INDIANA UN.-67	
	2.335	.625	.752	3.6100	.1500		BOWLER NPB17,331-70	
	2.409	.665	.792	5.4200	.1800		DETOEUF PRL16,860-66	
	2.440	.681	.809	5.4900	.2200		BOWLER NPB17,331-70	
	2.503	.715	.843	7.6000	.2100		DETOEUF PRL16,860-66	
	2.516	.722	.850	9.0000	.3000		DEBAISIE. NPB5,147-68	
	2.598	.765	.894	9.5200	.2100		DETOEUF PRL16,860-66	
	2.627	.781	.910	9.6000	.5000		TILGER PR142,972-66	
	2.690	.815	.944	9.8600	.1400		DETOEUF PRL16,860-66	
	2.702	.821	.950	9.3000	.8000		BARLOUTA. NC27,238-63	
	2.785	.865	.995	10.4300	.2500		DETOEUF PRL16,860-66	
	2.850	.900	1.030	8.6000	.8000		BARLOUTA. NC27,238-63	
	2.871	.911	1.041	10.6000	.4000		FOELSCHE,36,CERN62	
	2.878	.915	1.045	9.3000	.2300		DETOEUF PRL16,860-66	
	2.943	.949	1.080	8.8800	.3700		METZGER PR164,1680-67	
	2.982	.970	1.101	9.1900	.2200		DETOEUF PRL16,860-66	
	3.130	1.049	1.180	8.9000	.9000		BARLOUTA. NC27,238-63	
	3.171	1.070	1.202	9.7200	.2000		DETOEUF PRL16,860-66	
	3.208	1.090	1.222	11.0000	.3000		FOELSCHE,36,CERN62	
	3.527	1.260	1.393	12.8000	.4000		FOELSCHE,36,CERN62	
	3.876	1.447	1.580	9.2000	.2000		DARONIAN NC41A,503-66	
	3.914	1.466	1.600	7.4000	ERROR NOT GIVEN		ALITTI,449,DUBNA64	
	4.812	1.945	2.080	5.2900	.1300		JAMES PR142,896-66	
	5.317	2.215	2.350	4.7000	.2000		ALFF PR145,1072-66	
	6.067	2.614	2.750	2.7900	.1000		ARMENISE NC37,361-65	
	6.104	2.634	2.770	4.8800	.2300		YAMAMO. PR173,1302-68	
	6.348	2.764	2.900	3.6000	.2000		ALFF PR145,1072-66	
	7.473	3.363	3.500	2.1500	.0700		CARMONY BAPS9,408-64	
	7.548	3.403	3.540	2.0500	.2000		ABOLINS PR136B,196-64	
	8.223	3.763	3.900	2.2100	.3000	.2000	PLESS VIENNA732-68	
	8.223	3.763	3.900	2.3000	.0600		BASTIEN,PR3,2047-71	
	8.410	3.863	4.000	2.3100	.4600		ADERH.PR138B,897-65	
	10.286	4.862	5.000	1.3000	.0300		SCHOTANUS,NPB22,45-70	
	15.989	7.902	8.040	.7400	.0600		ADERHOLZ NPB8,45-68	
	22.481	11.361	11.500	1.1000	.2000		EVANS VIENNA327-68	
	30.925	15.861	16.000	.3400	.0040		ABBCCW COLL,TBP-71	
THRESHOLD	1.48	.17	.28				46 DATA POINTS LISTED	
				FIT OF SIGMA AGAINST PLAB GEV/C				
				15 DATA POINTS USED ABOVE 1.5 GEV/C , PROB. = .00				
				K = 14.50 +- .48 N = -1.37 +- .02				
..... REACTION 30								
PPI+PIO (NON RESONANT)	8.223	3.763	3.900	.2700	.1000		BASTIEN,PR3,2047-71	
THRESHOLD	1.48	.17	.28					
..... REACTION 31								
DIFF DISS=PPI+PIO	8.223	3.763	3.900	.5600	.0800		BASTIEN,PR3,2047-71	
THRESHOLD	1.48	.17	.28					
..... REACTION 32								
PPI+PIOPIO	2.102	.501	.625	.0200	ERROR NOT GIVEN		DEBAIS.NP63,273-65	
	2.516	.722	.850	.1700	.0300		DEBAISIE. NPB5,147-68	
	4.756	1.915	2.050	1.5500	.3200		JACQUET NCA63,743-69	
	4.812	1.945	2.080	2.3100	.1800		JAMES PR142,896-66	
THRESHOLD	1.84	.36	.48				4 DATA POINTS LISTED	
..... REACTION 33								
PPI+PIOPIOPIO	4.756	1.915	2.050	.6800	.2000		JACQUET NCA63,743-69	
	4.812	1.945	2.080	.2100	.0700		JAMES PR142,896-66	
THRESHOLD	2.24	.58	.70				2 DATA POINTS LISTED	
..... REACTION 34								
PPI+ZO	2.871	.911	1.041	.3100	.0600		FOELSCHE,36,CERN62	
	3.208	1.090	1.222	.8100	.1000		FOELSCHE,36,CERN62	
	3.527	1.260	1.393	1.4000	.2000		FOELSCHE,36,CERN62	
	3.876	1.447	1.580	4.0000	.1000		DARONI. NC,A41,503-66	
	4.812	1.945	2.080	3.3200	.1100		JAMES PR142,896-66	
	6.104	2.634	2.770	3.0600	.1600		YAMAMO. PR173,1302-68	
	8.223	3.763	3.900	4.1500	ERROR NOT GIVEN		BASTIEN,PR3,2047-71	
	8.410	3.863	4.000	3.0400	.6100		ADERH.PR138B,897-65	
	10.286	4.862	5.000	3.5700	.4000		SCHOTANUS,NPB22,45-70	
	15.989	7.902	8.040	2.4000	.1000		ADERHOLZ NPB8,45-68	
	30.925	15.861	16.000	1.6900	.0800		ABBCCW COLL,TBP-71	
THRESHOLD	1.84	.36	.48				11 DATA POINTS LISTED	
				FIT OF SIGMA AGAINST PLAB GEV/C				
				6 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. = .49				
				K = 4.25 +- .37 N = -.30 +- .05				
..... REACTION 35								
P3PI+2PI-	4.812	1.945	2.080	.0100	ERROR NOT GIVEN		JAMES PR142,896-66	
	7.473	3.363	3.500	.1650	.0400		CARM.ABS VII/67 DUB64	
	8.410	3.863	4.000	.2490	.0360		BONDAR NC44A,530-66	
	10.286	4.862	5.000	.4100	.0200		DREVERM.PR161,1356-67	
	15.914	7.862	8.000	.4000	.0300		JUREWICZ,NPB29,269-71	
	16.852	8.362	8.500	.4470	.0310		KUNG NEVIS171-69	
	30.925	15.861	16.000	.3600	.0200		ABBCCW COLL,TBP-71	
THRESHOLD	2.68	.81	.94				7 DATA POINTS LISTED	

FOOTNOTES

2=CROSS SECTION NOT CORRECTED FOR SCREENING IN THE DEUTERON

PI+P

	S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 36										
P3PI+2PI-PI0	7.473	3.363	3.500		.1040		.0250		CARM.ABS VII/67 DUB64	
	8.410	3.863	4.000		.2530		.0360		BONDAR NC44A,530-66	
	10.286	4.862	5.000		.6000		ERROR NOT GIVEN		BDNPT NPB16,221-70	
	10.286	4.862	5.000		.6100		.0300		DREVERM.PR161,1356-67	
	15.989	7.902	8.040		.9100		.1000		ADERHOLZ NPB8,45-68	
	16.852	8.362	8.500		.6430		.0515		KUNG NEVIS171-69	
	30.925	15.861	16.000		.8500		.0800		ABBCCW COLL,TBP-71	
THRESHOLD	3.16	1.07	1.20						7 DATA POINTS LISTED	
..... REACTION 37										
P3PI+2PI-Z0	8.410	3.863	4.000		.0780		.0140		BONDAR NC44A,530-66	
	10.286	4.862	5.000		.1500		.0100		DREVERM.PR161,1356-67	
	30.925	15.861	16.000		2.4500		.1000		ABBCCW COLL,TBP-71	
THRESHOLD	3.68	1.34	1.47						3 DATA POINTS LISTED	
..... REACTION 38										
P4PI+3PI-	15.989	7.902	8.040		.0720		.0060		ADERHOLZ NPB8,45-68	
	16.852	8.362	8.500		.0580		.0076		KUNG NEVIS171-69	
	30.925	15.861	16.000		.8300		.0060		ABBCCW COLL,TBP-71	
THRESHOLD	3.68	1.34	1.47						3 DATA POINTS LISTED	
..... REACTION 39										
P4PI+3PI-PI0	15.989	7.902	8.040		.1080		.0090		ADERHOLZ NPB8,45-68	
	16.852	8.362	8.500		.1110		.0160		KUNG NEVIS171-69	
	30.925	15.861	16.000		.2920		.0250		ABBCCW COLL,TBP-71	
THRESHOLD	4.24	1.64	1.77						3 DATA POINTS LISTED	
..... REACTION 40										
P4PI+3PI-Z0	30.925	15.861	16.000		.6370		.0300		ABBCCW COLL,TBP-71	
THRESHOLD	4.79	1.93	2.07							
..... REACTION 41										
P5PI+4PI-	15.989	7.902	8.040		1.3000	MICROB	.6000		ADERHOLZ NPB8,45-68	
	30.925	15.861	16.000		.0140		.0040		ABBCCW COLL,TBP-71	
THRESHOLD	4.83	1.96	2.09						2 DATA POINTS LISTED	
..... REACTION 42										
P5PI+4PI-PI0	15.989	7.902	8.040		5.2000	MICROB	1.7000		ADERHOLZ NPB8,45-68	
	30.925	15.861	16.000		.0470		.0060		ABBCCW COLL,TBP-71	
THRESHOLD	5.47	2.29	2.43						2 DATA POINTS LISTED	
..... REACTION 43										
P5PI+4PI-Z0	15.989	7.902	8.040		.3000	MICROB	.3000		ADERHOLZ NPB8,45-68	
	30.925	15.861	16.000		.0760		.0070		ABBCCW COLL,TBP-71	
THRESHOLD	6.14	2.65	2.79						2 DATA POINTS LISTED	
..... REACTION 44										
PK+K-PI+	6.348	2.764	2.900		.1000		ERROR NOT GIVEN		ALFF,50,CERN62	
	7.342	3.293	3.430		.1200		.0350		ABOLINS,PRL11,381,63	
	7.548	3.403	3.540		.1200		.0200		ABOLINS,PRL11,381,63	
	8.410	3.863	4.000		.0590		.0240		BARTSCH NC43A,1010-66	
	10.286	4.862	5.000		.1480		ERROR NOT GIVEN		BDNPT NPB16,221-70	
	15.989	7.902	8.040		.0730		.0070		ADERHOLZ NPB14,255-69	
	30.925	15.861	16.000		.0900		.0100		ABBCCW COLL,TBP-71	
THRESHOLD	4.27	1.66	1.79						7 DATA POINTS LISTED	
..... REACTION 45										
PK+K-PI+PI0	8.410	3.863	4.000		.0540		.0240		BARTSCH NC43A,1010 66	
THRESHOLD	4.87	1.97	2.11							
..... REACTION 46										
PK+K0	3.521	1.257	1.390	U	.0100				FOELSCHE BNL-YALE-64	
	4.101	1.566	1.700		.0140		.0030		PAN,PR2,449-70	
	4.213	1.626	1.760		.0300		.0200		FOEL. PR161,1384-67PC	
	4.568	1.815	1.950	U	.0100				DAGAN PR161,1384-67	
	4.812	1.945	2.080		.0500		.0250		FOEL. PR161,1384-67PC	
	6.104	2.634	2.770		.0590		.0130		YAMAMO. PR134B,383-64	
	8.410	3.863	4.000		.0430		.0110		BARTSCH NC43A,1010-66	
	11.224	5.362	5.500		.0260		.0040		COOPER,NPB23,605-70	
	15.989	7.902	8.040		.0260		.0040		ADERHOLZ NPB14,255-69	
	16.665	8.262	8.400		.0190		.0080		KREBS BAPS12,539-67	
THRESHOLD	3.71	1.36	1.49						10 DATA POINTS LISTED	
..... REACTION 47										
PK+K0PI+PI-	8.410	3.863	4.000		.0120		.0060		BARTSCH NC43A,1010-66	
	11.224	5.362	5.500		.0230		.0050		COOPER,NPB23,605-70	
THRESHOLD	4.87	1.97	2.11						2 DATA POINTS LISTED	
..... REACTION 48										
PK+K0PI+PI-PI0	8.410	3.863	4.000		3.0000	MICROB	3.0000		BARTSCH NC43A,1010-66	
	11.224	5.362	5.500		.0200		.0040		COOPER,NPB23,605-70	
THRESHOLD	5.50	2.31	2.45						2 DATA POINTS LISTED	

FOOTNOTES

U=UPPER LIMIT

PI+P

		S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 49											
PK+KOPIO		6.104	2.634	2.770		.0220		.0080		YAMAMO. PR134B,283-64	
		8.410	3.863	4.000		.0590		.0140		BARTSCH NC43A,1010-66	
		11.224	5.362	5.500		.0560		.0070		COOPER,NPB23,605-70	
		15.989	7.902	8.040		.0620		.0060		ADERHOLZ NPB11,259-69	
	THRESHOLD	4.27	1.66	1.79						4 DATA POINTS LISTED	
..... REACTION 50											
PK+KOZO		8.410	3.863	4.000		.0180		.0130		BARTSCH NC43A,1010-66	
	THRESHOLD	4.87	1.97	2.11							
..... REACTION 51											
PK+KS		10.286	4.862	5.000		.0150		ERROR NOT GIVEN		BDNPT NPB16,221-70	
		12.162	5.862	6.000		.0100		ERROR NOT GIVEN		CRENNELL PL28B,136-68	R
	THRESHOLD	3.72	1.36	1.50						2 DATA POINTS LISTED	
..... REACTION 52											
PK-KOPI+PI+		8.410	3.863	4.000		.0210		.0080		BARTSCH NC43A,1010-66	
		11.224	5.362	5.500		.0210		.0050		COOPER,NPB23,605-70	
	THRESHOLD	4.87	1.97	2.11						2 DATA POINTS LISTED	
..... REACTION 53											
PK-KOPI+PI+PIO		8.410	3.863	4.000		3.0000	MICROB	3.0000		BARTSCH NC43A,1010-66	
		11.224	5.362	5.500		.0100		.0030		COOPER,NPB23,605-70	
	THRESHOLD	5.50	2.31	2.45						2 DATA POINTS LISTED	
..... REACTION 54											
PKOKOPI+		7.754	3.513	3.650		.1200		.0300		TRILLING,PL19,427,65	
		8.410	3.863	4.000		.0870		.0140		BARTSCH NC43A,1010-66	
		11.224	5.362	5.500		.1740		.0260		COOPER,NPB23,605-70	
		15.914	7.862	8.000		.0880		.0160		BRANDT PL22,230-66	
	THRESHOLD	4.27	1.66	1.79						4 DATA POINTS LISTED	
..... REACTION 55											
PKOKOPI+PIO		8.410	3.863	4.000		.0300		.0170		BARTSCH NC43A,1010-66	
	THRESHOLD	4.87	1.97	2.11							
..... REACTION 56											
PKOKOPI+ZO		8.410	3.863	4.000		0.0000	MICROB	19.0000		BARTSCH NC43A,1010-66	$
	THRESHOLD	5.50	2.31	2.45							
..... REACTION 57											
PKSKSPI+		6.104	2.634	2.770		5.0000	MICROB	3.0000		YAMAMO. PR134B,383-64	
		15.989	7.902	8.040		.0180		.0030		ADERHOLZ NPB11,259-69	
	THRESHOLD	4.29	1.67	1.80						2 DATA POINTS LISTED	
..... REACTION 58											
PKSKSPI+PIO		15.989	7.902	8.040		4.0000	MICROB	2.0000		ADERHOLZ NPB11,259-69	
	THRESHOLD	4.89	1.99	2.12							
..... REACTION 59											
PKSKLPI+		6.104	2.634	2.770		.0130		.0050		YAMAMO. PR134B,383-64	
		15.989	7.902	8.040		.0370		.0030		ADERHOLZ NPB11,259-69	
	THRESHOLD	4.30	1.67	1.81						2 DATA POINTS LISTED	
..... REACTION 60											
PETPI+		2.887	.920	1.050		.0410		.0070		GROSSM. PR178,2109-69	*
		3.111	1.039	1.170		.2300		.0220		GROSSM. PR178,2109-69	*
		3.204	1.088	1.220		.3000		.0430		FOELSC.PR134B,1138-64	*
		3.521	1.257	1.390		.5640		.1950		FOELSC.PR134B,1138-64	*
		3.876	1.447	1.580		.5200		.0900		DARONIAN NC41A,503-66	
		4.812	1.945	2.080		.8400		.1300		JAMES PR142,896-66	
		5.317	2.215	2.350		.7800		.1600		ALFF PR145,1072-66	
		5.823	2.484	2.620		.7200		.3600		ALFF PR145,1072-66	
		6.104	2.634	2.770		.2700		.0800		YAMAMO. PR173,1302-68	
		6.348	2.764	2.900		.7000		.1600		ALFF PR145,1072-66	
		7.342	3.293	3.430		.3000		.1300		ABOLINS PRL11,381-63	
		7.548	3.403	3.540		.2300		.0600		ABOLINS PRL11,381-63	
		7.754	3.513	3.650		.2100		.0700		SHEN(THESIS)UCRL16170	
		8.410	3.863	4.000		.1730		.0350		ADERH.PR138B,897-66	*
		11.224	5.362	5.500		.1650		.0350		PRENTICE,KIEV70	*
		16.852	8.362	8.500		.0560		.0150		RABIN RUTGERS-67	
		35.616	18.361	18.500		8.0000	MICROB	2.0000		HONES,PR2,827-70	
	THRESHOLD	2.65	.79	.92						17 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

7 DATA POINTS USED ABOVE 3.0 GEV/C , PROB. = .91
K = 3.31 +- 2.09 N = -1.99 +- .34

..... REACTION 61											
PETPI+=PPI+PI+PI-PIO		2.869	.910	1.040	U	4.0000	MICROB			FOELSC.PR134B,1138-64	
		2.887	.920	1.050		9.5000	MICROB	1.5000		GROSSM. PR178,2109-69	
		3.111	1.039	1.170		.0533		.0050		GROSSM. PR178,2109-69	
		3.204	1.088	1.220		.0690		.0100		FOELSC.PR134B,1138-64	
		3.521	1.257	1.390		.1300		.0450		FOELSC.PR134B,1138-64	
		3.876	1.447	1.580		.1200		.0200		DARONIAN NC41A,503-66	
		4.568	1.815	1.950		.0400		.0200		CHAPMAN,PR3,38-71	
		4.812	1.945	2.080		.1500		.0300		JAMES PR142,896-66	
		5.317	2.215	2.350		.2300		.0500		ALFF PR145,1072-66	
		5.823	2.484	2.620		.1800		.0900		ALFF PR145,1072-66	
		6.348	2.764	2.900		.1500		.0500		ALFF PR145,1072-66	
		8.410	3.863	4.000		.0400		.0080		ADERH.PR138B,897-66	
		11.224	5.362	5.500		.0381		.0077		PRENTICE,KIEV-70	
	THRESHOLD	2.65	.79	.92						13 DATA POINTS LISTED	

FOOTNOTES

R=CROSS SECTION FOR FINAL STATES OBSERVED IN THE BUBBLE CHAMBER
$=DATA POINT NOT USED IN FITTING OR PLOTTING
*=CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS
U=UPPER LIMIT

PI+P

		S	K.ENERGY	PLAB		CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 62										
PETPI+=PPI+Z0		3.895	1.457	1.590		.4300	.0400		DARONIAN NC41A,503-66	
		4.812	1.945	2.080		.6900	.1000		JAMES PR142,896-66	
		5.317	2.215	2.350		.5500	.1500		ALFF PR145,1072-66	
		6.104	2.634	2.770		.1900	.0700		YAMAMO. PR173,1302-68	
		6.348	2.764	2.900		.5500	.1500		ALFF PR145,1072-66	
	THRESHOLD	2.65	.79	.92					5 DATA POINTS LISTED	
..... REACTION 63										
PET2PI+PI-		7.473	3.363	3.500		.1100	.0350		CARM,ABS VII/67 DUB64	*
		10.286	4.862	5.000		.1000	.0200		DREVERM.PR161,1356-67	
		11.224	5.362	5.500		.3700	.0500		PRENTICE,KIEV70	*
	THRESHOLD	3.64	1.32	1.45					3 DATA POINTS LISTED	
..... REACTION 64										
PET2PI+PI-=P2PI+PI-Z0		11.224	5.362	5.500		.2890	.0310		PRENTICE,KIEV-70	
	THRESHOLD	3.64	1.32	1.45						
..... REACTION 65										
PET2PI+PI-=P3PI+2PI-PI0		7.473	3.363	3.500		.0260	.0090		CARM.ABS VII/67 DUB64	
		10.286	4.862	5.000		.0270	.0060		DREVERM.PR161,1356-67	
	THRESHOLD	3.64	1.32	1.45					2 DATA POINTS LISTED	
..... REACTION 66										
PRH+		2.869	.910	1.040		.1900	.0700		FOELSCHE,36,CERN62	
		2.943	.949	1.080		.3900	.3600	.3900	METZGER PR164,1680-67	
		2.999	.979	1.110		1.3770	.0820		TAUTFE. COO1428-14-65	
		3.204	1.088	1.220		.3900	.0900		FOELSCHE,36,CERN62	
		3.521	1.257	1.390		.5700	.0800		FOELSCHE,36,CERN62	
		3.876	1.447	1.580		2.0000	.0800		DARONIAN NC41A,503-66	
		3.914	1.466	1.600		3.0000	ERROR NOT GIVEN		ALITTI,449,DUB64	
		4.812	1.945	2.080		2.0700	.1500		JAMES PR142,896-66	
		5.317	2.215	2.350		1.5000	.3000		ALFF PR145,1072-66	
		6.067	2.614	2.750		.8900	.1000		ARMENISE PL13,341-64	
		6.348	2.764	2.900		1.1000	.2000		ALFF PR145,1072-66	
		8.223	3.763	3.900		.8600	.0600		BASTIEN,PR3,2047-71	
		8.410	3.863	4.000		.3500	.0700		ADERH.PR138B,897-65	
		10.286	4.862	5.000		.4300	.0200		SCHOTANUS,NPB22,45-70	
		15.914	7.862	8.000		.1410	.0100		ADERHOLZ NPB8,45-68	
		25.484	12.961	13.100		.0540	.0103		KRAMER,PRL25,396-70	
	THRESHOLD	2.88	.92	1.05					16 DATA POINTS LISTED	
						FIT OF SIGMA AGAINST PLAB GEV/C				
						9 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. = .16				
						K = 8.92 +- 1.71 N = -1.93 +- .13				
..... REACTION 67										
PRH+PI+PI-		16.852	8.362	8.500		.5420	.1350		RABIN RUTGERS-67	
		35.616	18.361	18.500		.2400	.0100		HONES,PR2,827-70	
	THRESHOLD	3.91	1.47	1.60					2 DATA POINTS LISTED	
..... REACTION 68										
PRH+2PI+2PI-		10.286	4.862	5.000	U	.0200			DREVERM.PR161,1356-67	
	THRESHOLD	5.10	2.10	2.23						
..... REACTION 69										
PRH+RHO		35.616	18.361	18.500		.0760	.0180		HONES,PR2,827-70	
	THRESHOLD	6.04	2.60	2.74						
..... REACTION 70										
PRH-PI+PI+		16.852	8.362	8.500		.5600	.2000		RABIN RUTGERS-67	
		35.616	18.361	18.500		.0760	.0060		HONES,PR2,827-70	
	THRESHOLD	3.91	1.47	1.60					2 DATA POINTS LISTED	
..... REACTION 71										
PRH-3PI+PI-		10.286	4.862	5.000	U	.0150			DREVERM.PR161,1356-67	
	THRESHOLD	5.10	2.10	2.23						
..... REACTION 72										
PRHOPI+		4.812	1.945	2.080		1.2000	.3000		JAMES PR142,896-66	
		5.317	2.215	2.350		1.7600	.1500		ALFF PR145,1072-66	
		5.823	2.484	2.620		1.8600	.2400		ALFF PR145,1072-66	
		6.348	2.764	2.900		1.1100	.1200		ALFF PR145,1072-66	
		7.342	3.293	3.430		1.0600	.2000		ABOLINS PRL11,381-63	
		7.548	3.403	3.540		1.1000	.1500		ABOLINS PRL11,381-63	
		7.754	3.513	3.650		.8600	.0900		GOLDH.PRL12,336-64	
		8.410	3.863	4.000		.6500	.1300		ADERH.PR138B,897-66	
		11.224	5.362	5.500		1.2500	.1700		PRENTICE,KIEV-70	
		14.038	6.862	7.000		.6900	.1300		SLATTERY NC50,377-67	
	THRESHOLD	3.38	1.18	1.31					10 DATA POINTS LISTED	
..... REACTION 73										
PRHOPI+PI0		16.852	8.362	8.500		.6000	.1500		RABIN RUTGERS-67	
		35.616	18.361	18.500		.2100	.0100		HONES,PR2,827-70	
	THRESHOLD	3.91	1.47	1.60					2 DATA POINTS LISTED	
..... REACTION 74										
PRHO2PI+PI-		10.286	4.862	5.000		.2600	.0500		DREVERM.PR161,1356-67	
	THRESHOLD	4.49	1.77	1.91						
..... REACTION 75										
PRHO2PI+PI-PI0		10.286	4.862	5.000	U	.0300			DREVERM.PR161,1356-67	
	THRESHOLD	5.10	2.10	2.23						

FOOTNOTES

*=CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS
U=UPPER LIMIT

PI+P

	S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 76										
POMPI+	3.876	1.447	1.580		.1100		.0220		DARONIAN NC41A,503-66	*
	4.812	1.945	2.080		1.7600		.1600		JAMES PR142,896-66	
	5.317	2.215	2.350		2.4000		.2300		ALFF PR145,1072-66	
	5.823	2.484	2.620		2.8970		.3400		ALFF PR145,1072-66	
	6.067	2.614	2.750		1.8500		.0600		ARMENISE NC37,361-65	*
	6.348	2.764	2.900		2.0700		.1800		ALFF PR145,1072-66	
	7.548	3.403	3.540		1.0600		.1000		ABOLINS PRL11,381-63	
	7.754	3.513	3.650		.8800		.1000		SHEN(THESIS)UCRL16170	
	8.410	3.863	4.000		.5800		.0500		ADERH.PR138B,897-66	
	14.038	6.862	7.000		.4400		.0600		SLATTERY NC50,377-67	*
	15.989	7.902	8.040		.2880		.0120		ADERHOLZ NPB14,255-69	
	16.852	8.362	8.500		.2800		.0600		RABIN RUTGERS-67	
	35.616	18.361	18.500		.0910		.0130		HONES,PR2,827-70	
THRESHOLD	3.46	1.23	1.36						13 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C					
					10 DATA POINTS USED ABOVE 2.5 GEV/C , PROB. = .05					
					K = 10.25 +- 1.28 N = -1.71 +- .08					
..... REACTION 77										
POMPI+=PPI+PI+PI-PIO	3.876	1.447	1.580		.1000		.0200		DARONIAN NC41A,503-66	
	4.812	1.945	2.080		1.6600		.1300		JAMES PR142,896-66	
	5.317	2.215	2.350		2.1000		.1900		ALFF PR145,1072-66	
	5.823	2.484	2.620		2.6100		.3100		ALFF PR145,1072-66	
	6.067	2.614	2.750		1.6600		.0500		ARMENISE NC37,361-65	
	6.348	2.764	2.900		1.9700		.1700		ALFF PR145,1072-66	
	14.038	6.862	7.000		.3960		.0500		SLATTERY NC50,377-67	
THRESHOLD	3.46	1.23	1.36						7 DATA POINTS LISTED	
..... REACTION 78										
POMPI+=PPI+ZO	4.812	1.945	2.080		.1000		.0300		JAMES PR142,896-66	
	5.317	2.215	2.350		.3000		.1200		ALFF PR145,1072-66	
	6.348	2.764	2.900		.1000		.0600		ALFF PR145,1072-66	
THRESHOLD	3.46	1.23	1.36						3 DATA POINTS LISTED	
..... REACTION 79										
POMPI+PI+PI-	8.410	3.863	4.000		.1780		.0260		BONDAR NC44A,530-66	
	10.286	4.862	5.000		.2600		.0300		DREVE. PR161,1356-67	
THRESHOLD	4.58	1.82	1.96						2 DATA POINTS LISTED	
..... REACTION 80										
PK**+890KO=PK+KOPIO	11.224	5.362	5.500		.0120		.0030		COOPER,NPB23,605-70	
THRESHOLD	5.39	2.25	2.39							
..... REACTION 81										
PK**+890KO=PKOKOPI+	11.224	5.362	5.500		.0300		.0070		COOPER,NPB23,605-70	
THRESHOLD	5.39	2.25	2.39							
..... REACTION 82										
PK*0890K+	15.914	7.862	8.000		.0230		.0040		ADERHOLZ,NPB14,255-69	
THRESHOLD	5.39	2.25	2.39							
..... REACTION 83										
PK*0890K+=PK+KOPI+	11.224	5.362	5.500		9.0000	MICROB	2.0000		COOPER,NPB23,605-70	
THRESHOLD	5.39	2.25	2.39							
..... REACTION 84										
PXOPI+	8.410	3.863	4.000		.0350		.0200		BONDAR NC44A,530-66	
	10.286	4.862	5.000		.0500		.0200		DREVERM.PR161,1356-67	
THRESHOLD	4.21	1.63	1.76						2 DATA POINTS LISTED	
..... REACTION 85										
PXOPI+=P3PI+2PI-PIO	10.286	4.862	5.000		6.0000	MICROB	2.0000		DREVERM.PR161,1356-67	
THRESHOLD	4.21	1.63	1.76							
..... REACTION 86										
PPHIPI+	7.342	3.293	3.430		.0200		.0200		ABOLINS PRL11,381-63	
	7.548	3.403	3.540		.0200		.0100		ABOLINS PRL11,381-63	
	15.914	7.862	8.000	U	8.0000	MICROB			BRANDT PL22,230-66	
THRESHOLD	4.40	1.73	1.86						3 DATA POINTS LISTED	
..... REACTION 87										
PPHIPI+=PK+K-PI+	15.989	7.902	8.040	U	2.0000	MICROB			ADERHOLZ NPB14,255-69	
THRESHOLD	4.40	1.73	1.86							
..... REACTION 88										
PPHIPI+=PKSKLPI+	15.989	7.902	8.040	U	3.0000	MICROB			ADERHOLZ NPB14,255-69	
THRESHOLD	4.40	1.73	1.86							
..... REACTION 89										
PA1+	8.410	3.863	4.000		.1000		.0180		ADERH.PR138B,897-66	
	15.914	7.862	8.000		.2700		.0270		ADERHOLZ NPB8,45-68	
THRESHOLD	4.15	1.59	1.73						2 DATA POINTS LISTED	
..... REACTION 90										
PA1+=PK+KO	15.989	7.902	8.040	U	1.4000	MICROB			ADERHOLZ NPB11,259-69	
THRESHOLD	4.15	1.59	1.73							

FOOTNOTES

*=CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS
U=UPPER LIMIT

PI+P

	S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 91										
PA1+=PRHOPI+	15.914	7.862	8.000		.1200		.0120		BOESEBECK NPB4,501-68	
THRESHOLD	4.15	1.59	1.73							
..... REACTION 92										
PA1+PI+PI-=P3PI+2PI-	10.286	4.862	5.000	U	.0300				DREVERM.PR161,1356-67	
THRESHOLD	5.37	2.24	2.38							
..... REACTION 93										
PA1+PI+PI-PIO=P3PI+2PI-PI	10.286	4.862	5.000	U	.0300				DREVERM.PR161,1356-67	
THRESHOLD	6.04	2.60	2.74							
..... REACTION 94										
PA1(+,-)PI+PI=PRHO3PI	10.286	4.862	5.000	U	.0300				DREVERM.PR161,1356-67	
THRESHOLD	5.37	2.24	2.38							
..... REACTION 95										
PA1+PIO=PRHOPI+PIO	35.616	18.361	18.500		.0570		.0080		HONES,PR2,827-70	
THRESHOLD	4.74	1.91	2.04							
..... REACTION 96										
PA1-PI+PI+=P3PI+2PI-	10.286	4.862	5.000	U	.0200				DREVERM.PR161,1356-67	
THRESHOLD	5.37	2.24	2.38							
..... REACTION 97										
PA1-PI+PI+PIO=P3PI+2PI-PI	10.286	4.862	5.000	U	.0200				DREVERM.PR161,1356-67	
THRESHOLD	6.04	2.60	2.74							
..... REACTION 98										
PA1OPI+PI+PI-=P3PI+2PI-PI	10.286	4.862	5.000	U	.0300				DREVERM.PR161,1356-67	
THRESHOLD	6.04	2.60	2.74							
..... REACTION 99										
PB+	6.667	2.934	3.070		.0650		.0300		GIDAL UCRL-17984-67	1
	7.473	3.363	3.500		.0910		.0250		GIDAL UCRL-17984-67	
	7.942	3.613	3.750		.0730		.0250		GIDAL UCRL-17984-67	
	8.410	3.863	4.000		.1000		ERROR NOT GIVEN		ADERH.PR1388,897-66	
	8.504	3.913	4.050		.0740		.0300		GIDAL UCRL-17984-67	
	10.286	4.862	5.000		.0920		.0160		POLS,NPB25,109-71	
	15.914	7.862	8.000		.0320		.0110		ADERHOLZ NPB8,45-68	
	30.925	15.861	16.000		.0330		.0110		BALLAM,PR3,2606-71	*
	35.616	18.361	18.500		.0200		.0060		HONES,PR2,827-70	*
THRESHOLD	4.70	1.89	2.02						9 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C					
					5 DATA POINTS USED ABOVE 4.0 GEV/C , PROB. = .83					
					K = .40 +- .36 N = -1.00 +- .43					
..... REACTION 100										
PB+ (BACKWARD)	10.286	4.862	5.000		7.9000	MICROB	2.6000		POLS,NPB25,109-71	
THRESHOLD	4.70	1.89	2.02							
..... REACTION 101										
PB+=POMPI+	35.616	18.361	18.500		.0180		.0050		HONES,PR2,827-70	
THRESHOLD	4.70	1.89	2.02							
..... REACTION 102										
PB+=POMPI+=PPI+PI+PI-PIO	30.925	15.861	16.000		.0300		.0100		BALLAM,PR3,2606-71	
THRESHOLD	4.70	1.89	2.02							
..... REACTION 103										
PB+PI+PI-=P3PI+2PI-PIO	10.286	4.862	5.000	U	.0400				DREVERM.PR161,1356-67	
THRESHOLD	5.99	2.57	2.71							
..... REACTION 104										
PB(+,-)PI+PI(-,+)=POM3PI	10.286	4.862	5.000		.0250		ERROR NOT GIVEN		DREVERM.PR161,1356 67	4
THRESHOLD	5.99	2.57	2.71							
..... REACTION 105										
PB-PI+PI+=P3PI+2PI-PIO	10.286	4.862	5.000	U	.0300				DREVERM.PR161,1356-67	
THRESHOLD	5.99	2.57	2.71							
..... REACTION 106										
PFPI+	7.342	3.293	3.430	U	.1000				ABOLINS PRL11,381-63	
	7.548	3.403	3.540	U	.0700				ABOLINS PRL11,381-63	
	11.224	5.362	5.500		.2900		.0450		PRENTICE,KIEV70	*
	16.852	8.362	8.500		.2340		.0750		RABIN RUTGERS-67	
THRESHOLD	5.42	2.27	2.40						4 DATA POINTS LISTED	
..... REACTION 107										
PFPI+=PPI+PI+PI-	11.224	5.362	5.500		.1980		.0300		PRENTICE,KIEV-70	
THRESHOLD	5.42	2.27	2.40							
..... REACTION 108										
PFPI+=PK+K-PI+	15.989	7.902	8.040		5.0000	MICROB	2.0000		ADERHOLZ NPB14,255-69	
THRESHOLD	5.42	2.27	2.40							

FOOTNOTES

U=UPPER LIMIT
1=AVERAGE VALUE OVER A BAND OF MOMENTA
*=CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS
4=CROSS SECTION DEDUCED FROM THE CHARGED DECAY MODE OF THE ETA

PI+P

	S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 109										
PF2PI+PI-=P3PI+2PI-	10.286	4.862	5.000	U	5.0000	MICROB			DREVERM.PR161,1356-67	
THRESHOLD	6.80	3.01	3.14							
..... REACTION 110										
PF2PI+PI-PI0=P3PI+2PI-PI0	10.286	4.862	5.000	U	1.0000	MICROB			DREVERM.PR161,1356-67	
THRESHOLD	7.55	3.41	3.54							
..... REACTION 111										
PD0PI+=P3PI+2PI-	30.925	15.861	16.000		.0160		.0050		BOESEBEC,PL34B,659-71	
THRESHOLD	5.58	2.36	2.49							
..... REACTION 112										
PD0PI+=PETPI+PI+PI-	15.914	7.862	8.000		.0190		.0050		OTWINOW. PL29B,529-69	
THRESHOLD	5.58	2.36	2.49							
..... REACTION 113										
PA2+	7.848	3.563	3.700		.2120		.0290		BARNHAM,PRL26,1494-71	
	8.410	3.863	4.000		.2500		.0290		ADERH.PR138B,897-66	
	10.474	4.962	5.100		.2360		.0520		ARMENISE NC65A,637-70	
	10.286	4.862	5.000		.3100		.0600		POLS,NPB25,109-71	
	15.914	7.862	8.000		.2370		.0210		ADERHOLZ NPB8,45-68	
THRESHOLD	5.01	2.05	2.19						5 DATA POINTS LISTED	
..... REACTION 114										
PA2+=PPI+PI+PI-	7.848	3.563	3.700		.1660		.0270		BARNHAM,PRL26,1494-71	
	10.286	4.862	5.000		.2280		.0570		BDNPT NPB16,221-70	
	10.474	4.962	5.100		.1180		.0260		ARMENISE,NC65A,637-70	
THRESHOLD	5.01	2.05	2.19						3 DATA POINTS LISTED	
..... REACTION 115										
PA2+=PK+K0	7.848	3.563	3.700		.0130		.0060		BARNHAM,PRL26,1494-71	
	10.286	4.862	5.000		.0110		.0060		BOCKMANN,NPB16,221-70	
	11.224	5.362	5.500		7.0000	MICROB	2.0000		COOPER,NPB23,605-70	
	15.989	7.902	8.040		4.5000	MICROB	1.5000		ADERHOLZ NPB11,259-69	
THRESHOLD	5.01	2.05	2.19						4 DATA POINTS LISTED	
..... REACTION 116										
PA2+=PETPI+	7.848	3.563	3.700		.0320		.0070		BARNHAM,PRL26,1494-71	
	10.286	4.862	5.000		.0480		.0170		BOCKMANN,NPB16,221-70	
	15.914	7.862	8.000		.0190		.0050		BOESEBECK NPB4,501-68	
THRESHOLD	5.01	2.05	2.19						3 DATA POINTS LISTED	
..... REACTION 117										
PA2+=PRH0PI+	15.914	7.862	8.000		.0940		.0100		BOESEBECK NPB4,501-68	
THRESHOLD	5.01	2.05	2.19							
..... REACTION 118										
PA2+=P(RHPI)+	10.286	4.862	5.000		.2280		.0570		BOCKMANN,NPB16,221-70	
	15.989	7.902	8.040		.1840		.0200		BOESEBECK NPB4,501-68	*
THRESHOLD	5.01	2.05	2.19						2 DATA POINTS LISTED	
..... REACTION 119										
PA2+=PX0PI+	7.848	3.563	3.700	U	4.0000	MICROB			BARNHAM,PRL26,1494-71	
	10.286	4.862	5.000		5.0000	MICROB	3.0000	5.0000	BOCKMANN,NPB16,221-70	
	15.914	7.862	8.000		1.0000	MICROB	1.0000		BOESEBECK NPB4,501-68	
THRESHOLD	5.01	2.05	2.19						3 DATA POINTS LISTED	
..... REACTION 120										
PA2+PI+PI-=P3PI+2PI-	10.286	4.862	5.000	U	.0200				DREVERM.PR161,1356-67	
THRESHOLD	6.34	2.76	2.90							
..... REACTION 121										
PA2+PI+PI-PI0=P3PI+2PI-PI	10.286	4.862	5.000	U	.0150				DREVERM.PR161,1356-67	
THRESHOLD	7.06	3.15	3.28							
..... REACTION 122										
PA2(+,-)PI+PI=PRH03PI	10.286	4.862	5.000	U	.0200				DREVERM.PR161,1356-67	
THRESHOLD	6.34	2.76	2.90							
..... REACTION 123										
PA2+PI0=PRH0PI+PI0	35.616	18.361	18.500		.0470		.0070		HONES,PR2,827-70	
THRESHOLD	5.65	2.39	2.53							
..... REACTION 124										
PA2-PI+PI+=P3PI+2PI-	10.286	4.862	5.000	U	.0100				DREVERM.PR161,1356-67	
THRESHOLD	6.34	2.76	2.90							
..... REACTION 125										
PA2-PI+PI+PI0=P3PI+2PI-PI	10.286	4.862	5.000	U	.0100				DREVERM.PR161,1356-67	
THRESHOLD	7.06	3.15	3.28							
..... REACTION 126										
PA20PI+	16.852	8.362	8.500		.1870		.0800		RABIN RUTGERS-67	
THRESHOLD	5.65	2.39	2.53							
..... REACTION 127										
PA20PI+PI+PI-=P3PI+2PI-PI	10.286	4.862	5.000	U	.0100				DREVERM.PR161,1356-67	
THRESHOLD	7.06	3.15	3.28							

FOOTNOTES

U=UPPER LIMIT
*=CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS

********** PI+P **********

	S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 128										
PF*PI+	15.914	7.862	8.000	U	.0180				BRANDT PL22,230-66	
THRESHOLD	6.65	2.92	3.06							
..... REACTION 129										
PF*PI+=PKSKSPI+	15.989	7.902	8.040	U	2.0000	MICROB			ADERHOLZ NPB11,259-69	
THRESHOLD	6.65	2.92	3.06							
..... REACTION 130										
PA3+	15.914	7.862	8.000		.0770		.0180		ADERHOLZ NPB8,45-68	
THRESHOLD	6.65	2.92	3.06							
..... REACTION 131										
PG+	15.914	7.862	8.000		.0420		.0060		ADERHOLZ NPB8,45-68	
	25.484	12.961	13.100		8.7000	MICROB	2.3000		KRAMER,PRL25,396-70	
THRESHOLD	6.70	2.95	3.09						2 DATA POINTS LISTED	
..... REACTION 132										
PG+=PPI+PI0	15.914	7.862	8.000		.0400		.0100		BARTSCH,NPB22,109-70	
THRESHOLD	6.70	2.95	3.09							
..... REACTION 133										
PR+1700=PPI+PI+PI-PI0	30.925	15.861	16.000		.0250		.0100		BALLAM,PR3,2606-71	
THRESHOLD	6.96	3.09	3.23							
..... REACTION 134										
PS1975=PPI+PI0	25.484	12.961	13.100		6.5000	MICROB	1.8000		KRAMER,PRL25,396-70	
THRESHOLD	8.49	3.90	4.04							
..... REACTION 135										
PT2200=PPI+PI0	25.484	12.961	13.100		.0105		.0032		KRAMER,PRL25,396-70	
THRESHOLD	9.85	4.63	4.77							
..... REACTION 136										
NPI+PI+	1.832	.357	.477		.1200		.0100		KIRZ PR126,763-62	
	2.006	.450	.573		.2800		.7000		POIRIER PR143,1092-66	
	2.039	.468	.591		.1800		.0200		BOWLER NPB17,331-70	
	2.102	.501	.625		.4600		.1000		DEBAIS.NP63,273-65	
	2.138	.520	.645		.4200		.0800		BOWLER NPB17,331-70	
	2.236	.572	.698		.4900		.0500		BOWLER NPB17,331-70	
	2.285	.599	.725		.7000		.1000		NEWCOMB PR132,1283-63	
	2.287	.600	.726		.7800		.1700		BARLOUT.NC26,1409-62	
	2.335	.625	.752		.6800		.0700		BOWLER NPB17,331-70	
	2.440	.681	.809		1.1200		.1000		BOWLER NPB17,331-70	
	2.516	.722	.850		1.3100		.1000		DEBAISIE. NPB5,147-68	
	2.627	.781	.910		2.1000		.1700		TILGER PR142,972-66	
	2.702	.821	.950		1.9000		.3000		BARLOUTA. NC27,238-63	
	2.850	.900	1.030		2.4000		.4000		BARLOUTA. NC27,238-63	
	2.869	.910	1.040		1.7000		.2000		BARLOUTAUD	
	2.871	.911	1.041		2.5000		.2000		FOELSCHE,36,CERN62	
	2.943	.949	1.080		1.8700		.1200		METZGER PR164,1680-67	
	2.981	.969	1.100		2.6000		.5000		STONEHILL PRL6,624-61	
	3.130	1.049	1.180		2.3000		.5000		BARLOUTA. NC27,238-63	
	3.208	1.090	1.222		2.8000		.2000		FOELSCHE,36,CERN62	
	3.527	1.260	1.393		4.6000		.3000		FOELSCHE,36,CERN62	
	3.876	1.447	1.580		3.7000		.1000		DARONIAN NC41A,503-66	
	4.812	1.945	2.080		2.2500		.0900		JAMES PR142,896-66	
	5.317	2.215	2.350		2.3800		.1400		ALFF PR145,1072-66	
	6.067	2.614	2.750		2.4100		.1500		ARMENISE NC37,361-65	
	6.104	2.634	2.770		2.5900		.1500		YAMAMO. PR173,1302-68	
	6.348	2.764	2.900		2.4200		.1400		ALFF PR145,1072-66	
	7.473	3.363	3.500		1.4800		.0500		CARMONY BAPS9,408-64	
	7.548	3.403	3.540		1.4800		.1500		ABOLINS PR136B,195-64	
	8.223	3.763	3.900		1.6100		.2000	.3000	PLESS VIENNA732-68	
	8.223	3.763	3.900		1.4500		.0500		BASTIEN,PR3,2047-71	
	8.410	3.863	4.000		1.4400		.3000		ADERH.PR138B,897-65	
	10.286	4.862	5.000		.7100		.0400		SCHOTANUS,NPB22,45-70	
	12.162	5.862	6.000		.8000		ERROR NOT GIVEN		CRENNELL PL28B,136-68	
	15.989	7.902	8.040		.6100		.0600		ADERHOLZ NPB8,45-68	
	22.481	11.361	11.500		.4000		.2000		EVANS VIENNA327-68	
	30.925	15.861	16.000		.3100		.0030		ABBCCW COLL,TBP-71	
THRESHOLD	1.49	.17	.28						37 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C					
					14 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. = .00					
					K = 5.80 +- .33 N = -1.06 +- .02					
..... REACTION 137										
NPI+PI+ (NON RESONANT)	8.223	3.763	3.900		.0600		.0700		BASTIEN,PR3,2047-71	
THRESHOLD	1.49	.17	.28							
..... REACTION 138										
DIFF DISS=NPI+PI+	8.223	3.763	3.900		1.1300		.0500		BASTIEN,PR3,2047-71	
THRESHOLD	1.49	.17	.28							

FOOTNOTES

U=UPPER LIMIT

PI+P

	S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 139									
NPI+PI+PI+PI-	3.876	1.447	1.580	.0700		.0200		DARONIAN NC41A,503-66	
	4.258	1.650	1.784	.1100		.0200		JOHNSON BAPS9,70-64	
	4.568	1.815	1.950	.1800		.0400		CHAPMAN,PR3,38-71	
	4.812	1.945	2.080	.2600		.0300		JAMES PR142,896-66	
	5.317	2.215	2.350	.2800		.0400		ALFF PR145,1072-66	
	5.823	2.484	2.620	.3900		.0700		ALFF PR145,1072-66	
	6.067	2.614	2.750	.3900		.0300		ARMENISE NC37,361-65	
	6.104	2.634	2.770	.3300		.0300		YAMAMO. PR140B,730-65	
	6.348	2.764	2.900	.5000		.0500		ALFF PR145,1072-66	
	6.442	2.814	2.950	.5300		.0700		BROWN,PR1,3053-70	
	6.892	3.053	3.190	.5900		.0600		BROWN,PR1,3053-70	
	7.342	3.293	3.430	.9800		.1000		ABOLINS PRL11,381-63	
	7.529	3.393	3.530	.6300		.0600		BROWN,PR1,3053-70	
	7.548	3.403	3.540	.8300		.0700		ABOLINS PRL11,381-63	
	7.754	3.513	3.650	.7600		.0700		GOLDHAB. PRL12,336-64	
	7.923	3.603	3.740	.8400		.0900		BROWN,PR1,3053-70	
	8.410	3.863	4.000	.9300		.1900		ADERH.PR138B,897-65	
	8.560	3.943	4.080	.9700		.1000		BROWN,PR1,3053-70	
	10.286	4.862	5.000	.8500		.0200		POLS,NPB25,109-71	
	15.989	7.902	8.040	.7400		.0700		ADERHOLZ NPB8,45-68	
	22.481	11.361	11.500	.6700		.2000		EVANS VIENNA327-68	
	30.925	15.861	16.000	.3500		.1000		BALLAM SLAC-334-67	
	30.925	15.861	16.000	.3600		.0600		ABBCCW COLL,TBP-71	
THRESHOLD	2.25	.58	.71					23 DATA POINTS LISTED	
..... REACTION 140									
NPI+PI+PI+PI-ZO	8.410	3.863	4.000	.7000		.1400		ADERH.PR138B,897-65	
	14.976	7.362	7.500	3.7000		.3000		BAL. DUBNA P1,2963-67	
THRESHOLD	3.17	1.07	1.20					2 DATA POINTS LISTED	
..... REACTION 141									
NPI+PI+PIO	2.102	.501	.625	.0100		ERROR NOT GIVEN		DEBAIS.NP63,273-65	
	2.516	.722	.850	.0200		.0100		DEBAISIE. NPB5,147-68	
	4.812	1.945	2.080	1.6300		.0700		JAMES PR142,896-66	
THRESHOLD	1.85	.37	.49					3 DATA POINTS LISTED	
..... REACTION 142									
NPI+PI+ZO	3.914	1.466	1.600	2.0000		.1000		DARONIAN NC41A,503-66	
	8.410	3.863	4.000	1.7800		.3600		ADERH.PR138B,897-65	
THRESHOLD	2.25	.58	.71					2 DATA POINTS LISTED	
..... REACTION 143									
NK+K-PI+PI+	8.410	3.863	4.000	.0660		.0380		BARTSCH NC43A,1010-66	
THRESHOLD	4.88	1.98	2.11						
..... REACTION 144									
NK+KOPI+	6.104	2.634	2.770	.0190		.0070		YAMAMO. PR134,B383-64	
	8.410	3.863	4.000	.0800		.0160		BARTSCH NC43A,1010-66	
	15.989	7.902	8.040	.0490		.0120		ADERHOLZ NPB11,259-69	
THRESHOLD	4.28	1.66	1.79					3 DATA POINTS LISTED	
..... REACTION 145									
NK+KOPI+PI+PI-	8.410	3.863	4.000	3.0000	MICROB	3.0000		BARTSCH NC43A,1010-66	
	11.224	5.362	5.500	8.0000	MICROB	3.0000		COOPER,NPB23,605-70	
THRESHOLD	5.51	2.32	2.45					2 DATA POINTS LISTED	
..... REACTION 146									
NK+KOPI+ZO	8.410	3.863	4.000	.0300		.0150		BARTSCH NC43A,1010-66	
THRESHOLD	5.51	2.32	2.45						
..... REACTION 147									
NK+KOPI-	11.224	5.362	5.500	.0390		.0050		COOPER,NPB23,605-70	
THRESHOLD	4.28	1.66	1.79						
..... REACTION 148									
NK-KOPI+PI+PI+	8.410	3.863	4.000	7.0000	MICROB	5.0000		BARTSCH NC43A,1010-66	
	11.224	5.362	5.500	2.0000	MICROB	2.0000		COOPER,NPB23,605-70	
THRESHOLD	5.51	2.32	2.45					2 DATA POINTS LISTED	
..... REACTION 149									
NKOKOPI+PI+	8.410	3.863	4.000	.0380		.0220		BARTSCH NC43A,1010-66	
THRESHOLD	4.88	1.98	2.11						
..... REACTION 150									
NKSKSPI+PI+	15.989	7.902	8.040	8.0000	MICROB	2.0000		ADERHOLZ NPB11,259-69	
THRESHOLD	4.90	1.99	2.13						
..... REACTION 151									
N4PI+2PI-	7.473	3.363	3.500	.0220		.0070		CARM.ABS VII/67 DUB64	
	8.410	3.863	4.000	.0400		.0090		BONDAR NC44A,530-66	
	10.286	4.862	5.000	.1100		.0100		DREVERM.PR161,1356-67	
	15.914	7.862	8.000	.2700		.0400		BARDADIN INR761/6/PH	
	30.925	15.861	16.000	.2100		.0200		ABBCCW COLL,TBP-71	
THRESHOLD	3.17	1.07	1.20					5 DATA POINTS LISTED	
..... REACTION 152									
N4PI+2PI-PIO	15.989	7.902	8.040	.2700		.0400		ADERHOLZ NPB8,45-68	
THRESHOLD	3.69	1.35	1.48						

PI+P

		S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 153											
N4PI+2PI-ZO		10.286	4.862	5.000		.0500		.0100		DREVERM.PR161,1356-67	
	THRESHOLD	4.24	1.64	1.78							
..... REACTION 154											
N5PI+3PI-		15.989	7.902	8.040		.0330		.0030		ADERHOLZ NPB8,45-68	
		30.925	15.861	16.000		.8900		.0090		ABBCCW COLL,TBP-71	
	THRESHOLD	4.24	1.64	1.78						2 DATA POINTS LISTED	
..... REACTION 155											
N6PI+4PI-		15.989	7.902	8.040		1.9000	MICROB	1.9000		ADERHOLZ NPB8,45-68	
		30.925	15.861	16.000		.0170		.0040		ABBCCW COLL,TBP-71	
	THRESHOLD	5.48	2.30	2.43						2 DATA POINTS LISTED	
..... REACTION 156											
N*+++1640PI-		4.475	1.766	1.900	U	.0400				BANNER,NPB15,205-70	
	THRESHOLD	3.17	1.07	1.20							
..... REACTION 157											
N*++1236		30.925	15.861	16.000		.4400		.1000		BALLAM SLAC-334-67	A
	THRESHOLD	1.53	.20	.30							
..... REACTION 158											
N*++1236PAP		15.914	7.862	8.000		.0100		.0030		ADERHOLZ,NPB14,255-69	
		15.989	7.902	8.040		.0100		.0030		ADERHOLZ NPB14,255-69	
	THRESHOLD	9.68	4.54	4.68						2 DATA POINTS LISTED	
..... REACTION 159											
N*++1236PI+PI+PI-PI-		10.286	4.862	5.000		.2500		.0500		DREVERM.PR161,1356-67	
	THRESHOLD	3.23	1.10	1.23							
..... REACTION 160											
N*++1236PI+PI+PI-PI-PIO		8.410	3.863	4.000		.1970		.0350		BONDAR NC44A,530-66	
		10.286	4.862	5.000		.3500		.0500		DREVERM.PR161,1356-67	
	THRESHOLD	3.75	1.38	1.51						2 DATA POINTS LISTED	
..... REACTION 161											
N*++12362PI+2PI-PIO(NR)		8.410	3.863	4.000		.0580		.0130		BONDAR NC44A,530-66	
	THRESHOLD	3.75	1.38	1.51							
..... REACTION 162											
N*++1236PI+PI-		3.876	1.447	1.580		1.3000		.0700		DARONIAN NC41A,503-66	
		4.568	1.815	1.950		1.6400		.2000		CHAPMAN,PR3,38-71	
		4.812	1.945	2.080		2.3000		.2000		JAMES PR142,896-66	
		5.317	2.215	2.350		2.0000		.1900		ALFF PR145,1072-66	
		5.823	2.484	2.620		1.9100		.2500		ALFF PR145,1072-66	
		6.348	2.764	2.900		1.4700		.1300		ALFF PR145,1072-66	
		7.754	3.513	3.650		1.1600		.1200		GOLDHAB. PRL12,336-64	
		8.410	3.863	4.000		1.1000		.0200		ADERH.PR138B,897-65	
		11.224	5.362	5.500		1.3600		.1800		PRENTICE,KIEV-70	
		14.038	6.862	7.000		1.2600		.1300		SLATTERY NC50A,377-67	
		16.852	8.362	8.500		1.1700		.2300		RABIN RUTGERS-67	
	THRESHOLD	2.30	.61	.73						11 DATA POINTS LISTED	
..... REACTION 163											
N*++1236PI+PI-PIO		3.914	1.466	1.600		.2000		.0300		DARONIAN NC41A,503-66	A
		5.317	2.215	2.350		1.4100		.1300		ALFF PR145,1072-66	
		5.823	2.484	2.620		1.5200		.2300		ALFF PR145,1072-66	
		6.348	2.764	2.900		.9600		.1000		ALFF PR145,1072-66	
		7.754	3.513	3.650		1.8400		.3000		SHEN(THESIS)UCRL16170	
		8.410	3.863	4.000		1.1000		.0610		ADERH.PR138B,897-65	
		11.224	5.362	5.500		.9120		.1230		PRENTICE,KIEV-70	
		16.852	8.362	8.500		1.0100		.2500		RABIN RUTGERS-67	
		35.616	18.361	18.500		.2000		.0100		HONES,PR2,827-70	
	THRESHOLD	2.74	.84	.97						9 DATA POINTS LISTED	
..... REACTION 164											
N*++PI+PI-PIO(NON RES.)		4.568	1.815	1.950		.3900		.0500		CHAPMAN,PR3,38-71	
	THRESHOLD	2.74	.84	.97							
..... REACTION 167											
N*++1236PIO		2.943	.949	1.080		5.5700		.2500	.2600	METZGER PR164,1680-67	
		2.999	.979	1.110		6.0050		.2600		TAUTFE. COO1428-14-65	
		3.876	1.447	1.580		1.2500		.0600		DARONIAN NC41A,503-66	
		4.812	1.945	2.080		.5500		.0800		JAMES PR142,896-66	
		6.067	2.614	2.750		.3000		.0300		ARMENISE NC37,361-65	
		7.548	3.403	3.540		.2000		.0400		ABOLINS PR136B,195-64	
		7.754	3.513	3.650		.3000		.0300		TRILLING PL19,427-65	
		8.223	3.763	3.900		.0380		.0300		BASTIEN,PR3,2047-71	
		8.410	3.863	4.000		.3000		.0600		ADERH.PR138B,897-65	
		10.286	4.862	5.000		.2200		.0100		SCHOTANUS,NPB22,45-70	
		15.914	7.862	8.000		.1100		.0080		ADERHOLZ NPB8,45-68	
	THRESHOLD	1.89	.39	.51						11 DATA POINTS LISTED	
						FIT OF SIGMA AGAINST PLAB GEV/C					
						8 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. = .48					
						K = 1.08 +- .31 N = -1.04 +- .18					
..... REACTION 168											
N*++1236ZO		3.914	1.466	1.600		1.6000		.0700		DARONIAN NC41A,503-66	
	THRESHOLD	2.30	.61	.73							

FOOTNOTES

U=UPPER LIMIT
A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES

PI+P

		S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 169										
N*++1236K+K-		15.914	7.862	8.000	.0310		.0050		ADERHOLZ,NPB14,255-69	
	THRESHOLD	4.95	2.02	2.15						
..... REACTION 170										
N*++1236K0K0		11.224	5.362	5.500	.0380		.0070		COOPER,NPB23,605-70	
	THRESHOLD	4.95	2.02	2.15						
..... REACTION 171										
N*++1236KSKS		15.989	7.902	8.040	9.0000	MICROB	2.0000		ADERHOLZ NPB11,259-69	
	THRESHOLD	4.97	2.03	2.17						
..... REACTION 172										
N*++1236KSKL		15.989	7.902	8.040	.0100		.0020		ADERHOLZ NPB11,259-69	
	THRESHOLD	4.98	2.03	2.17						
..... REACTION 173										
N*++1236ET		3.297	1.138	1.270	.3450		.0850		FOSTER,108,CERN62	*
		3.316	1.148	1.280	.2800		.0600		GRETNER,KIEV-70	
		3.521	1.257	1.390	.6300		.1000		GRETNER,KIEV-70	
		3.820	1.417	1.550	.7100		.1200		GRETNER,KIEV-70	
		3.951	1.486	1.620	.7800		.1100		GRETNER,KIEV-70	
		4.194	1.616	1.750	.6600		.1000		GRETNER,KIEV-70	
		4.381	1.716	1.850	.5600		.1000		GRETNER,KIEV-70	
		4.568	1.815	1.950	1.0000		.1300		CHAPMAN,PR3,38-71	*
		4.812	1.945	2.080	.6400		.2000		JAMES PR142,896-66	
		5.224	2.165	2.300	.3300		.0500		GRETNER,KIEV-70	
		5.299	2.205	2.340	.3100		.0700		GELFA. COLUMBIA UNIV.	
		5.823	2.484	2.620	.2400		.1200		GELFA. COLUMBIA UNIV.	
		5.917	2.534	2.670	.2500		.0400		GRETNER,KIEV-70	
		6.348	2.764	2.900	.2000		.0700		GELFA. COLUMBIA UNIV.	
		6.442	2.814	2.950	.1800		.0600		GIDAL PC-68	
		6.910	3.063	3.200	.2750		.0500		GIDAL PC-68	
		7.473	3.363	3.500	.1400		.0350		GIDAL PC-68	
		7.473	3.363	3.500	.1700		.0300		GRETNER,KIEV-70	
		7.754	3.513	3.650	.1400		.0400		TRILLING PL19,427-65	
		7.848	3.563	3.700	.1470		.0210		ABRAMS,UCRL19743-70	
		7.942	3.613	3.750	.1650		.0450		GIDAL PC-68	
		8.410	3.863	4.000	.1000		.0050		ADERHOLZ NC35,659-65	
		8.598	3.963	4.100	.1800		.0450		GIDAL PC-68	
		10.286	4.862	5.000	.0830		.0170		POLS,NPB25,109-71	
		11.224	5.362	5.500	.0860		.0090		PRENTICE,KIEV70	
		15.914	7.862	8.000	.0520		.0090		ADERHOLZ NPB8,45-68	
		35.616	18.361	18.500	.0200		.0080		BISWAS,PR2,2529-70	
	THRESHOLD	3.19	1.08	1.21					27 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C					
					12 DATA POINTS USED ABOVE 3.0 GEV/C , PROB. = .76					
					K = .64 +- .30 N = -1.24 +- .31					
..... REACTION 174										
N*++1236ET (BACKWARD)		10.286	4.862	5.000	8.3000	MICROB	4.2000		POLS,NPB25,109-71	
	THRESHOLD	3.19	1.08	1.21						
..... REACTION 175										
N*++1236ET=PPI+PI+PI-PI0		3.297	1.138	1.270	.1000		.0270		FOSTER,108,CERN6	
		4.568	1.815	1.950	.2300		.0300		CHAPMAN,PR3,38-71	
		8.410	3.863	4.000	.0300		.0040		ADERH.PR138B,897-65	
		11.224	5.362	5.500	.0198		.0044		PRENTICE,KIEV-70	
	THRESHOLD	3.19	1.08	1.21					4 DATA POINTS LISTED	
..... REACTION 176										
N*++1236RH0		4.568	1.815	1.950	1.4000		.2000		CHAPMAN,PR3,38-71	
		4.812	1.945	2.080	1.0000		.3000		JAMES PR142,896-66	
		5.299	2.205	2.340	.6100		ERROR NOT GIVEN		ALFF PR145,1072-66	
		5.317	2.215	2.350	1.2200		.2000		ALFF PR145,1072-66,PC	
		5.823	2.484	2.620	1.2000		.2000		ALFF PR145,1072-66,PC	
		5.823	2.484	2.620	.6000		.1200		ALFF PR145,1072-66	
		6.104	2.634	2.770	.9000		.0700		YAM. PR140B,730-65,PC	
		6.348	2.764	2.900	.4100		.1000		ALFF PR145,1072-66	
		6.348	2.764	2.900	.6800		.1400		ALFF PR145,1072-66,PC	
		6.442	2.814	2.950	.8300		.0700		BROWN PRL19,664-67	
		6.910	3.063	3.200	.7600		.0800		BROWN PRL19,664-67	
		7.342	3.293	3.430	.9500		.2000		ABOLINS PRL11,381-63	
		7.473	3.363	3.500	.8200		.0800		BROWN PRL19,664-67	
		7.548	3.403	3.540	1.0000		.1500		ABOLINS PRL11,381-63	
		7.754	3.513	3.650	1.1700		.1200		TRILLING PL19,427-65	
		7.848	3.563	3.700	.9000		.1000		ABRAMS,PRL25,617-70	
		7.942	3.613	3.750	.8400		.0800		BROWN PRL19,664-67	
		8.410	3.863	4.000	.6000		.0500		ABBBHLM NC35,659-65	
		8.560	3.943	4.080	.6900		.0700		BROWN PRL19,664-67	
		10.286	4.862	5.000	.8700		.0800		POLS,NPB25,109-71	
		10.474	4.962	5.100	.6320		.0600		ARMENISE,NC65A,637-70	
		11.224	5.362	5.500	.6830		.0930		PRENTICE,KIEV-70	
		14.038	6.862	7.000	.7000		.1000		SLATTERY NC50,377-67	
		15.914	7.862	8.000	.3110		.0350		ADERHOLZ NPB8,45-68	
		22.857	11.561	11.700	.2680		.0330		DGHMS COLLAB,KIEV-70	
		25.484	12.961	13.100	.1700		.0200		GAIDOS,PR1,3190-70	
		35.616	18.361	18.500	.0870		.0220		BISWAS,PR2,2529-70	
	THRESHOLD	3.98	1.50	1.64					27 DATA POINTS LISTED	
					FIT OF SIGMA AGAINST PLAB GEV/C					
					8 DATA POINTS USED ABOVE 5.0 GEV/C , PROB. = .53					
					K = 8.81 +- 3.76 N = -1.51 +- .21					

FOOTNOTES

*=CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS

PI+P

		S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 177											
N***1236RHO (BACKWARD)		10.286	4.862	5.000		.0107		.0029		POLS,NPB25,109-71	
	THRESHOLD	3.98	1.50	1.64							
..... REACTION 178											
N***1236RHORHO		15.914	7.862	8.000		.0900		.0500		BARDADIN INR761/6/PH	
	THRESHOLD	7.60	3.43	3.57							
..... REACTION 179											
N***1236OM		4.568	1.815	1.950		1.5700		.1600		CHAPMAN,PR3,38-71	*
		4.812	1.945	2.080	**	**1.5500		.2000		JAMES PR142,896-66	
		5.224	2.165	2.300		.7200		.1000		KO,KIEV-70	
		5.299	2.205	2.340		1.2600		.1400		ALFF PR145,1072-66	
		5.317	2.215	2.350		.9500		.0200		ALFF PR145,1072-66,PC	
		5.823	2.484	2.620		1.5600		.1900		GELFA. COLUMBIA UNIV.	
		5.823	2.484	2.620		.9800		.2000		ALFF PR145,1072-66,PC	
		5.917	2.534	2.670		.8100		.0800		KO,KIEV-70	
		6.067	2.614	2.750		.7200		.2200		ARMENISE NC40A,273-65	*
		6.104	2.634	2.770		1.1500		.0700		YAM. PR140B,730-65,PC	
		6.348	2.764	2.900		.5800		.2000		ALFF PR145,1072-66,PC	
		6.442	2.814	2.950		.7300		.0700		BROWN PRL19,664-67	
		6.910	3.063	3.200		.6300		.0700		BROWN PRL19,664-67	
		7.342	3.293	3.430		.5800		.0700		ABOLINS PRL11,381-63	
		7.473	3.363	3.500		.5300		.0700		BROWN PRL19,664-67	
		7.548	3.403	3.540		.5100		.1000		ABOLINS PRL11,381-63	
		7.754	3.513	3.650		.7000		.0800		TRILLING PL19,427-65	
		7.848	3.563	3.700		.6600		.0800		ABRAMS,PRL25,617-70	
		7.942	3.613	3.750		.5000		.0700		BROWN PRL19,664-67	
		8.410	3.863	4.000		.3900		.0400		ABBBHLM NC35,659-65	
		8.560	3.943	4.080		.4500		.0700		BROWN PRL19,664-67	
		10.286	4.862	5.000		.2800		.0100		POLS,NPB25,109-71	
		11.224	5.362	5.500		.2070		.0300		PRENTICE KIEV70	
		14.038	6.862	7.000		.1000		.0300		FERB. UR875,153-66,PC	
		15.914	7.862	8.000		.1070		.0100		ADERHOLZ NPB8,45-68	
		22.857	11.561	11.700		.0860		.0180		DGHMS COLLAB,KIEV70	
		35.616	18.361	18.500		.0120		.0030		BISWAS,PR2,2529-70	
	THRESHOLD	4.08	1.55	1.69						27 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

15 DATA POINTS USED ABOVE 3.0 GEV/C , PROB. = .93

K = 7.76 +- 2.18 N = -2.06 +- .18

..... REACTION 180											
N***1236OM (BACKWARD)		10.286	4.862	5.000		5.3000	MICROB	1.8000		POLS,NPB25,109-71	
	THRESHOLD	4.07	1.55	1.68							
..... REACTION 181											
N***1236OM=PPI+PI+PI-PIO		4.568	1.815	1.950		1.4100		.1400		CHAPMAN,PR3,38-71	
		6.067	2.614	2.750		.6500		.0200		ARMENISE NC40A,273-65	
		11.224	5.362	5.500		.1830		.0280		PRENTICE,KIEV-70	
		22.857	11.561	11.700		.0770		.0160		DGHMS COLLAB,KIEV-70	
	THRESHOLD	4.08	1.55	1.69						4 DATA POINTS LISTED	
..... REACTION 182											
N***1236OMPI+PI-		8.410	3.863	4.000		.1500		.0330		BONDAR NC44A,530-66	
	THRESHOLD	5.29	2.20	2.33							
..... REACTION 183											
N***1236OMRHO		15.914	7.862	8.000		.0800		.0800		BARDADIN INR761/6/PH	
	THRESHOLD	7.72	3.50	3.63							
..... REACTION 184											
N***1236XO		7.754	3.513	3.650		.0470		.0200	.0140	TRILLING PL19,427-65	
		7.848	3.563	3.700		.0300		.0060		ABRAMS,UCRL19743-70	
		8.410	3.863	4.000		.0710		.0320		BONDAR NC44A,530-66	
		15.914	7.862	8.000		.0500		.0250		BARDADIN INR761/6/PH	*
	THRESHOLD	4.89	1.99	2.12						4 DATA POINTS LISTED	
..... REACTION 185											
N***1236XO=N*2PI+2PI-PIO		15.914	7.862	8.000		.0100		.0050		BARDADIN INR761/6/PH	
	THRESHOLD	4.89	1.99	2.12							
..... REACTION 186											
N***1236H=PPI+PI+PI-PIO		8.410	3.863	4.000		.1500		ERROR NOT GIVEN		BARTSCH PL11,167,64	
	THRESHOLD	4.96	2.02	2.16							
..... REACTION 187											
N***1236PHI		7.754	3.513	3.650	U	.0100				TRILLING PL19,427-65	
		15.914	7.862	8.000	U	4.0000	MICROB			BRANDT PL22,230-66	
	THRESHOLD	5.09	2.09	2.23						2 DATA POINTS LISTED	
..... REACTION 188											
N***1236PHI=PKSKLPI+		15.989	7.902	8.040	U	1.0000	MICROB			ADERHOLZ NPB11,259-69	
	THRESHOLD	5.09	2.09	2.23							

FOOTNOTES

*=CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS
U=UPPER LIMIT

PI+P

	S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 189										
N*++1236F	7.754	3.513	3.650		.1300		.0500		TRILLING,PL19,427,65	
	8.410	3.863	4.000		.1500		.0500		ABBBHLM NC35,659-65	
	10.286	4.862	5.000		.3400		.0700		POLS,NPB25,109-71	
	10.474	4.962	5.100		.2700		.0180		ARMENISE,NC65A,637-70	
	11.224	5.362	5.500		.2860		.0440		PRENTICE,KIEV70	
	15.914	7.862	8.000		.2150		.0150		ADERHOLZ NPB8,45-68	
	22.857	11.561	11.700		.1080		.0180		DGHMS COLLAB,KIEV70	
	25.484	12.961	13.100		.1150		.0070		GAIDOS,NPB26,225-71	
	35.616	18.361	18.500		.0410		.0100		BISWAS,PR2,2529-70	
THRESHOLD	6.18	2.67	2.81						9 DATA POINTS LISTED	
..... REACTION 190										
N*++1236F=PPI+PI+PI-	8.410	3.863	4.000		.1000		.0200		ADERH.PR138B,897-66	
	10.286	4.862	5.000		.1910		.0200		BDNPT NPB16,221-70	
	10.474	4.962	5.100		.1800		.0120		ARMENISE,NC65A,637-70	
	11.224	5.362	5.500		.1910		.0290		PRENTICE,KIEV-70	
	14.038	6.862	7.000		.1680		.0630		SLATTERY NC50A,377-67	
	22.857	11.561	11.700		.0720		.0120		DGHMS COLLAB,KIEV-70	
THRESHOLD	6.18	2.67	2.81						6 DATA POINTS LISTED	
..... REACTION 191										
N*++1236F=PK+K-PI+	15.989	7.902	8.040		5.0000	MICROB	2.0000		ADERHOLZ NPB11,259-69	
THRESHOLD	6.18	2.67	2.81							
..... REACTION 192										
N*++1236F=PKSKSPI+	15.989	7.902	8.040	U	5.0000	MICROB			ADERHOLZ NPB11,259-69	
THRESHOLD	6.18	2.67	2.81							
..... REACTION 193										
N*++1236D0=PETPI+PI+PI-	15.914	7.862	8.000		6.0000	MICROB	2.0000		OTWINOW. PL29B,529-69	
THRESHOLD	6.36	2.77	2.90							
..... REACTION 194										
N*++1236A20	10.286	4.862	5.000		.2200		.0300		POLS,NPB25,109-71	
	15.914	7.862	8.000		.0680		.0130		ADERHOLZ NPB8,45-68	
THRESHOLD	6.43	2.81	2.94						2 DATA POINTS LISTED	
..... REACTION 195										
N*++1236A20=P2PI+PI-PI0	10.286	4.862	5.000		.1460		.0220		BOCKMANN LUND-69	
	15.914	7.862	8.000		.0330		.0100		BOESEB.NPB4,501-68	
THRESHOLD	6.43	2.81	2.94						2 DATA POINTS LISTED	
..... REACTION 196										
N*++1236A20=PK+K-PI+	15.989	7.902	8.040	U	2.0000	MICROB			ADERHOLZ NPB11,259-69	
THRESHOLD	6.43	2.81	2.94							
..... REACTION 197										
N*++1236A20=PKSKSPI+	15.989	7.902	8.040	U	2.0000	MICROB			ADERHOLZ NPB11,259-69	
THRESHOLD	6.43	2.81	2.94							
..... REACTION 199										
N*++1236A20=N*++1236ETPI0	10.286	4.862	5.000	U	.0500		.0250		BOCKMANN,NPB16,221-70	
THRESHOLD	6.43	2.81	2.94							
..... REACTION 200										
N*++A20=N*++(RHPI)0	10.286	4.862	5.000		.1460		.0220		BOCKMANN,NPB16,221-70	
THRESHOLD	6.43	2.81	2.94							
..... REACTION 201										
N*++1236G0	22.857	11.561	11.700		6.0000	MICROB	3.0000		DGHMS COLLAB,KIEV-70	
	35.616	18.361	18.500		.0340		.0080		BISWAS,PR2,2529-70	
THRESHOLD	8.33	3.82	3.96						2 DATA POINTS LISTED	
..... REACTION 202										
N*+1236PI+	2.943	.949	1.080		2.4600		.2300	.0900	METZGER PR164,1680-67	
	2.999	.979	1.110		2.8800		.1440		TAUTFEST COO1428-14	
	3.876	1.447	1.580		.9000		.0600		DARONI. NC,A41,503-66	
	3.876	1.447	1.580		.9600		.1200		DARONI. NC,A41,503-66	
	8.410	3.863	4.000		.2000		.0400		ADERH. PR138,B897-65	
	15.914	7.862	8.000		.1200		.0450		DEUTSCHM. PL19,608-65	
THRESHOLD	1.89	.39	.51						6 DATA POINTS LISTED	
..... REACTION 203										
N*+1236PI+=PPI+PI0	2.999	.979	1.110		1.9250		.0960		TAUTFEST COO 1428-14	
	3.876	1.447	1.580		.6000		.0400		DARONI. NC,A41,503-66	
	8.223	3.763	3.900		.1400		.0500		BASTIEN,PR3,2047-71	
	15.914	7.862	8.000		.0800		.0300		DEUTSCHM.PL19,608-65	
THRESHOLD	1.89	.39	.51						4 DATA POINTS LISTED	
..... REACTION 204										
N*+1236PI+=NPI+PI+	3.876	1.447	1.580		.3200		.0400		DARONI. NC,A41,503-66	
	8.223	3.763	3.900		.0800		.0100		BASTIEN,PR3,2047-71	
THRESHOLD	1.89	.39	.51						2 DATA POINTS LISTED	

FOOTNOTES

U=UPPER LIMIT

PI+P

	S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 205										
N*+1236PI+PI+PI-	35.616	18.361	18.500		.0610		.0060		HONES,PR2,827-70	
THRESHOLD	2.74	.84	.97							
..... REACTION 206										
N*+3PI+2PI-=P3PI+2PI-PI0	10.286	4.862	5.000	U	.0200				DREVERM.PR161,1356-67	
THRESHOLD	3.75	1.38	1.51							
..... REACTION 207										
N*+1236K+K0	11.224	5.362	5.500		8.0000	MICROB	2.0000		COOPER,NPB23,605-70	
THRESHOLD	4.95	2.02	2.15							
..... REACTION 208										
N*01236PI+PI+	8.410	3.863	4.000		.2500		.0500		ADERH.PR138,B897-65	
THRESHOLD	2.30	.61	.73							
..... REACTION 209										
N*03PI+PI-=P3PI+2PI-	10.286	4.862	5.000	U	.0200				DREVERM.PR161,1356-67	
THRESHOLD	3.23	1.10	1.23							
..... REACTION 210										
N+1400PI+	12.162	5.862	6.000		.0340		ERROR NOT GIVEN		BELL PRL20,164-68	
	25.671	13.061	13.200		.1500		.0400		FOLEY PRL19,397-67	1
THRESHOLD	2.37	.64	.77						2 DATA POINTS LISTED	
..... REACTION 211										
N+1525PI+	2.943	.949	1.080		0.0000	MICROB	90.0000		METZGER PR164,1680-67	$
	3.914	1.466	1.600		.3600		.0400		DARONIAN NC41A,503-66	A
THRESHOLD	2.77	.86	.99						2 DATA POINTS LISTED	
..... REACTION 212										
N*++1670K0K0=PK0K0PI+	11.224	5.362	5.500		4.0000	MICROB	2.0000		COOPER,NPB23,605-70	
THRESHOLD	7.06	3.15	3.28							
..... REACTION 213										
N+1688PI+	3.914	1.466	1.600		.4700		.0500		DARONIAN NC41A,503-66	A
	25.671	13.061	13.200		.4000		1.0000		FOLEY PRL19,397-67	1
THRESHOLD	3.34	1.16	1.29						2 DATA POINTS LISTED	
..... REACTION 214										
N+1688PI+=PPI+PI0	8.223	3.763	3.900		.0900		.0200		BASTIEN,PR3,2047-71	
THRESHOLD	3.34	1.16	1.29							
..... REACTION 215										
N+1688PI+=NPI+PI+	4.812	1.945	2.080		.7700		.1400		JAMES PR142,896-66	
	8.223	3.763	3.900		.1800		.0300		BASTIEN,PR3,2047-71	
THRESHOLD	3.34	1.16	1.29						2 DATA POINTS LISTED	
..... REACTION 216										
N+1688PI+=LK+PI+	4.568	1.815	1.950		.0300		.0100		DAGAN PR161,1384-67	
THRESHOLD	3.34	1.16	1.29							
..... REACTION 217										
N+1710PI+=LK+PI+	15.989	7.902	8.040		6.0000	MICROB	3.0000		ADERHOLZ NPB11,259-69	
THRESHOLD	3.42	1.20	1.34							
..... REACTION 218										
(N1710PI)+PI+=(LKPI)+PI+	15.989	7.902	8.040		.0270		.0060		ADERHOLZ NPB11,259-69	
THRESHOLD	3.96	1.49	1.62							
..... REACTION 219										
YK	15.914	7.862	8.000		1.5500		.2000		BRANDT PL22,230-66	
THRESHOLD	2.82	.88	1.02							
..... REACTION 220										
Y0K	14.297	7.000	7.138		.8000		.2500		SOLOVIEV,388,ROCH60	A
THRESHOLD	3.06	1.01	1.14							
..... REACTION 221										
Y0	8.410	3.863	4.000		.4350		ERROR NOT GIVEN		BARTSCH NC43A,1010-66	A
THRESHOLD	3.06	1.01	1.14							
..... REACTION 222										
YK*890PI=YKPIPI	8.410	3.863	4.000		.0830		.0180		BARTSCH NC43A,1010-66	
THRESHOLD	4.60	1.83	1.97							
..... REACTION 223										
L(K/PI)+PI+Z0	15.989	7.902	8.040		.1410		.0130		ADERHOLZ NPB11,259-69	
THRESHOLD	4.10	1.57	1.70							
..... REACTION 224										
SK	3.130	1.049	1.180		.1000		.0500		BARLOUTA. NC27,238-63	A
THRESHOLD	2.84	.89	1.02							
..... REACTION 225										
LK+	16.665	8.262	8.400		.2050		.0250		KREBS BAPS12,539-67	A
THRESHOLD	3.06	1.01	1.14							

FOOTNOTES

U=UPPER LIMIT
1=AVERAGE VALUE OVER A BAND OF MOMENTA
$=DATA POINT NOT USED IN FITTING OR PLOTTING
A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES

PI+P

	S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 226										
LK+PI+	3.521	1.257	1.390		.0100		.0100		FOELSCHE BNL-YALE-64	
	4.101	1.566	1.700		.1500		.0200		PAN,PR2,449-70	
	4.213	1.626	1.760		.1900		.0400		FOEL. PR161,1384-67PC	
	4.568	1.815	1.950		.1400		.0300		DAGAN PR161,1384-67	
	4.812	1.945	2.080		.1200		.0300		FOEL. PR161,1384-67PC	
	11.224	5.362	5.500		.0660		.0070		COOPER,NPB23,605-70	
	12.162	5.862	6.000		.0190		.0020		CRENELL PRL19,1212-67	
	15.989	7.902	8.040		.0300		.0040		ADERHOLZ NPB11,259-69	
	16.665	8.262	8.400		.0230		.0070		KREBS BAPS12,539-67	
THRESHOLD	3.06	1.01	1.14						9 DATA POINTS LISTED	
..... REACTION 227										
LK+PI+PI+PI+PI-PI-	15.989	7.902	8.040		9.0000	MICROB	4.0000		ADERHOLZ NPB11,259-69	
THRESHOLD	5.33	2.22	2.36							
..... REACTION 228										
LK+PI+PI+PI+PI-PI-PIO	15.989	7.902	8.040		.0110		.0050		ADERHOLZ NPB11,259-69	
THRESHOLD	6.00	2.58	2.71							
..... REACTION 229										
LK+PI+PI+PI-	11.224	5.362	5.500		.0200		.0030		COOPER,NPB23,605-70	
	15.989	7.902	8.040		.0560		.0100		ADERHOLZ NPB11,259-69	
THRESHOLD	4.12	1.57	1.71						2 DATA POINTS LISTED	
..... REACTION 230										
LK+PI+PI+PI-PIO	15.989	7.902	8.040		.0880		.0120		ADERHOLZ NPB11,259-69	
THRESHOLD	4.70	1.89	2.02							
..... REACTION 231										
LK+PI+PIO	3.521	1.257	1.390	U	.0100				FOELSCHE BNL-YALE-64	
	4.101	1.566	1.700		.4000	MICROB	.2000		PAN,PR2,449-70	
	4.213	1.626	1.760	U	.0100				FOEL. PR161,1384-67PC	
	4.568	1.815	1.950		.0100		.0100		DAGAN PR161,1384-67	
	4.812	1.945	2.080		.0150		.0110		FOEL. PR161,1384-67PC	
	11.224	5.362	5.500		.1270		.0100		COOPER,NPB23,605-70	
	15.989	7.902	8.040		.0750		.0070		ADERHOLZ NPB11,259-69	
THRESHOLD	3.57	1.28	1.42						7 DATA POINTS LISTED	
..... REACTION 232										
LKO	16.665	8.262	8.400		.1050		.0250		KREBS BAPS12,539-67	A
THRESHOLD	3.57	1.28	1.42							
..... REACTION 233										
LKOPI+PI+	3.521	1.257	1.390	U	.0100				FOELSCHE BNL-YALE-64	
	4.101	1.566	1.700		.5000	MICROB	.3000		PAN,PR2,449-70	
	4.213	1.626	1.760		5.0000	MICROB	5.0000		FOELSC. PR161,1384-67	
	4.812	1.945	2.080		.0100		.0100		FOELSC. PR161,1384-67	
	11.224	5.362	5.500		.0880		.0140		COOPER,NPB23,605-70	
	15.989	7.902	8.040		.0480		.0070		ADERHOLZ NPB11,259-69	
THRESHOLD	3.57	1.28	1.42						6 DATA POINTS LISTED	
..... REACTION 234										
LKOPI+PI+PI+PI-	15.989	7.902	8.040		.0540		.0100		ADERHOLZ NPB11,259-69	
THRESHOLD	4.70	1.89	2.02							
..... REACTION 235										
LKOPI+PI+PI+PI-PIO	15.989	7.902	8.040		.0590		.0150		ADERHOLZ NPB11,259-69	
THRESHOLD	5.33	2.22	2.36							
..... REACTION 236										
LKOPI+PI+PI+PI-ZO	15.989	7.902	8.040		.0180		.0070		ADERHOLZ NPB11,259-69	
THRESHOLD	6.00	2.58	2.71							
..... REACTION 237										
LKOPI+PI+PIO	15.989	7.902	8.040		.0490		.0080		ADERHOLZ NPB11,259-69	
THRESHOLD	4.12	1.57	1.71							
..... REACTION 238										
LKOPI+PI+ZO	15.989	7.902	8.040		.0360		.0070		ADERHOLZ NPB11,259-69	
THRESHOLD	4.70	1.89	2.02							
..... REACTION 239										
LKO4PI+2PI-	15.989	7.902	8.040		6.0000	MICROB	4.0000		ADERHOLZ NPB11,259-69	
THRESHOLD	6.00	2.58	2.71							
..... REACTION 240										
LK**890PI+	15.989	7.902	8.040		.0390		.0050		ADERHOLZ NPB11,259-69	
THRESHOLD	4.60	1.83	1.97							
..... REACTION 241										
LK**890PI+=LK+PI+PIO	11.224	5.362	5.500		8.0000	MICROB	1.0000		COOPER,NPB23,605-70	
THRESHOLD	4.60	1.83	1.97							
..... REACTION 242										
LK**890PI+=LKOPI+PI+	11.224	5.362	5.500		.0120		.0030		COOPER,NPB23,605-70	
THRESHOLD	4.60	1.83	1.97							

FOOTNOTES

U=UPPER LIMIT
A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES

********** PI+P **********

	S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 243									
LK**+890PI+PI0=LK02PI+PI0	15.989	7.902	8.040	.0150		.0050		ADERHOLZ NPB11,259-69	
THRESHOLD	5.22	2.16	2.30						
..... REACTION 244									
(L/S0)	14.297	7.000	7.138	2.0000		.3500		SOLOVIEV,388,ROCH60	A
THRESHOLD	3.06	1.01	1.14						
..... REACTION 245									
(L/S0)K+PI+	6.104	2.634	2.770	.1630		.0180		YAMAMO. PR134B,383-64	
	8.410	3.863	4.000	.0810		.0210		BARTSCH NC43A,1010-66	
THRESHOLD	3.07	1.01	1.15					2 DATA POINTS LISTED	
..... REACTION 246									
(L/S0)K+PI+PI+PI-	8.410	3.863	4.000	.0260		.0070		BARTSCH NC43A,1010-66	
THRESHOLD	4.12	1.58	1.71						
..... REACTION 247									
(L/S0)K+PI+PI+PI-PI0	8.410	3.863	4.000	8.0000	MICROB	4.0000		BARTSCH NC43A,1010-66	
THRESHOLD	4.71	1.89	2.03						
..... REACTION 248									
(L/S0)K+PI+PI+PI-Z0	8.410	3.863	4.000	.0100		.0050		BARTSCH NC43A,1010-66	
THRESHOLD	5.34	2.23	2.36						
..... REACTION 249									
(L/S0)K+PI+PI0	6.104	2.634	2.770	.0840		.0130		YAMAMO. PR134B,383-64	
	8.410	3.863	4.000	.1480		.0160		BARTSCH NC43A,1010-66	
THRESHOLD	3.58	1.29	1.42					2 DATA POINTS LISTED	
..... REACTION 250									
(L/S0)K+PI+Z0	8.410	3.863	4.000	.0230		.0100		BARTSCH NC43A,1010-66	
THRESHOLD	4.12	1.58	1.71						
..... REACTION 251									
(L/S0)K0PI+PI+	4.568	1.815	1.950	.0150		.0110		DAGAN PR161,1384-67	
	6.104	2.634	2.770	.0850		.0120		YAMAMO. PR134B,383-64	
	8.410	3.863	4.000	.0910		.0100		BARTSCH NC43A,1010-66	
THRESHOLD	3.58	1.29	1.42					3 DATA POINTS LISTED	
..... REACTION 252									
(L/S0)K0PI+PI+PI0	8.410	3.863	4.000	.0200		.0120		BARTSCH NC43A,1010-66	
THRESHOLD	4.12	1.58	1.71						
..... REACTION 253									
(L/S0)K0PI+PI+Z0	8.410	3.863	4.000	.0170		.0200	.0170	BARTSCH NC43A,1010-66	
THRESHOLD	4.71	1.89	2.03						
..... REACTION 254									
S+	8.410	3.863	4.000	.3870		ERROR NOT GIVEN		BARTSCH NC43A,1010-66	A
THRESHOLD	2.84	.89	1.02						
..... REACTION 255									
S+K+	2.871	.911	1.041	.0340		.0160		FOELSCHE,36,CERN62	
	3.001	.980	1.111	.1440		.0100		CARAYAN.PR138B,433-65	
	3.020	.990	1.121	.1900		.0900	.0700	KOPP PR123,301-61	
	3.074	1.019	1.150	.2140		.0350		BERTHELOT NC21,693-61	
	3.111	1.039	1.170	.2050		.0140		CRAWFORD,PR128,368,62	
	3.178	1.074	1.206	.2140		.0150		CARAYAN.PR138B,433-65	
	3.208	1.090	1.222	.2500		.0200		FOELSCHE,36,CERN62	
	3.288	1.133	1.265	.2780		.0200		CARAYAN.PR138B,433-65	
	3.316	1.148	1.280	.3400		.0350		KALMUS,UCRLXYZ-70	
	3.428	1.208	1.340	.4000		.0350		KALMUS,PR2,1824-70	
	3.521	1.257	1.390	.4400		.0600		FOELSCHE BNL-YALE-64	
	3.559	1.277	1.410	.4900		.0450		KALMUS,UCRLXYZ-70	
	3.596	1.297	1.430	.5100		.0400		KALMUS,PR2,1824-70	
	3.820	1.417	1.550	.5300		.0500		KALMUS,PR2,1824-70	
	3.876	1.447	1.580	.5300		.0700		DARONIAN NC41A,503-66	
	3.970	1.496	1.630	.4700		.0400		KALMUS,PR2,1824-70	
	4.063	1.546	1.680	.5050		.0400		KALMUS,PR2,1824-70	
	4.101	1.566	1.700	.4700		.0400		PAN PR2,449-70	
	4.213	1.626	1.760	.3800		.0500		FOEL. PR161,1384-67PC	
	4.232	1.636	1.770	.4150		.0500		KALMUS,PR2,1824-70	
	4.363	1.706	1.840	.4050		.0500		KALMUS,PR2,1824-70	
	4.568	1.815	1.950	.3100		.0400		DAGAN PR161,1384-67	
	4.812	1.945	2.080	.2900		.0400		FOEL. PR161,1384-67PC	
	6.104	2.634	2.770	.1050		.0100		YAMAMO. PR134B,383-64	
	6.967	3.093	3.230	.1680		.0200		KOFLER PR163,1479-67	
	8.410	3.863	4.000	.0590		.0090		BARTSCH NC43A,1010-66	
	11.224	5.362	5.500	.0297		.0035		COOPER,NPB23,605-70	
THRESHOLD	2.84	.89	1.02					27 DATA POINTS LISTED	
				FIT OF SIGMA AGAINST PLAB GEV/C					
				5 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. = .06					
				K = 1.32 +- .55 N = -2.19 +- .34					
..... REACTION 256									
S+K+ (BACKWARD)	11.036	5.262	5.400	1.3000	MICROB	.7000		COOPER PRL20,472-68	
THRESHOLD	2.84	.89	1.02						

FOOTNOTES

A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES

PI+P

	S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 257										
S+K+PI+PI-	6.104	2.634	2.770		7.0000	MICROB	3.0000		YAMAMO. PR134,B383-64	
	8.410	3.863	4.000		.0520		.0080		BARTSCH NC43A,1010-66	
	11.224	5.362	5.500		.0370		.0050		COOPER,NPB23,605-70	
THRESHOLD	3.86	1.44	1.57						3 DATA POINTS LISTED	
..... REACTION 258										
S+K+PI+PI-PIO	8.410	3.863	4.000		.0300		.0060		BARTSCH NC43A,1010 66	
THRESHOLD	4.43	1.74	1.87							
..... REACTION 259										
S+K+PI+PI-ZO	8.410	3.863	4.000		.0140		.0060		BARTSCH NC43A,1010-66	
THRESHOLD	5.04	2.06	2.20							
..... REACTION 260										
S+K+PIO	3.521	1.257	1.390	U	.0100				FOELSCHE BNL-YALE -64	
	3.876	1.447	1.580		.0600		.0300		DARONIAN N41A,503-66	
	4.101	1.566	1.700		.0310		.0040		PAN,PR2,449-70	
	4.213	1.626	1.760		.0700		.0200		FOEL. PR161,1384-67PC	
	4.568	1.815	1.950		.0700		.0200		DAGAN PR161,1384-67	
	4.812	1.945	2.080		.1700		.0300		FOEL. PR161,1384-67PC	
	6.104	2.634	2.770		.1200		.0100		YAMAMO. PR134B,383-64	
	8.410	3.863	4.000		.0690		.0090		BARTSCH NC43A,1010-66	
	11.224	5.362	5.500		.0409		.0130		COOPER,NPB23,605-70	
THRESHOLD	3.33	1.15	1.29						9 DATA POINTS LISTED	
..... REACTION 261										
S+K+ZO	8.410	3.863	4.000		.0220		.0070		BARTSCH NC43A,1010-66	
THRESHOLD	3.86	1.44	1.57							
..... REACTION 262										
S+KOPI+	3.521	1.257	1.390	U	.0100				FOELSCHE BNL-YALE-64	
	4.101	1.566	1.700		.0190		.0030		PAN,PR2,449-70	
	4.213	1.626	1.760		.0300		.0100		FOEL. PR161,1384-67PC	
	4.568	1.815	1.950		.1200		.0300		DAGAN PR161,1384-67	
	4.812	1.945	2.080		.1100		.0300		FOEL. PR161,1384-67PC	
	6.104	2.634	2.770		.0900		.0100		YAMAMO. PR134B,383-64	
	8.410	3.863	4.000		.0520		.0070		BARTSCH NC43A,1010-66	
	11.224	5.362	5.500		.0513		.0140		COOPER,NPB23,605-70	
THRESHOLD	3.33	1.15	1.29						8 DATA POINTS LISTED	
..... REACTION 263										
S+KOPI+PI+PI-	8.410	3.863	4.000		.0110		.0040		BARTSCH NC43A,1010-66	
	11.224	5.362	5.500		.0110		.0030		COOPER,NPB23,605-70	
THRESHOLD	4.43	1.74	1.87						2 DATA POINTS LISTED	
..... REACTION 264										
S+KOPI+PI+PI-ZO	8.410	3.863	4.000		9.0000	MICROB	5.0000		BARTSCH NC43A,1010-66	
THRESHOLD	5.68	2.41	2.55							
..... REACTION 265										
S+KOPI+PIO	6.104	2.634	2.770		.0370		.0060		YAMAMO. PR134,B383-64	
	8.410	3.863	4.000		.0400		.0130		BARTSCH NC43A,1010 66	
THRESHOLD	3.86	1.44	1.57						2 DATA POINTS LISTED	
..... REACTION 266										
S+KOPI+ZO	8.410	3.863	4.000		.0290		.0210		BARTSCH NC43A,1010-66	
THRESHOLD	4.43	1.74	1.87							
..... REACTION 267										
S+K*+890	4.568	1.815	1.950		.1400		.0300		DAGAN PR161,1384-67	
	8.410	3.863	4.000		.0230		.0070		BARTSCH NC43A,1010-66	
	11.224	5.362	5.500		.0492		.0062		COOPER,NPB23,605-70	
THRESHOLD	4.33	1.69	1.82						3 DATA POINTS LISTED	
..... REACTION 268										
S+K*+890 (BACKWARD)	11.036	5.262	5.400		2.2000	MICROB	.8000		COOPER PRL20,472-68	
THRESHOLD	4.33	1.69	1.82							
..... REACTION 269										
S-	8.410	3.863	4.000		.0300		ERROR NOT GIVEN		BARTSCH NC43A,1010-66	A
THRESHOLD	3.86	1.44	1.57							
..... REACTION 270										
S-K+PI+PI+	6.104	2.634	2.770		.0130		.0040		YAMAMO. PR134B,383-64	
	8.410	3.863	4.000		.0100		.0030		BARTSCH NC43A,1010-66	
THRESHOLD	3.86	1.44	1.57						2 DATA POINTS LISTED	
..... REACTION 271										
S-K+PI+PI+PIO	8.410	3.863	4.000		8.0000	MICROB	3.0000		BARTSCH NC43A,1010-66	
THRESHOLD	4.43	1.74	1.87							
..... REACTION 272										
S-KOPI+PI+PI+	8.410	3.863	4.000		7.0000	MICROB	3.0000		BARTSCH NC43A,1010-66	
THRESHOLD	4.43	1.74	1.87							

FOOTNOTES

U=UPPER LIMIT
A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES

PI+P

	S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 273									
SOK+PI+	3.521	1.257	1.390	5.0000	MICROB	5.0000		FOELSCHE BNL-YALE-64	
	4.101	1.566	1.700	.0230		.0030		PAN,PR2,449-70	
	4.213	1.626	1.760	.0400		.0200		FOEL. PR161,1384-67PC	
	4.568	1.815	1.950	.0300		.0150		DAGAN PR161,1384-67	
	4.812	1.945	2.080	.0400		.0200		FOEL. PR161,1384-67PC	
THRESHOLD	3.33	1.15	1.29					5 DATA POINTS LISTED	
..... REACTION 274									
Y*+1385K+	3.521	1.257	1.390	.0100		.0100		FOELSCHE BNL-YALE-64	
	4.101	1.566	1.700	.1240		.0210		PAN,PR2,449-70	
	4.213	1.626	1.760	.1900		.0400		FOELSC. PR161,1384-67	
	4.568	1.815	1.950	.1400		.0300		DAGAN PR161,1384-67	
	4.812	1.945	2.080	.0800		.0300		FOELSC. PR161,1384-67	
	8.410	3.863	4.000	.0230		.0070		BARTSCH NC43A,1010-66	*
	8.410	3.863	4.000	.0270		ERROR NOT GIVEN		YING PL30B,289-69	
	10.380	4.912	5.050	.0130		ERROR NOT GIVEN		YING PL30B,289-69	
	11.224	5.362	5.500	.0160		.0030		COOPER,NPB23,605-70	
	15.914	7.862	8.000	8.0000	MICROB	2.0000		MORRISON PC-68	
THRESHOLD	3.53	1.26	1.40					10 DATA POINTS LISTED	
..... REACTION 275									
Y*+1385K+=LK+PI+	4.101	1.566	1.700	.1100		.0200		PAN,PR2,449-70	
	15.989	7.902	8.040	8.0000	MICROB	3.0000		ADERHOLZ NPB11,259-69	
THRESHOLD	3.53	1.26	1.40					2 DATA POINTS LISTED	
..... REACTION 276									
Y*+1385K+=(L/SO)K+PI+	8.410	3.863	4.000	.0220		.0070		BARTSCH NC43A,1010-66	
THRESHOLD	3.53	1.26	1.40						
..... REACTION 277									
Y*+1385K+=SOK+PI+	4.101	1.566	1.700	.0140		.0040		PAN,PR2,449-70	
THRESHOLD	3.53	1.26	1.40						
..... REACTION 278									
Y*+1385K+PIO	11.224	5.362	5.500	.0180		.0020		COOPER,NPB23,605-70	
THRESHOLD	4.08	1.55	1.69						
..... REACTION 279									
Y*+1385K+PIO=(L/SO)K+PIPI	8.410	3.863	4.000	.0410		.0110		BARTSCH NC43A,1010-66	
THRESHOLD	4.08	1.55	1.69						
..... REACTION 280									
Y*+1385K+PIO=LK+PI+PIO	15.989	7.902	8.040	.0140		.0020		ADERHOLZ NPB11,259-69	
THRESHOLD	4.08	1.55	1.69						
..... REACTION 281									
Y*+(K/PI)+ZO=L(K/PI)PI+ZO	15.989	7.902	8.040	.0270		.0100		ADERHOLZ NPB11,259-69	
THRESHOLD	4.66	1.86	2.00						
..... REACTION 282									
Y*+1385KOPI+	11.224	5.362	5.500	.0120		.0030		COOPER,NPB23,605-70	
THRESHOLD	4.08	1.55	1.69						
..... REACTION 283									
Y*+1385KOPI+=LKOPI+PI+	15.989	7.902	8.040	.0240		.0040		ADERHOLZ NPB11,259-69	
THRESHOLD	4.08	1.55	1.69						
..... REACTION 284									
Y*+1385KOPI+PIO=LKO2PI+PI	15.989	7.902	8.040	.0120		.0040		ADERHOLZ NPB11,259-69	
THRESHOLD	4.66	1.86	2.00						
..... REACTION 285									
Y*+1385K*+890=LK+PI+PIO	11.224	5.362	5.500	.0130		.0020		COOPER,NPB23,605-70	
THRESHOLD	5.18	2.14	2.27						
..... REACTION 286									
Y*+1385K*+890=LKOPI+PI+	11.224	5.362	5.500	6.0000	MICROB	3.0000		COOPER,NPB23,605-70	
THRESHOLD	5.18	2.14	2.27						
..... REACTION 287									
Y*+1385K*+890=L(KPI)+PI+	15.989	7.902	8.040	.0100		.0050		ADERHOLZ NPB11,259-69	
THRESHOLD	5.18	2.14	2.27						
..... REACTION 288									
Y*01385K+PI+	11.224	5.362	5.500	.0100		.0020		COOPER,NPB23,605-70	
THRESHOLD	4.08	1.55	1.69						
..... REACTION 289									
Y*+1475K+	4.101	1.566	1.700	.0240		.0070		PAN,PR2,449-70	WR
THRESHOLD	3.86	1.44	1.57						
..... REACTION 290									
Y*+1475K+=PK+KO	4.101	1.566	1.700	4.0000	MICROB	2.0000		PAN,PR2,449-70	WR
THRESHOLD	3.86	1.44	1.57						
..... REACTION 291									
Y*+1475K+=LK+PI+	4.101	1.566	1.700	.0110		.0050		PAN,PR2,449-70	WR
THRESHOLD	3.86	1.44	1.57						

FOOTNOTES

*=CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS
WR=WARNING *** RESONANT STATE NOT WELL ESTABLISHED

********** PI+P **********

	S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 292									
Y*+1475K+=S0K+PI+	4.101	1.566	1.700	9.0000	MICROB	4.0000		PAN,PR2,449-70	WR
THRESHOLD	3.86	1.44	1.57						
..... REACTION 293									
Y*+1690PI+=LK+PI+	11.224	5.362	5.500	6.0000	MICROB	3.0000		COOPER,NPB23,605-70	
THRESHOLD	3.35	1.17	1.30						
..... REACTION 294									
Y*+1690K+=LK+PI+	15.989	7.902	8.040	5.0000	MICROB	2.0000		ADERHOLZ NPB11,259-69	
THRESHOLD	4.77	1.92	2.06						
..... REACTION 295									
PI+PI+PI+PI-Z0	6.067	2.614	2.750	.1700		.0200		ARMENISE NC37,361-65	
	10.286	4.862	5.000	1.1800		.1700		POLS,NPB25,109-71	
	15.989	7.902	8.040	2.4800		.1200		ADERHOLZ NPB8,45-68	
	30.925	15.861	16.000	1.9800		.0600		ABBCCW COLL,TBP-71	
THRESHOLD	2.67	.81	.93					4 DATA POINTS LISTED	
..... REACTION 296									
PI+PI+Z0	2.871	.911	1.041	.1900		.0500		FOELSCHE,36,CERN62	
	3.208	1.090	1.222	.4700		.0700		FOELSCHE,36,CERN62	
	3.527	1.260	1.393	.9100		.1100		FOELSCHE,36,CERN62	
	3.876	1.447	1.580	2.0000		.1000		DARONIAN NC41A,503-66	
	6.067	2.614	2.750	2.4200		.6000		ARMENISE NC37,361-65	
	6.104	2.634	2.770	1.6900		.1000		YAMAMO. PR173,1302-68	
	8.223	3.763	3.900	2.3900		ERROR	NOT GIVEN	BASTIEN,PR3,2047-71	
	10.286	4.862	5.000	2.2100		.4000		SCHOTANUS,NPB22,45-70	
	15.989	7.902	8.040	2.5000		.1000		ADERHOLZ NPB8,45-68	
	30.925	15.861	16.000	1.3400		.0700		ABBCCW COLL,TBP-71	
THRESHOLD	1.84	.36	.48					10 DATA POINTS LISTED	
..... REACTION 297									
K0K0	16.665	8.262	8.400	.1400		.0500		KREBS BAPS12,539-67	A
THRESHOLD	4.24	1.64	1.78						
..... REACTION 298									
KAK	8.410	3.863	4.000	.6130		ERROR	NOT GIVEN	BARTSCH NC43A,1010-66	
	14.297	7.000	7.138	1.2000		.3000		SOLOVIEV,388,ROCH60	A
	15.914	7.862	8.000	1.5500		.2000		BRANDT PL22,230-66	
THRESHOLD	4.24	1.64	1.78					3 DATA POINTS LISTED	
..... REACTION 299									
4PI+2PI-Z0	8.410	3.863	4.000	.0200		.0060		BONDAR NC44A,530-66	
	10.286	4.862	5.000	.0500		.0100		DREVERM.PR161,1356-67	
	30.925	15.861	16.000	.9800		.0500		ABBCCW COLL,TBP-71	
THRESHOLD	3.69	1.35	1.48					3 DATA POINTS LISTED	
..... REACTION 300									
5PI+3PI-Z0	30.925	15.861	16.000	.3190		.0150		ABBCCW COLL,TBP-71	
THRESHOLD	4.83	1.96	2.09						
..... REACTION 301									
6PI+4PI-Z0	15.989	7.902	8.040	2.3000	MICROB	1.3000		ADERHOLZ NPB8,45-68	
	30.925	15.861	16.000	.0460		.0050		ABBCCW COLL,TBP-71	
THRESHOLD	4.84	1.96	2.10					2 DATA POINTS LISTED	

FOOTNOTES

WR=WARNING *** RESONANT STATE NOT WELL ESTABLISHED
A=SUM OF ALL FINAL STATES WHICH INCLUDE THE GIVEN PARTICLES

PI+N

	S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 302								
TOTAL	29.090	14.861	15.000	25.6000	.2000		DENISOV,PL36B,415-71	S7
	38.485	19.861	20.000	25.0300	.2000		DENISOV,PL36B,415-71	S7
	47.880	24.861	25.000	24.8500	.2300		DENISOV,PL36B,415-71	S7
	57.276	29.861	30.000	24.4500	.2000		DENISOV,PL36B,415-71	S7
	66.671	34.861	35.000	24.1800	.2200		DENISOV,PL36B,415-71	S7
	76.067	39.861	40.000	23.4200	.3000		DENISOV,PL36B,415-71	S7
	85.462	44.861	45.000	24.0700	.2300		DENISOV,PL36B,415-71	S7
	94.858	49.861	50.000	23.7100	.2500		DENISOV,PL36B,415-71	S7
	104.253	54.861	55.000	23.8300	.2200		DENISOV,PL36B,415-71	S7
	113.649	59.861	60.000	23.5600	.4000		DENISOV,PL36B,415-71	S7
THRESHOLD	1.16	0.00	0.00				10 DATA POINTS LISTED	
				FIT OF SIGMA AGAINST PLAB GEV/C				
				10 DATA POINTS USED ABOVE 15.0 GEV/C , PROB. = .99				
				K = 29.95 +- 1.40 N = -.06 +- .01				
..... REACTION 303								
PPI+PI+PI-PI-	4.070	1.546	1.680	.2200	.0400		BACON PR157,1263-67	S
THRESHOLD	2.24	.57	.70					
..... REACTION 304								
PPI+PI+PI-PI-PIO	4.070	1.546	1.680	.0400	.0200		BACON PR157,1263-67	S
THRESHOLD	2.68	.81	.94					
..... REACTION 305								
PPI+PI-	4.070	1.546	1.680	6.6000	.3000		BACON PR157,1263-67	S
	4.107	1.566	1.700	6.6200	.2600		FICKING.129,ATHENS65	
THRESHOLD	1.48	.17	.28				2 DATA POINTS LISTED	
..... REACTION 306								
PPI+PI- (NON RESONANT)	10.489	4.962	5.100	.1280	.0030		CERN 68	
THRESHOLD	1.48	.17	.28					
..... REACTION 307								
PPI+PI-PIO	4.070	1.546	1.680	5.0000	.3000		BACON PR157,1263-67	S
	4.107	1.566	1.700	4.9900	.2500		FICKING.129,ATHENS65	
	11.053	5.262	5.400	1.4300	.2400		FARBER,NPB29,237-71	
THRESHOLD	1.84	.36	.48				3 DATA POINTS LISTED	
..... REACTION 308								
PPI+PI-ZO	4.070	1.546	1.680	.7000	.1000		BACON PR157,1263-67	S
THRESHOLD	2.24	.57	.70					
..... REACTION 309								
PPIO	3.640	1.317	1.450	8.5000	1.3000		MULLER,48,DUB64	
	3.677	1.337	1.470	9.8000	1.0000		MULLER,48,DUB64	
	3.714	1.357	1.490	9.2000	1.0000		MULLER,48,DUB64	
	3.752	1.377	1.510	8.0000	.8000		MULLER,48,DUB64	
	3.789	1.397	1.530	8.4000	.5000		MULLER,48,DUB64	
	3.827	1.417	1.550	6.6000	.5000		MULLER,48,DUB64	
	3.864	1.437	1.570	6.0000	.4000		MULLER,48,DUB64	
	3.901	1.457	1.590	5.0000	.5000		MULLER,48,DUB64	
	3.939	1.476	1.610	6.0000	.5000		MULLER,48,DUB64	
	3.976	1.496	1.630	7.5000	.5000		MULLER,48,DUB64	
	4.003	1.510	1.644	8.1000	ERROR NOT GIVEN		MULLER,48,DUB64	
	4.014	1.516	1.650	7.5000	.5000		MULLER,48,DUB64	
	4.051	1.536	1.670	7.0000	.8000		MULLER,48,DUB64	
	4.077	1.550	1.684	6.6000	ERROR NOT GIVEN		MULLER,48,DUB64	
	4.089	1.556	1.690	6.3000	1.0000		MULLER,48,DUB64	
	4.152	1.590	1.724	5.2000	ERROR NOT GIVEN		MULLER,48,DUB64	
	4.229	1.631	1.765	7.6000	ERROR NOT GIVEN		MULLER,48,DUB64	
	4.304	1.671	1.805	7.2000	ERROR NOT GIVEN		MULLER,48,DUB64	
	12.180	5.862	6.000	.1260	.0200		BRUYANT PL12,278-64	
THRESHOLD	1.16	0.00	0.00				19 DATA POINTS LISTED	
..... REACTION 310								
PPIOPIO	3.640	1.317	1.450	3.0000	1.3000		MULLER,48,DUB64	
	3.677	1.337	1.470	2.0000	.8000		MULLER,48,DUB64	
	3.714	1.357	1.490	4.0000	.8000		MULLER,48,DUB64	
	3.752	1.377	1.510	2.8000	.6000		MULLER,48,DUB64	
	3.789	1.397	1.530	2.8000	.5000		MULLER,48,DUB64	
	3.827	1.417	1.550	2.2000	.4000		MULLER,48,DUB64	
	3.827	1.417	1.550	2.2000	.4000		MULLER,48,DUB64	
	3.864	1.437	1.570	1.4000	.4000		MULLER,48,DUB64	
	3.939	1.476	1.610	2.1000	.3000		MULLER,48,DUB64	
	3.976	1.496	1.630	1.8000	.3000		MULLER,48,DUB64	
	4.014	1.516	1.650	3.5000	.5000		MULLER,48,DUB64	
	4.051	1.536	1.670	2.5000	.6000		MULLER,48,DUB64	
	4.089	1.556	1.690	3.2000	1.0000		MULLER,48,DUB64	
THRESHOLD	1.48	.17	.28				13 DATA POINTS LISTED	
..... REACTION 311								
PK+K-	11.053	5.262	5.400	.1370	.0270		FARBER,NPB29,237-71	
THRESHOLD	3.71	1.35	1.49					
..... REACTION 312								
PK+KOPI-	5.596	2.358	2.494	9.0000 MICROB	4.0000		HANFT C0094-67	
	5.617	2.369	2.505	9.0000 MICROB	4.0000		HANFT C0094-67	
THRESHOLD	4.27	1.65	1.79				2 DATA POINTS LISTED	
..... REACTION 313								
PK-KOPI+	5.596	2.358	2.494	.0150	.0050		HANFT C0094-67	
	5.617	2.369	2.505	.0150	.0050		HANFT C0094-67	
THRESHOLD	4.27	1.65	1.79				2 DATA POINTS LISTED	

FOOTNOTES

S7=SYSTEMATIC ERROR IS 1.4 PER CENT
S=STATISTICAL ERROR ONLY

PI+N

		S	K.ENERGY	PLAB		CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 314										
PKSKS		5.596	2.358	2.494		.0190	.0050		HANFT C0094-67	
		5.617	2.369	2.505		.0190	.0050		HANFT C0094-67	
	THRESHOLD	3.73	1.37	1.50					2 DATA POINTS LISTED	
..... REACTION 315										
PKSKL		5.617	2.369	2.505		.0210	.0100		HANFT C0094-67	
	THRESHOLD	3.74	1.37	1.50						
..... REACTION 316										
PET		2.891	.919	1.049		1.3500	.4500		ABOLINS HEID 67	
		3.060	1.009	1.140		1.3000	.4400		DANBURG,PR2,2564-70	
		3.228	1.098	1.230		.7300	.2000		TOOHIG,99,CERN62	*
		3.247	1.108	1.240		1.0900	.3500		DANBURG,PR2,2564-70	
		3.434	1.208	1.340		1.6600	.3300		DANBURG,PR2,2564-70	
		3.621	1.307	1.440		.8700	.2000		DANBURG,PR2,2564-70	
		3.752	1.377	1.510		2.9000	.7000		MULLER,48,DUB64	
		3.789	1.397	1.530		1.8000	.5000		MULLER,48,DUB64	
		3.808	1.407	1.540		.9000	.1900		DANBURG,PR2,2564-70	
		3.827	1.417	1.550		1.6000	.5000		MULLER,48,DUB64	
		3.864	1.437	1.570		2.5000	.5000		MULLER,48,DUB64	
		3.901	1.457	1.590		2.7000	.5000		MULLER,48,DUB64	
		3.939	1.476	1.610		2.4000	.5000		MULLER,48,DUB64	
		3.976	1.496	1.630		2.8500	.6000		MULLER,48,DUB64	
		4.014	1.516	1.650		2.4000	.6000		MULLER,48,DUB64	
		4.014	1.516	1.650		.5000	.1300		DANBURG,PR2,2564-70	
		4.051	1.536	1.670		4.5000	1.0000		MULLER,48,DUB64	
		4.089	1.556	1.690		3.2000	1.0000		MULLER,48,DUB64	
		4.107	1.566	1.700		.5000	.1400		FICKING.129,ATHENS65	*
		4.126	1.576	1.710		.5000	.1400		BACON PR157,1263-67	*
		4.201	1.616	1.750		.5900	.1400		DANBURG,PR2,2564-70	
		4.426	1.736	1.870		.5500	.1400		DANBURG,PR2,2564-70	
		4.632	1.845	1.980		.6000	.1400		DANBURG,PR2,2564-70	
		4.857	1.965	2.100		.5500	.1400		DANBURG,PR2,2564-70	
		5.063	2.075	2.210		.2900	.1200		DANBURG,PR2,2564-70	
		5.307	2.205	2.340		.3000	.1200		DANBURG,PR2,2564-70	
		5.532	2.324	2.460		.1600	.1100		DANBURG,PR2,2564-70	
		5.983	2.564	2.700		.2100	.0400		MILLER PR178,2061-69	S
		11.053	5.262	5.400		.1170	.0420		FARBER,NPB29,237-71	
		12.180	5.862	6.000		.0520	ERROR NOT GIVEN		BRUYANT PL12,278-64	
	THRESHOLD	2.21	.56	.68					30 DATA POINTS LISTED	
..... REACTION 317										
PET=PPI+PI-PIO		3.228	1.098	1.230		.2200	.0600		TOOHIG,99,CERN62	
		4.126	1.576	1.710		.1500	.0400		BACON PR157,1263-67	
	THRESHOLD	2.21	.56	.68					2 DATA POINTS LISTED	
..... REACTION 318										
PRH+PI-		5.983	2.564	2.700		.3400	.0700		MILLER PR178,2061-69	S
		11.053	5.262	5.400		.3170	.0640		FARBER,NPB29,237-71	
	THRESHOLD	3.38	1.18	1.31					2 DATA POINTS LISTED	
..... REACTION 319										
PRH-PI+		11.053	5.262	5.400	U	.0400			FARBER,NPB29,237-71	
	THRESHOLD	3.38	1.18	1.31						
..... REACTION 320										
PRHO		4.070	1.546	1.680		1.4900	.1600		BACON,532,DUBNA64	
		5.983	2.564	2.700		2.2000	.2500		MILLER PR178,2061-69	S
		10.489	4.962	5.100		.6500	.0830		ARMENISE,NC65A,637-70	
	THRESHOLD	2.88	.91	1.04					3 DATA POINTS LISTED	
..... REACTION 321										
PRHOPIO		5.983	2.564	2.700		.3400	.0700		MILLER PR178,2061-69	S
		11.053	5.262	5.400		.2410	.0480		FARBER,NPB29,237-71	
	THRESHOLD	3.38	1.18	1.31					2 DATA POINTS LISTED	
..... REACTION 322										
POM		3.060	1.009	1.140		1.5000	.2900		DANBURG,PR2,2564-70	
		3.228	1.098	1.230		1.5000	.5000		TOOHIG,99,CERN62	*
		3.247	1.108	1.240		2.4600	.3500		DANBURG,PR2,2564-70	
		3.434	1.208	1.340		2.5100	.2500		DANBURG,PR2,2564-70	
		3.621	1.307	1.440		2.1100	.2000		DANBURG,PR2,2564-70	
		3.808	1.407	1.540		1.9900	.1900		DANBURG,PR2,2564-70	
		4.014	1.516	1.650		1.5200	.1700		DANBURG,PR2,2564-70	
		4.070	1.546	1.680		1.3600	.2200		BACON,532,DUB64	
		4.107	1.566	1.700		2.0800	.2000		FICKING.129,ATHENS65	*
		4.126	1.576	1.710		2.0700	.2300		BACON,PR157,1263,67	*
		4.201	1.616	1.750		1.6800	.1900		DANBURG,PR2,2564-70	
		4.426	1.736	1.870		1.5800	.1800		DANBURG,PR2,2564-70	
		4.632	1.845	1.980		1.4000	.1600		DANBURG,PR2,2564-70	
		4.857	1.965	2.100		1.7000	.1900		DANBURG,PR2,2564-70	
		5.063	2.075	2.210		1.1900	.1700		DANBURG,PR2,2564-70	
		5.307	2.205	2.340		1.0800	.1600		DANBURG,PR2,2564-70	
		5.532	2.324	2.460		1.0400	.1900		DANBURG,PR2,2564-70	
		5.983	2.564	2.700		.8000	.0800		MILLER PR178,2061-69	S
		11.053	5.262	5.400		.1490	.0350		FARBER,NPB29,237-71	
		13.965	6.812	6.950		.0864	.0128		MATTHEWS,PRL26,400-71	
	THRESHOLD	2.96	.96	1.09					20 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

7 DATA POINTS USED ABOVE 2.0 GEV/C , PROB. = .99
K = 9.01 +- 2.65 N = -2.41 +- .27

FOOTNOTES

*=CROSS SECTION DEDUCED BY EDITORS FROM PUBLISHED RESULTS
S=STATISTICAL ERROR ONLY
U=UPPER LIMIT

PI+N

		S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 323											
POM=PPI+PI-PIO		3.228	1.098	1.230		1.3000		.4000		TOOHIG,99,CERN62	
		4.107	1.566	1.700		1.8100		.1600		FICKING.129,ATHENS65	
		4.126	1.576	1.710		1.8000		.2000		BACON,PR157,1263,67	
		10.489	4.962	5.100		.1950		.0400		ARMENISE,NC65A,637-70	
	THRESHOLD	2.96	.96	1.09						4 DATA POINTS LISTED	
..... REACTION 324											
PXO		3.802	1.404	1.537		.0800		.0350		ABOLINS HEID 67	
		4.203	1.617	1.751		.0800		.0300		ABOLINS HEID 67	
		4.623	1.840	1.975		.1600		.0500		ABOLINS HEID 67	
		5.063	2.075	2.210		.1550		.0600		ABOLINS HEID 67	
		5.523	2.319	2.455		.0750		.0500		ABOLINS HEID.67	
		5.983	2.564	2.700		.0500		.0200		MILLER PR178,2061-69	S
	THRESHOLD	3.66	1.33	1.46						6 DATA POINTS LISTED	
..... REACTION 325											
PXO=PGAMGAM		4.951	2.015	2.150		.0131		.0076		BENSINGE,PL33B,505-70	
	THRESHOLD	3.66	1.33	1.46							
..... REACTION 326											
PXO=PETPIOPIO		4.951	2.015	2.150		.0114		.0059		BENSINGE,PL33B,505-70	
	THRESHOLD	3.66	1.33	1.46							
..... REACTION 327											
PPHI		4.632	1.845	1.980		.0230		.0100		ABOLINS HEID 67	
		11.053	5.262	5.400	U	9.0000	MICROB			FARBER,NPB29,237-71	
	THRESHOLD	3.83	1.42	1.55						2 DATA POINTS LISTED	
..... REACTION 328											
PPHI=PPI+PI-		10.489	4.962	5.100		.4210		.0260		CERN 68-7	
	THRESHOLD	3.83	1.42	1.55							
..... REACTION 329											
PS*=PK+K-		11.053	5.262	5.400	U	8.0000	MICROB			FARBER,NPB29,237-71	
	THRESHOLD	3.99	1.50	1.64							
..... REACTION 330											
PA10		5.983	2.564	2.700		.1700		.1000		MILLER PR178,2061-69	S
	THRESHOLD	4.15	1.59	1.72							
..... REACTION 331											
PA10=PPI+PI-PIO		11.053	5.262	5.400	U	.0300				FARBER,NPB29,237-71	
	THRESHOLD	4.15	1.59	1.72							
..... REACTION 332											
PF		5.983	2.564	2.700		.5100		.2000		MILLER PR178,2061-69	S
		9.362	4.363	4.500		.4300		.0500		FORINO PL19,65-65	
	THRESHOLD	4.79	1.93	2.06						2 DATA POINTS LISTED	
..... REACTION 333											
PF=PPI+PI-		10.489	4.962	5.100		.4600		.0610		ARMENISE,NC65A,637-70	
	THRESHOLD	4.79	1.93	2.06							
..... REACTION 334											
PF=PZO		10.489	4.962	5.100		.2100		.0300		ARMENISE,NC65A,637-70	
	THRESHOLD	4.79	1.93	2.06							
..... REACTION 335											
PA20		5.983	2.564	2.700		.1400		.0800		MILLER PR178,2061-69	S
		7.766	3.513	3.650		.1900		.0500		BENSON PRL16,1177-66	
		10.489	4.962	5.100		.1470		.0300		CERN 68-7	
	THRESHOLD	5.01	2.05	2.18						3 DATA POINTS LISTED	
..... REACTION 336											
PA20=PPI+PI-PIO		10.489	4.962	5.100		.1470		.0300		ARMENISE,NC65A,637-70	
		11.053	5.262	5.400		.0500		.0200		FARBER,NPB29,237-71	
		13.965	6.812	6.950		.0540		.0150		MATTHEWS,PR3,2561-71	
	THRESHOLD	5.01	2.05	2.18						3 DATA POINTS LISTED	
..... REACTION 337											
PGO		10.489	4.962	5.100		.0830		.0190		ARMENISE,NC65A,637-70	
		12.180	5.862	6.000		.0560		.0140		GOLDBERG,PL17,354-65	
		15.937	7.862	8.000		.0640		.0130		CHOPS,VIENNA-68	
		17.816	8.862	9.000		.0520		.0200		ARMENISE,LUND-69	
		21.574	10.861	11.000		.0550		.0150		CASO,VIENNA-68	
	THRESHOLD	6.70	2.94	3.08						5 DATA POINTS LISTED	
..... REACTION 338											
PGO=PPI+PI-		10.489	4.962	5.100		.0760		.0210		CERN 68-7	
	THRESHOLD	6.70	2.94	3.08							
..... REACTION 339											
PPHI1650=PPI+PI-PIO		13.965	6.812	6.950		.0335		.0090		MATTHEWS,PR3,2561-71	
	THRESHOLD	6.70	2.94	3.08							

FOOTNOTES

S=STATISTICAL ERROR ONLY
U=UPPER LIMIT

PI+N

	S	K.ENERGY	PLAB		CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 340									
NK+K0	5.596	2.358	2.494		.0430	.0130		HANFT C0094-67	
	5.617	2.369	2.505		.0430	.0130		HANFT C0094-67	
THRESHOLD	3.72	1.36	1.49					2 DATA POINTS LISTED	
..... REACTION 341									
NRH0PI+	5.983	2.564	2.700		.4300	.0700		MILLER PR178,2061-69	S
THRESHOLD	3.39	1.18	1.31						
..... REACTION 342									
N*++1236PI-PI0	11.053	5.262	5.400	U	.0500			FARBER,NPB29,237-71	
THRESHOLD	2.30	.60	.73						
..... REACTION 343									
N*+1236PI+PI-	5.983	2.564	2.700	U	.7500			MILLER PR178,2061-69	
THRESHOLD	2.30	.60	.73						
..... REACTION 344									
N*+1236PI+PI-=PPI+PI-PI0	11.053	5.262	5.400		.3490	.0850		FARBER,NPB29,237-71	
THRESHOLD	2.30	.60	.73						
..... REACTION 345									
N*+1236RH0=PRH0PI0	11.053	5.262	5.400		.0600	.0220		FARBER,NPB29,237-71	
THRESHOLD	3.98	1.50	1.63						
..... REACTION 346									
N*-1236PI+PI+	5.983	2.564	2.700		.6500	.1000		MILLER PR178,2061-69	S
THRESHOLD	2.30	.60	.73						
..... REACTION 347									
N*01236PI+	5.983	2.564	2.700		1.8000	.2000		MILLER PR178,2061-69	S
THRESHOLD	1.89	.39	.51						
..... REACTION 348									
N*01236PI+PI-=PPI+PI-PI-	11.053	5.262	5.400		.1980	.0380		FARBER,NPB29,237-71	
THRESHOLD	2.30	.60	.73						
..... REACTION 349									
N*01236PI+PI0	5.983	2.564	2.700	U	.7500			MILLER PR178,2061-69	
THRESHOLD	2.30	.60	.73						
..... REACTION 350									
N*01236RH+=PRH+PI-	11.053	5.262	5.400		.0550	.0200		FARBER,NPB29,237-71	
THRESHOLD	3.98	1.50	1.63						
..... REACTION 351									
LK+	5.596	2.358	2.494		.1410	.0190		HANFT C0094-67	
	5.617	2.369	2.505		.1400	.0190		HANFT C0094-67	
THRESHOLD	2.59	.76	.89					2 DATA POINTS LISTED	
..... REACTION 352									
LK+PI+PI-	5.596	2.358	2.494		.0610	.0080		HANFT C0094-67	
	5.617	2.369	2.505		.0610	.0200		HANFT C0094-67	
THRESHOLD	3.57	1.28	1.41					2 DATA POINTS LISTED	
..... REACTION 353									
LK+PI0	5.596	2.358	2.494		.1070	.0200		HANFT C0094-67	
	5.617	2.369	2.505		.1070	.0200		HANFT C0094-67	
THRESHOLD	3.06	1.01	1.14					2 DATA POINTS LISTED	
..... REACTION 354									
LK0PI+	5.596	2.358	2.494		.1290	.0150		HANFT C0094-67	
	5.617	2.369	2.505		.1290	.0150		HANFT C0094-67	
THRESHOLD	3.06	1.01	1.14					2 DATA POINTS LISTED	
..... REACTION 355									
LK0PI+PI0	5.596	2.358	2.494		.0610	.0200		HANFT C0094-67	
	5.617	2.369	2.505		.0610	.0200		HANFT C0094-67	
THRESHOLD	3.57	1.28	1.41					2 DATA POINTS LISTED	
..... REACTION 356									
S+K+PI-	5.596	2.358	2.494		.0960	.0120		HANFT C0094-67	
	5.617	2.369	2.505		.0960	.0120		HANFT C0094-67	
THRESHOLD	3.33	1.15	1.28					2 DATA POINTS LISTED	
..... REACTION 357									
S+K+PI-PI0	5.617	2.369	2.505		7.0000 MICROB	4.0000		HANFT C0094-67	
THRESHOLD	3.86	1.43	1.57						
..... REACTION 358									
S+K0	5.596	2.358	2.494		.0350	.0150		HANFT C0094-67	
	5.617	2.369	2.505		.0350	.0150		HANFT C0094-67	
THRESHOLD	2.84	.89	1.02					2 DATA POINTS LISTED	
..... REACTION 359									
S+K0PI+PI-	5.596	2.358	2.494		.0180	.0060		HANFT C0094-67	
	5.617	2.369	2.505		.0180	.0030		HANFT C0094-67	
THRESHOLD	3.86	1.43	1.57					2 DATA POINTS LISTED	

FOOTNOTES

S=STATISTICAL ERROR ONLY
U=UPPER LIMIT

PI+N

		S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 360										
S+KOPIO		5.596	2.358	2.494	.0590		.0170		HANFT C0094-67	
	THRESHOLD	3.33	1.15	1.28						
..... REACTION 361										
S-K+PI+		5.596	2.358	2.494	.0340		.0100		HANFT C0094-67	
		5.617	2.369	2.505	.0340		.0100		HANFT C0094-67	
	THRESHOLD	3.33	1.15	1.28					2 DATA POINTS LISTED	
..... REACTION 362										
S-K+PI+PIO		5.596	2.358	2.494	.0100		.0040		HANFT C0094-67	
		5.617	2.369	2.505	.0100		.0040		HANFT C0094-67	
	THRESHOLD	3.86	1.43	1.57					2 DATA POINTS LISTED	
..... REACTION 363										
S-KOPI+PI+		5.596	2.358	2.494	8.0000	MICROB	.3000		HANFT C0094-67	
	THRESHOLD	3.86	1.43	1.57						
..... REACTION 364										
SOK+		5.596	2.358	2.494	.0520		.0100		HANFT C0094-67	
		5.617	2.369	2.505	.0520		.0100		HANFT C0094-67	
	THRESHOLD	2.84	.89	1.02					2 DATA POINTS LISTED	
..... REACTION 365										
SOK+PI+PI-		5.596	2.358	2.494	.0140		.0040		HANFT C0094-67	
		5.617	2.369	2.505	.0140		.0040		HANFT C0094-67	
	THRESHOLD	3.86	1.43	1.57					2 DATA POINTS LISTED	
..... REACTION 366										
SOKOPI+		5.596	2.358	2.494	.0570		.0140		HANFT C0094-67	
	THRESHOLD	3.33	1.15	1.28						

PI+DE

		S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 367									
TOTAL		5.443	.368	.488	63.7100	1.6800		CARTER PR168,1457-68	
		5.526	.390	.511	59.1600	1.2400		CARTER PR168,1457-68	1
		5.628	.417	.539	55.7800	1.1600		CARTER PR168,1457-68	
		5.719	.441	.564	53.4400	.8900		CARTER PR168,1457-68	1
		5.825	.470	.593	52.0300	.8300		CARTER PR168,1457-68	
		5.938	.500	.624	51.9100	.7200		CARTER PR168,1457-68	
		6.044	.528	.653	53.3500	.6900		CARTER PR168,1457-68	1
		6.158	.559	.684	55.9800	.6600		CARTER PR168,1457-68	
		6.254	.584	.710	57.7500	.6200		CARTER PR168,1457-68	1
		6.324	.603	.729	58.0400	.6000		CARTER PR168,1457-68	
		6.449	.636	.763	57.0900	.5800		CARTER PR168,1457-68	
		6.560	.666	.793	55.8800	.5500		CARTER PR168,1457-68	
		6.626	.683	.811	55.5900	.5100		CARTER PR168,1457-68	
		6.649	.689	.817	55.4200	.5100		CARTER PR168,1457-68	
		6.723	.709	.837	56.2300	.5100		CARTER PR168,1457-68	
		6.834	.739	.867	58.7100	.5000		CARTER PR168,1457-68	
		6.941	.767	.896	62.5300	.5000		CARTER PR168,1457-68	1
		7.067	.801	.930	68.4400	.4800		CARTER PR168,1457-68	
		7.182	.832	.961	72.6500	.4500		CARTER PR168,1457-68	1
		7.294	.861	.991	75.4800	.4000		CARTER PR168,1457-68	
		7.398	.889	1.019	75.9500	.3500		CARTER PR168,1457-68	1
		7.506	.918	1.048	74.4000	.3300		CARTER PR168,1457-68	
		7.658	.958	1.089	71.2800	.3300		CARTER PR168,1457-68	
		7.811	.999	1.130	68.4500	.3200		CARTER PR168,1457-68	1
		7.956	1.038	1.169	67.0900	.3400		CARTER PR168,1457-68	1
		8.068	1.068	1.199	67.0600	.3400		CARTER PR168,1457-68	1
		8.180	1.097	1.229	67.5100	.3500		CARTER PR168,1457-68	1
		8.288	1.126	1.258	68.1700	.3500		CARTER PR168,1457-68	
		8.359	1.145	1.277	69.0400	.3500		CARTER PR168,1457-68	
		8.437	1.166	1.298	69.7700	.3500		CARTER PR168,1457-68	
		8.579	1.204	1.336	71.1600	.3400		CARTER PR168,1457-68	1
		8.732	1.244	1.377	72.1800	.3200		CARTER PR168,1457-68	
		8.825	1.269	1.402	72.7300	.2900		CARTER PR168,1457-68	1
		8.941	1.300	1.433	72.8400	.2600		CARTER PR168,1457-68	1
		9.098	1.342	1.475	72.8500	.2600		CARTER PR168,1457-68	
		9.210	1.372	1.505	71.9300	.2800		CARTER PR168,1457-68	
		9.251	1.383	1.516	71.5900	.2900		CARTER PR168,1457-68	
		9.397	1.422	1.555	70.5000	.2900		CARTER PR168,1457-68	1
		9.580	1.470	1.604	68.8600	.2900		CARTER PR168,1457-68	1
		9.763	1.519	1.653	67.7600	.3200		CARTER PR168,1457-68	1
		10.014	1.586	1.720	66.0500	.4000		CARTER PR168,1457-68	
		10.253	1.650	1.784	65.3100	.4500		CARTER PR168,1457-68	
		10.500	1.716	1.850	64.7000	.5100		CARTER PR168,1457-68	1
		10.792	1.793	1.928	64.3700	.5200		CARTER PR168,1457-68	
		10.885	1.818	1.953	64.2900	.5400		CARTER PR168,1457-68	
		11.072	1.868	2.003	64.2000	.5600		CARTER PR168,1457-68	
		11.215	1.906	2.041	63.9900	.6000		CARTER PR168,1457-68	
		11.256	1.917	2.052	63.9300	.6000		CARTER PR168,1457-68	
		11.435	1.965	2.100	63.9200	.6500		CARTER PR168,1457-68	
		12.814	2.332	2.468	62.9200	.8100		CARTER PR168,1457-68	
		26.057	5.862	6.000	52.8000	.5000		GALBR.PR138B,913-65	
		33.559	7.862	8.000	50.5000	.5000		GALBR.PR138B,913-65	
		41.063	9.861	10.000	49.3000	.5000		GALBR.PR138B,913-65	
		48.566	11.861	12.000	48.2000	.5000		GALBR.PR138B,913-65	
		56.069	13.861	14.000	46.9000	.5000		GALBR.PR138B,913-65	
		59.821	14.861	15.000	48.2100	.2200		DENISOV,PL36B,415-71	S6
		63.573	15.861	16.000	46.6000	.5000		GALBR.PR138B,913-65	
		71.077	17.861	18.000	46.3000	.5000		GALBR.PR138B,913-65	
		78.581	19.861	20.000	45.9000	.5000		GALBR.PR138B,913-65	
		78.581	19.861	20.000	47.1500	.2200		DENISOV,PL36B,415-71	S6
		97.340	24.861	25.000	46.8500	.2200		DENISOV,PL36B,415-71	S6
		116.100	29.861	30.000	46.4100	.2200		DENISOV,PL36B,415-71	S6
		134.860	34.861	35.000	45.9100	.2200		DENISOV,PL36B,415-71	S6
		153.620	39.861	40.000	45.2100	.2500		DENISOV,PL36B,415-71	S6
		172.380	44.861	45.000	45.8800	.2200		DENISOV,PL36B,415-71	S6
		191.140	49.861	50.000	45.5100	.2200		DENISOV,PL36B,415-71	S6
		209.900	54.861	55.000	45.6500	.2200		DENISOV,PL36B,415-71	S6
		228.659	59.861	60.000	45.5800	.4000		DENISOV,PL36B,415-71	S6
	THRESHOLD	4.06	0.00	0.00				68 DATA POINTS LISTED	

FIT OF SIGMA AGAINST PLAB GEV/C

10 DATA POINTS USED ABOVE 20.0 GEV/C , PROB. = .93
K = 51.28 +- 1.80 N = -.03 +- .01

..... REACTION 368									
PP		4.597	.142	.245	11.8000	.5000		RICHARD,NPB20,413-70	
		4.679	.164	.270	11.3000	.5000		RICHARD,NPB20,413-70	
		4.763	.187	.295	8.8300	.4100		RICHARD,NPB20,413-70	
		4.918	.228	.340	4.6900	.2000		RICHARD,NPB20,413-70	
		5.058	.265	.380	2.9800	.1300		RICHARD,NPB20,413-70	
	THRESHOLD	4.06	0.00	0.00				5 DATA POINTS LISTED	
..... REACTION 369									
PI+DE		17.244	3.513	3.650	5.8000	ERROR NOT GIVEN		HSIUNG PRL21,187-68	
	THRESHOLD	4.06	0.00	0.00					
..... REACTION 370									
DE*02190PI+PI+		22.456	4.902	5.040	.0480	.0070		VANDERHA,NPB13,329-69	
	THRESHOLD	6.10	.54	.67					
..... REACTION 371									
DE*2190RH		22.456	4.902	5.040	.1060	.0180		VANDERHA,NPB13,329-69	
	THRESHOLD	8.70	1.24	1.37					
..... REACTION 372									
DE***2190F		22.456	4.902	5.040	.0180	.0050		VANDERHA,NPB13,329-69	
	THRESHOLD	11.83	2.07	2.21					

FOOTNOTES

1=AVERAGE VALUE OVER A BAND OF MOMENTA
S6=SYSTEMATIC ERROR IS 0.6 PER CENT

PI+DE

	S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
***** REACTION 373 *****									
DEPI+PI+PI-	9.864	1.546	1.680	.0700		.0200		BACON PR157,1263-67	
	13.683	2.564	2.700	.1500		ERROR NOT GIVEN		LICHTM.BAPS13,1440-68	
	19.306	4.063	4.200	.2750		.0600		EISENSTEIN,PR1,841-70	
	20.431	4.363	4.500	.2600		.0700		FORINO PL19,68-65	
	23.806	5.262	5.400	.5100		.0800		DEERY BAPS14,592-69	
	23.806	5.262	5.400	.4080		.0800		DEERY,PR3,635-71	
	26.057	5.862	6.000	.3000		.0500		VEGNI PL19,526-65	
	29.808	6.862	7.000	.3400		ERROR NOT GIVEN		FIREBAU.BAPS14,560-68	
THRESHOLD	5.27	.32	.44					8 DATA POINTS LISTED	
***** REACTION 374 *****									
DEPI+PI+PI- (NON RES.)	23.806	5.262	5.400	.1020		.0250		DEERY,PR3,635-71	
THRESHOLD	5.27	.32	.44						
***** REACTION 375 *****									
DERHOPI+	22.456	4.902	5.040	.1470		.0210		VANDERHA,NPB13,329-69	
	23.806	5.262	5.400	.3060		.0750		DEERY,PR3,635-71	
THRESHOLD	7.71	.97	1.10					2 DATA POINTS LISTED	
***** REACTION 376 *****									
PPPI+PI-	9.864	1.546	1.680	5.4800		.2200		BACON,532,DUB64	
	13.683	2.564	2.700	3.4200		.3000		MILLER PR178,2061-69	P
	20.431	4.363	4.500	1.5600		.0400		FORINO PL19,65-65	
	22.681	4.962	5.100	1.3900		.1700		ARMENISE,NC65A,637-70	P
	37.311	8.862	9.000	.6600		ERROR NOT GIVEN		ARMENISE,NCL4,199-70	P
THRESHOLD	4.65	.16	.26					5 DATA POINTS LISTED	
***** REACTION 377 *****									
PPPI+PI-PIO	9.864	1.546	1.680	3.9600		.1700		BACON,532,DUB64	
	13.683	2.564	2.700	4.2200		.3700		MILLER PR178,2061-69	P
	20.431	4.363	4.500	1.6200		.2400		FORINO PL19,68-65	
	22.681	4.962	5.100	2.1200		.6000		ARMENISE,NC65A,637-70	P
	37.311	8.862	9.000	.9940		ERROR NOT GIVEN		ARMENISE,NCL4,199-70	P
THRESHOLD	5.27	.32	.44					5 DATA POINTS LISTED	
***** REACTION 378 *****									
PP2PI+2PI-(PIO/GAM)	9.303	1.397	1.530	9.0000	MICROB	2.0000		RADER UCRL19431-69	
	9.490	1.447	1.580	.0120		.0060		RADER UCRL19431-69	
	9.939	1.566	1.700	.0260		.0040		RADER UCRL19431-69	
	10.537	1.726	1.860	.0590		.0070		RADER UCRL19431-69	
	11.623	2.015	2.150	.1520		.0130		RADER UCRL19431-69	
	12.447	2.235	2.370	.2530		.0340		RADER UCRL19431-69	
THRESHOLD	5.93	.50	.62					6 DATA POINTS LISTED	
***** REACTION 379 *****									
PPPI+PI-ZO	9.864	1.546	1.680	.2600		.0500		BACON,532,DUB64	
	13.683	2.564	2.700	1.6100		.2100		MILLER PR178,2061-69	P
	20.431	4.363	4.500	.6500		.1000		FORINO PL11,347-64	
THRESHOLD	5.93	.50	.62					3 DATA POINTS LISTED	
***** REACTION 380 *****									
PPPIO	20.431	4.363	4.500	.1330		.0140		FORINO PL19,65-65	
THRESHOLD	4.06	.00	.01						
***** REACTION 381 *****									
PP2PI+2PI-	7.699	.969	1.100	7.0000	MICROB	5.0000		RADER UCRL19431-69	
	8.444	1.168	1.300	.0260		.0080		RADER UCRL19431-69	
	9.303	1.397	1.530	.0600		.0070		RADER UCRL19431-69	
	9.490	1.447	1.580	.1010		.0200		RADER UCRL19431-69	
	9.939	1.566	1.700	.1320		.0120		RADER UCRL19431-69	
	10.537	1.726	1.860	.1940		.0170		RADER UCRL19431-69	
	11.623	2.015	2.150	.3390		.0270		RADER UCRL19431-69	
	12.447	2.235	2.370	.4430		.0550		RADER UCRL19431-69	
	15.894	3.153	3.290	.2500		ERROR NOT GIVEN		BUGG NPB6,246-68	
THRESHOLD	5.93	.50	.62					9 DATA POINTS LISTED	
***** REACTION 382 *****									
PP2PI+2PI-PIO	15.894	3.153	3.290	.2200		ERROR NOT GIVEN		BUGG NPB6,246-68	
THRESHOLD	6.64	.69	.81						
***** REACTION 383 *****									
PP2PI+2PI-ZO	9.303	1.397	1.530	1.0000	MICROB	1.0000		RADER UCRL19431-69	
	9.939	1.566	1.700	1.0000	MICROB	1.0000		RADER UCRL19431-69	
	10.537	1.726	1.860	4.0000	MICROB	1.0000		RADER UCRL19431-69	
	11.623	2.015	2.150	9.0000	MICROB	2.0000		RADER UCRL19431-69	
	12.447	2.235	2.370	8.0000	MICROB	4.0000		RADER UCRL19431-69	
	15.894	3.153	3.290	.3100		ERROR NOT GIVEN		BUGG NPB6,246-68	
THRESHOLD	7.38	.88	1.01					6 DATA POINTS LISTED	
***** REACTION 384 *****									
PPZO	20.431	4.363	4.500	1.0800		.0600		FORINO PL19,65-65	
	22.681	4.962	5.100	.9200		.1000		ARMENISE,NC65A,637-70	P
	37.311	8.862	9.000	.7350		ERROR NOT GIVEN		ARMENISE,NCL4,199-70	P
THRESHOLD	4.65	.16	.26					3 DATA POINTS LISTED	

FOOTNOTES

P=PROTON IS A SPECTATOR

PI+DE

	S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 385										
PPKSKS	9.939	1.566	1.700		6.2000	MICROB	3.1000		DAVIES,PR2,506-70	
	10.537	1.726	1.860		8.4000	MICROB	3.5000		DAVIES,PR2,506-70	
	11.623	2.015	2.150		.0132		.0051		DAVIES,PR2,506-70	
	12.447	2.235	2.370		5.2000	MICROB	5.2000		DAVIES,PR2,506-70	
THRESHOLD	8.24	1.11	1.24						4 DATA POINTS LISTED	
..... REACTION 386										
PPKSKL	9.303	1.397	1.530		1.9000	MICROB	1.2000		DAVIES,PR2,506-70	
	9.490	1.447	1.580		0.0000	MICROB	4.0000		DAVIES,PR2,506-70	$
	9.939	1.566	1.700		.0175		.0035		DAVIES,PR2,506-70	
	10.537	1.726	1.860		.0186		.0035		DAVIES,PR2,506-70	
	11.623	2.015	2.150		.0286		.0045		DAVIES,PR2,506-70	
	12.447	2.235	2.370		.0187		.0045		DAVIES,PR2,506-70	
THRESHOLD	8.24	1.11	1.25						6 DATA POINTS LISTED	
..... REACTION 387										
PPET	15.894	3.153	3.290		.1000		ERROR NOT GIVEN		COHN NPB1,57-67	
	20.431	4.363	4.500		.0620		.0100		FORINO PL19,65-65	
THRESHOLD	5.89	.49	.61						2 DATA POINTS LISTED	
..... REACTION 388										
PPRHO	20.431	4.363	4.500		.5440		.0300		FORINO PL19,65-65	
	22.681	4.962	5.100		.5950		.0760		ARMENISE NC54A,999-68	
	37.311	8.862	9.000		.1930		.0160		ARMENISE,NCL4,199-70	P
THRESHOLD	6.95	.77	.90						3 DATA POINTS LISTED	
..... REACTION 389										
PPOM	15.894	3.153	3.290		.2200		ERROR NOT GIVEN		COHN NPB1,57-67	
THRESHOLD	7.07	.80	.93							
..... REACTION 390										
PPOM=PPPI+PI-PIO	19.268	4.053	4.190		.3450		.0500		ABRAMS PRL23,673-69	P
	26.057	5.862	6.000		.1800		.0300		BRUYANT,442,DUB64	
THRESHOLD	7.07	.80	.93						2 DATA POINTS LISTED	
..... REACTION 391										
PPXO	15.894	3.153	3.290		.0300		.0180	.0110	COHN PL21,347-66	P
THRESHOLD	8.13	1.08	1.22							
..... REACTION 392										
PPXO=PPZO	26.057	5.862	6.000		.8100		.0800			
THRESHOLD	8.13	1.08	1.22							
..... REACTION 393										
PPXO=PPPI+PI+PI-PI-PIO	9.976	1.576	1.710	U	.0250				BACON PR157,1263-67	
THRESHOLD	8.13	1.08	1.22							
..... REACTION 394										
PPA1O=PPPI+PI-PIO	26.057	5.862	6.000		.0650		.0300		BRUYANT,442,DUB64	
THRESHOLD	8.86	1.28	1.41							
..... REACTION 395										
PPF=PPPI+PI-	20.431	4.363	4.500		.2850		.0210		FORINO PL19,65-65	
	22.681	4.962	5.100		.4210		.0560		ARMENISE NC54A,999-68	
	26.057	5.862	6.000		.2770		.0300		BRUYANT,442,DUB64	
	37.311	8.862	9.000		.1390		.0150		ARMENISE,NCL4,199-70	P
THRESHOLD	9.77	1.52	1.66						4 DATA POINTS LISTED	
..... REACTION 396										
PPF=PPPIOPIO	20.431	4.363	4.500		.1490		.0150		FORINO PL19,65-65	
	22.681	4.962	5.100		.1850		.0270		ARMENISE NC54A,999-68	
THRESHOLD	9.77	1.52	1.66						2 DATA POINTS LISTED	
..... REACTION 397										
PPF=PPZO	26.057	5.862	6.000		.1560		.0200		BRUYANT,442,DUB64	
	37.311	8.862	9.000		.0700		.0150		ARMENISE,NCL4,199-70	P
THRESHOLD	9.77	1.52	1.66						2 DATA POINTS LISTED	
..... REACTION 398										
PPDO=PPDELPI=PPET2PI	13.683	2.564	2.700		.0440		.0080		CAMPBE. PRL22,1204-69	P
THRESHOLD	10.00	1.58	1.72							
..... REACTION 399										
PPA2O	15.894	3.153	3.290		.1800		ERROR NOT GIVEN		COHN NPB1,57-67	D
THRESHOLD	10.09	1.61	1.74							
..... REACTION 400										
PPA2O=PPPI+PI-PIO	26.057	5.862	6.000		.0760		.0250		BRUYANT,442,DUB64	
THRESHOLD	10.09	1.61	1.74							
..... REACTION 401										
PPA3O	20.431	4.363	4.500		.0320		.0070		FORINO PL19,65-65	
THRESHOLD	12.36	2.21	2.35							
..... REACTION 402										
PPA3O=PPPI+PI-PIO	22.681	4.962	5.100		.0530		ERROR NOT GIVEN		ARMENISE PL26B,336-68	P
THRESHOLD	12.36	2.21	2.35							

FOOTNOTES

$=DATA POINT NOT USED IN FITTING OR PLOTTING
P=PROTON IS A SPECTATOR
U=UPPER LIMIT
D=NOT CORR. FOR HIGH MOMENTUM TRANSFER(GT.50 PI MSQ) TO THE N,NOR FOR KAK DECAY

PI+DE

	S	K.ENERGY	PLAB		CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 403										
PPGO	37.311	8.862	9.000		.0360		.0120		ARMENISE,NCL4,199-70	P
THRESHOLD	12.43	2.23	2.37							
..... REACTION 404										
PPGO=PPPI+PI-	22.681	4.962	5.100		.0760		.0170		ARMENISE NC54A,999-68	
	26.057	5.862	6.000	U	.0350		.0090		GOLDBERG PL17,354-65	
THRESHOLD	12.43	2.23	2.37						2 DATA POINTS LISTED	
..... REACTION 405										
PNPI+PI+PI-	9.864	1.546	1.680		3.2700		.1400		BACON PR157,1263-67	
	13.683	2.564	2.700		1.8600		.1800		MILLER PR178,2061-69	P
	20.431	4.363	4.500		1.2500		.2000		FORINO PL19,68-65	P
	20.431	4.363	4.500		1.5500		.1500		FORINO PL19,68-65	N
	22.681	4.962	5.100		1.9600		.2000		ARMENISE,NC65A,637-70	N
THRESHOLD	5.28	.32	.44						5 DATA POINTS LISTED	
..... REACTION 406										
PN3PI+2PI-	9.303	1.397	1.530		2.0000	MICROB	1.0000		RADER UCRL19431-69	
	9.939	1.566	1.700		6.0000	MICROB	2.0000		RADER UCRL19431-69	
	10.537	1.726	1.860		.0110		.0020		RADER UCRL19431-69	
	11.623	2.015	2.150		.0450		.0050		RADER UCRL19431-69	
	12.447	2.235	2.370		.0700		.0130		RADER UCRL19431-69	
THRESHOLD	6.65	.69	.82						5 DATA POINTS LISTED	
..... REACTION 407										
PN3PI+2PI-ZO	9.939	1.566	1.700		1.0000	MICROB	1.0000		RADER UCRL19431-69	
	10.537	1.726	1.860		2.0000	MICROB	1.0000		RADER UCRL19431-69	
	11.623	2.015	2.150		9.0000	MICROB	2.0000		RADER UCRL19431-69	
	12.447	2.235	2.370		.0180		.0060		RADER UCRL19431-69	
THRESHOLD	8.17	1.09	1.23						4 DATA POINTS LISTED	
..... REACTION 408										
PNK+KO	9.303	1.397	1.530		4.0000	MICROB	2.8000		DAVIES,PR2,506-70	
	9.490	1.447	1.580		.0110		.0110		DAVIES,PR2,506-70	
	9.939	1.566	1.700		.0200		.0060		DAVIES,PR2,506-70	
	10.537	1.726	1.860		.0250		.0060		DAVIES,PR2,506-70	
	11.623	2.015	2.150		.0480		.0090		DAVIES,PR2,506-70	
	12.447	2.235	2.370		.0670		.0180		DAVIES,PR2,506-70	
THRESHOLD	8.21	1.11	1.24						6 DATA POINTS LISTED	
..... REACTION 409										
PPHI	15.894	3.153	3.290		.0500		ERROR NOT GIVEN		COHN NPB1,57-67	D
THRESHOLD	3.83	0.00	0.00							
..... REACTION 410										
LPK+	7.774	.989	1.120		.3680		.0550		DAVIES,PR2,506-70	
	8.444	1.168	1.300		.4750		.0550		DAVIES,PR2,506-70	
	9.303	1.397	1.530		.2920		.0200		DAVIES,PR2,506-70	
	9.490	1.447	1.580		.2480		.0500		DAVIES,PR2,506-70	
	9.939	1.566	1.700		.2460		.0200		DAVIES,PR2,506-70	
	10.537	1.726	1.860		.1670		.0250		DAVIES,PR2,506-70	
	11.623	2.015	2.150		.1210		.0250		DAVIES,PR2,506-70	
	12.447	2.235	2.370		.1010		.0300		DAVIES,PR2,506-70	
THRESHOLD	6.49	.65	.77						8 DATA POINTS LISTED	
..... REACTION 411										
LPK+PI+PI-	9.939	1.566	1.700		.0100		.0030		DAVIES,PR2,506-70	
	10.537	1.726	1.860		.0180		.0040		DAVIES,PR2,506-70	
	11.623	2.015	2.150		.0470		.0070		DAVIES,PR2,506-70	
	12.447	2.235	2.370		.0580		.0150		DAVIES,PR2,506-70	
THRESHOLD	7.99	1.05	1.18						4 DATA POINTS LISTED	
..... REACTION 412										
LPK+PIO	9.303	1.397	1.530		.0790		.0100		DAVIES,PR2,506-70	
	9.490	1.447	1.580		.0890		.0220		DAVIES,PR2,506-70	
	9.939	1.566	1.700		.1140		.0090		DAVIES,PR2,506-70	
	10.537	1.726	1.860		.1310		.0090		DAVIES,PR2,506-70	
	11.623	2.015	2.150		.1510		.0120		DAVIES,PR2,506-70	
	12.447	2.235	2.370		.1500		.0220		DAVIES,PR2,506-70	
THRESHOLD	7.22	.84	.97						6 DATA POINTS LISTED	
..... REACTION 413										
LPKOPI+	8.444	1.168	1.300		9.0000	MICROB	7.0000		DAVIES,PR2,506-70	
	9.303	1.397	1.530		.0690		.0070		DAVIES,PR2,506-70	
	9.490	1.447	1.580		.0730		.0180		DAVIES,PR2,506-70	
	9.939	1.566	1.700		.0840		.0070		DAVIES,PR2,506-70	
	10.537	1.726	1.860		.1040		.0080		DAVIES,PR2,506-70	
	11.623	2.015	2.150		.1600		.0100		DAVIES,PR2,506-70	
	12.447	2.235	2.370		.1260		.0170		DAVIES,PR2,506-70	
THRESHOLD	7.22	.84	.97						7 DATA POINTS LISTED	
..... REACTION 414										
LPKOPI+PIO	9.939	1.566	1.700		3.3000	MICROB	3.3000		DAVIES,PR2,506-70	
	10.537	1.726	1.860		9.7000	MICROB	5.5000		DAVIES,PR2,506-70	
	11.623	2.015	2.150		.0280		.0100		DAVIES,PR2,506-70	
	12.447	2.235	2.370		.0630		.0240		DAVIES,PR2,506-70	
THRESHOLD	7.99	1.05	1.18						4 DATA POINTS LISTED	

FOOTNOTES

P=PROTON IS A SPECTATOR
U=UPPER LIMIT
N=NEUTRON IS A SPECTATOR
D=NOT CORR. FOR HIGH MOMENTUM TRANSFER(GT.50 PI MSQ) TO THE N,NOR FOR KAK DECAY

PI+DE

		S	K.ENERGY	PLAB	CROSS SECTION		ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 415										
LNK+PI+		8.444	1.168	1.300	.0110		.0070		DAVIES,PR2,506-70	
		9.303	1.397	1.530	.0720		.0120		DAVIES,PR2,506-70	
		9.490	1.447	1.580	.0650		.0220		DAVIES,PR2,506-70	
		9.939	1.566	1.700	.1080		.0120		DAVIES,PR2,506-70	
		10.537	1.726	1.860	.1340		.0140		DAVIES,PR2,506-70	
		11.623	2.015	2.150	.1180		.0120		DAVIES,PR2,506-70	
		12.447	2.235	2.370	.0670		.0160		DAVIES,PR2,506-70	
	THRESHOLD	7.23	.84	.97					7 DATA POINTS LISTED	
..... REACTION 416										
(L/SO)PK+		8.183	1.098	1.230	.7100		.0700		CRAWFORD,270,CERN62	
		8.183	1.098	1.230	.7100		.0800		SHAFER PR130,2077-63	
	THRESHOLD	6.50	.65	.78					2 DATA POINTS LISTED	
..... REACTION 417										
S+PKO		7.774	.989	1.120	.0390		.0390		DAVIES,PR2,506-70	
		8.154	1.090	1.222	.1770		.0330		KRAEMER,273,CERN62	
		8.444	1.168	1.300	.2540		.0900		DAVIES,PR2,506-70	
		9.303	1.397	1.530	.2340		.0450		DAVIES,PR2,506-70	
		9.490	1.447	1.580	.2700		.0900		DAVIES,PR2,506-70	
		9.939	1.566	1.700	.1880		.0390		DAVIES,PR2,506-70	
		10.537	1.726	1.860	.1740		.0330		DAVIES,PR2,506-70	
		11.623	2.015	2.150	.1420		.0330		DAVIES,PR2,506-70	
		12.447	2.235	2.370	.0520		.0330		DAVIES,PR2,506-70	
	THRESHOLD	6.87	.75	.88					9 DATA POINTS LISTED	
..... REACTION 418										
S+NK+		8.154	1.090	1.222	.1710		.0310		KRAEMER,273,CERN62	
	THRESHOLD	6.89	.75	.88						
..... REACTION 419										
S+NKOPI+		9.939	1.566	1.700	7.0000	MICROB	15.0000		DAVIES,PR2,506-70	
		10.537	1.726	1.860	.0620		.0210		DAVIES,PR2,506-70	
		11.623	2.015	2.150	.1100		.0260		DAVIES,PR2,506-70	
		12.447	2.235	2.370	.1600		.0600		DAVIES,PR2,506-70	
	THRESHOLD	7.64	.95	1.08					4 DATA POINTS LISTED	
..... REACTION 420										
SOPK+		7.774	.989	1.120	.1490		.0450		DAVIES,PR2,506-70	
		8.444	1.168	1.300	.1780		.0450		DAVIES,PR2,506-70	
		9.303	1.397	1.530	.1320		.0180		DAVIES,PR2,506-70	
		9.490	1.447	1.580	.1350		.0400		DAVIES,PR2,506-70	
		9.939	1.566	1.700	.1060		.0150		DAVIES,PR2,506-70	
		10.537	1.726	1.860	.1520		.0270		DAVIES,PR2,506-70	
		11.623	2.015	2.150	.1140		.0250		DAVIES,PR2,506-70	
		12.447	2.235	2.370	.0770		.0250		DAVIES,PR2,506-70	
	THRESHOLD	6.87	.75	.88					8 DATA POINTS LISTED	
..... REACTION 421										
SOPKOPI+		9.303	1.397	1.530	.0210		.0110		DAVIES,PR2,506-70	
		9.490	1.447	1.580	0.0000	MICROB	18.0000		DAVIES,PR2,506-70	$
		9.939	1.566	1.700	.0190		.0090		DAVIES,PR2,506-70	
		10.537	1.726	1.860	.0340		.0100		DAVIES,PR2,506-70	
		11.623	2.015	2.150	.0550		.0150		DAVIES,PR2,506-70	
		12.447	2.235	2.370	.0740		.0290		DAVIES,PR2,506-70	
	THRESHOLD	7.63	.95	1.08					6 DATA POINTS LISTED	
..... REACTION 422										
Y*+1385PKO=LPKOPI+		14.807	2.864	3.000	6.0000	MICROB	ERROR	NOT GIVEN	ABOLINS PRL22,427-69	1
		18.556	3.863	4.000	7.0000	MICROB	ERROR	NOT GIVEN	ABOLINS PRL22,427-69	1
	THRESHOLD	7.94	1.03	1.16					2 DATA POINTS LISTED	
..... REACTION 423										
Y*+1385NK+=LNK+PI+		11.997	2.115	2.250	.0900		ERROR	NOT GIVEN	ABOLINS PRL22,427-69	1
		14.807	2.864	3.000	.0310		ERROR	NOT GIVEN	ABOLINS PRL22,427-69	1
		18.556	3.863	4.000	.0280		ERROR	NOT GIVEN	ABOLINS PRL22,427-69	1
	THRESHOLD	7.95	1.04	1.17					3 DATA POINTS LISTED	
..... REACTION 424										
Y*01385PK+=LPK+PIO		14.807	2.864	3.000	.0250		ERROR	NOT GIVEN	ABOLINS PRL22,427-69	1
		18.556	3.863	4.000	.0230		ERROR	NOT GIVEN	ABOLINS PRL22,427-69	1
	THRESHOLD	7.94	1.03	1.16					2 DATA POINTS LISTED	

FOOTNOTES

$=DATA POINT NOT USED IN FITTING OR PLOTTING
1=AVERAGE VALUE OVER A BAND OF MOMENTA

PI+HE

		S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 425									
PI+HE		17.485	.486	.610	30.7000	ERROR	NOT GIVEN	CARAYANN.PRL20,822-68	
	THRESHOLD	13.98	0.00	0.00					

PIHE

		S	K.ENERGY	PLAB	CROSS SECTION	ERROR +	ERROR -	REFERENCE	FOOT-NOTES
..... REACTION 426									
TOTAL		17.331	.465	.588	111.5000	4.0000		CHAVAGN. NC40A,935-65	
		18.522	.630	.757	16.4000	3.5000		CHAVAGN. NC40A,935-65	
		19.096	.710	.838	20.0000	3.0000		CHAVAGN. NC40A,935-65	
		19.459	.760	.889	23.3000	3.5000		CHAVAGN. NC40A,935-65	
		19.957	.830	.959	26.3000	3.0000		CHAVAGN. NC40A,935-65	
		20.349	.884	1.014	32.2000	3.0000		CHAVAGN. NC40A,935-65	
		20.884	.958	1.089	33.6000	3.0000		CHAVAGN. NC40A,935-65	
		22.336	1.160	1.292	30.5000	4.0000		CHAVAGN. NC40A,935-65	
	THRESHOLD	13.98	0.00	0.00				8 DATA POINTS LISTED	
..... REACTION 427									
PIHE		17.331	.465	.588	31.5000	4.0000		CHAVAGN. NC40A,935-65	
		18.522	.630	.757	24.5000	3.5000		CHAVAGN. NC40A,935-65	
		19.096	.710	.838	23.0000	3.0000		CHAVAGN. NC40A,935-65	
		19.459	.760	.889	29.0000	3.5000		CHAVAGN. NC40A,935-65	
		19.957	.830	.959	25.0000	3.0000		CHAVAGN. NC40A,935-65	
		20.349	.884	1.014	32.0000	3.0000		CHAVAGN. NC40A,935-65	
		20.884	.958	1.089	35.0000	3.0000		CHAVAGN. NC40A,935-65	
		22.336	1.160	1.292	36.0000	4.0000		CHAVAGN. NC40A,935-65	
	THRESHOLD	13.98	0.00	0.00				8 DATA POINTS LISTED	

PLOTS OF CROSS SECTION

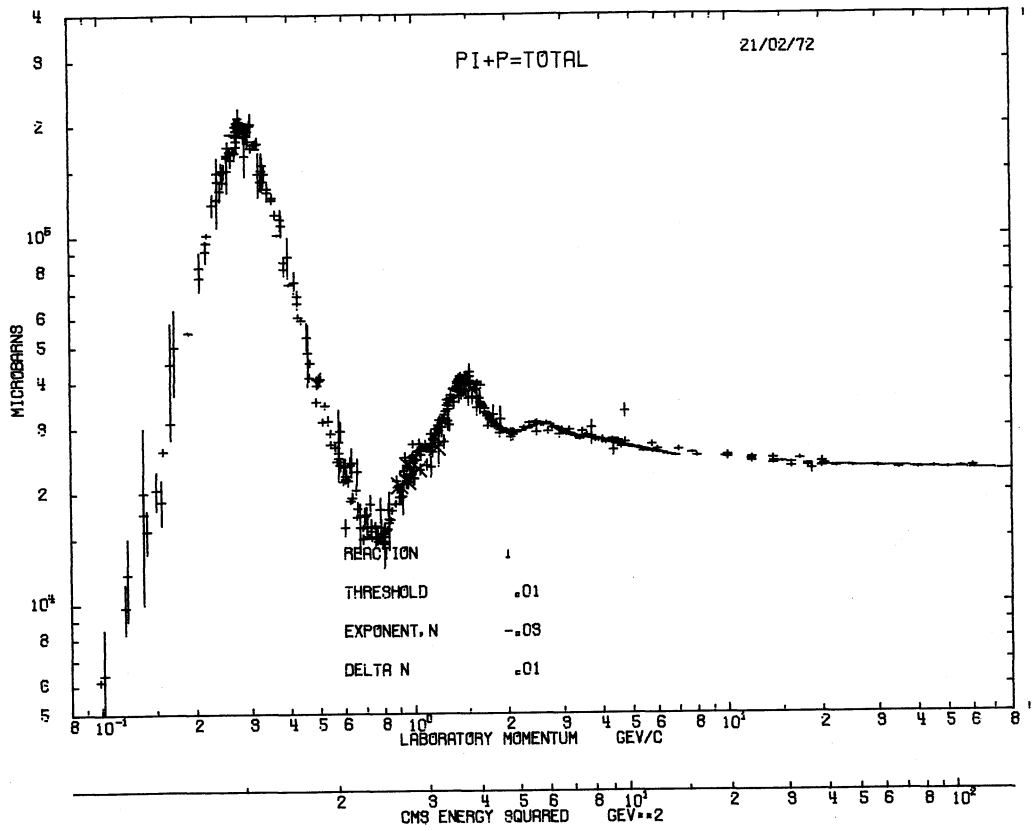
VERSUS INCIDENT LABORATORY MOMENTUM

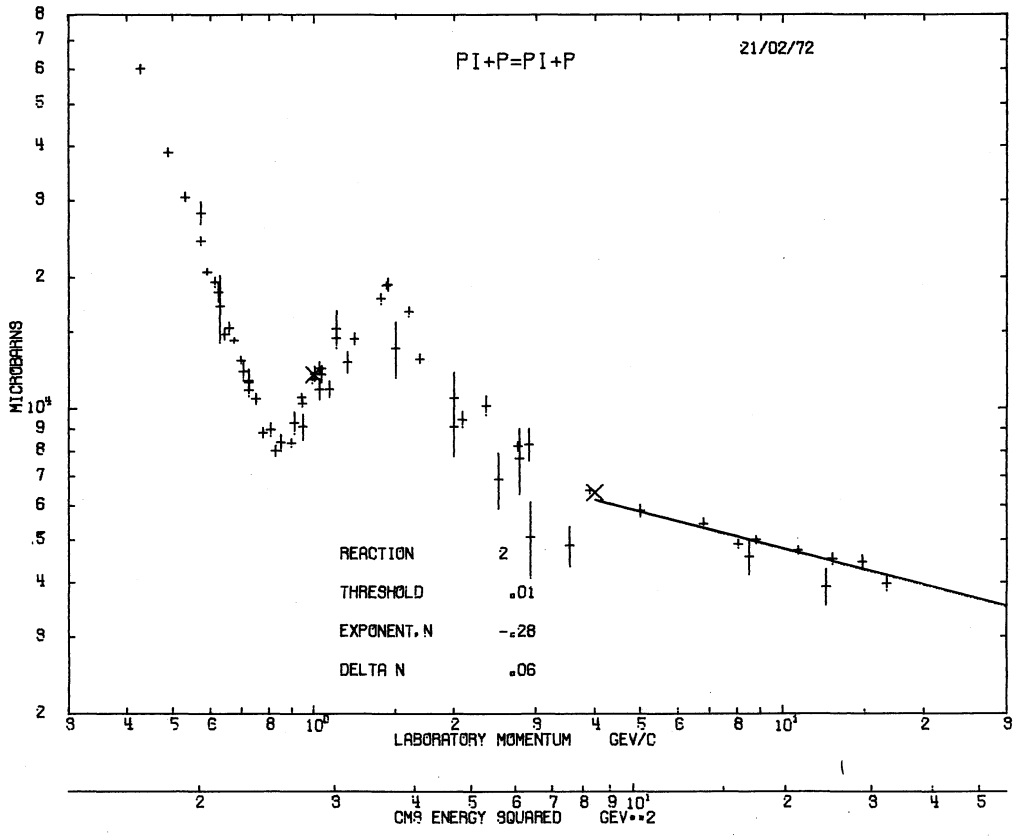
Description

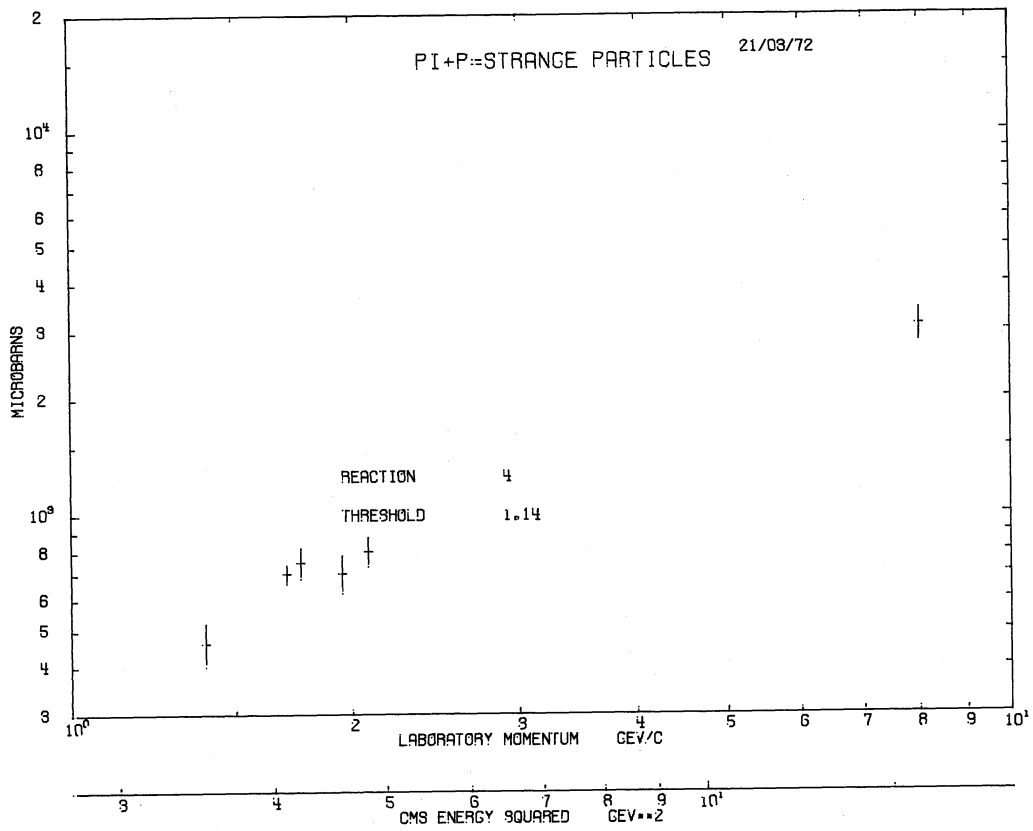
For those reactions having a sufficient number of data points, a graph is given of the cross section, σ, versus the momentum, p_{Lab} on log-log scales.

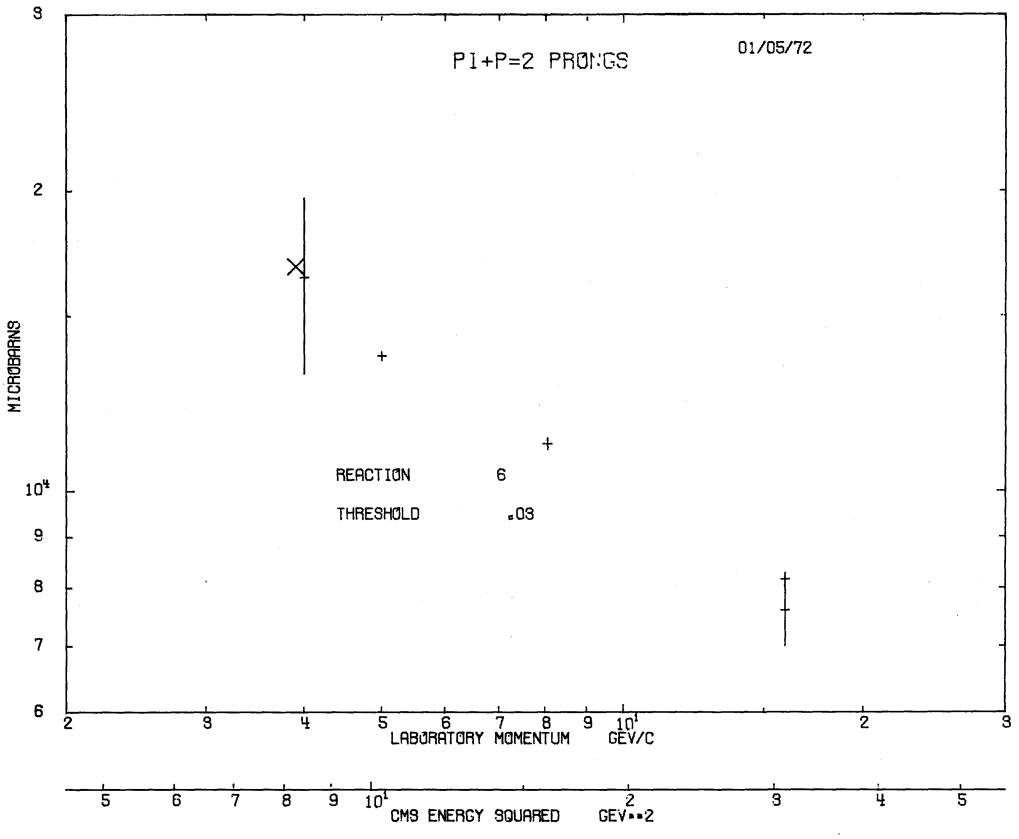
Errors are shown whenever they have been given. If no errors have been published, the data point is given as a cross, X. If only an upper limit is quoted, this is shown as a short horizontal bar together with a line extending to the bottom of the graph.

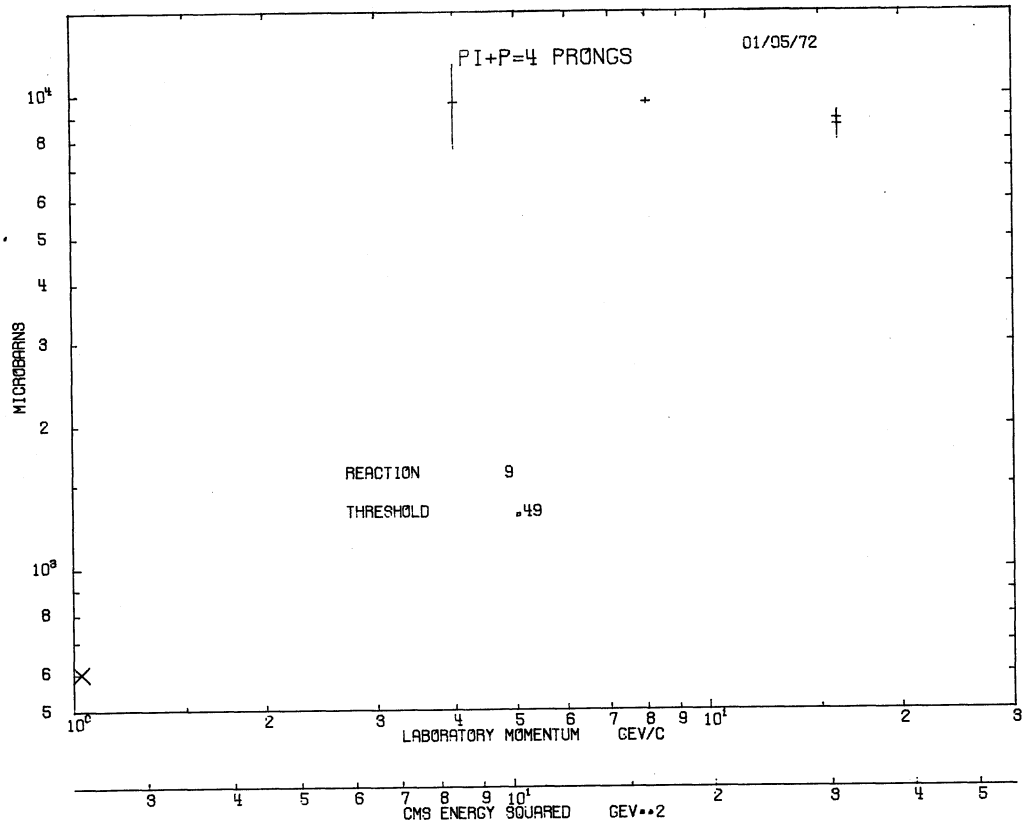
Lines drawn on the graph are fits to the high energy data of the formula (1), i.e. σ = constant. $(p_{Lab})^{\pm n}$, and the value of the exponent, n and its error are printed on the graph.

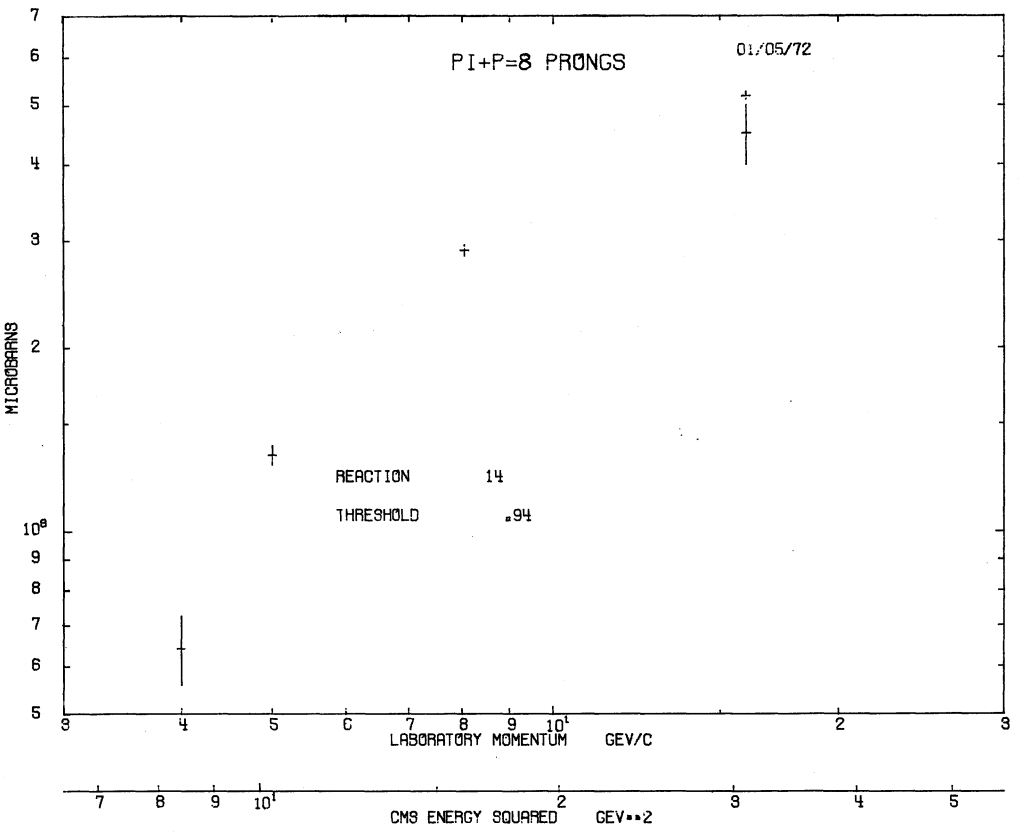

PI+P=TOTAL
21/02/72
MICROBARNS
REACTION 1
THRESHOLD .01
EXPONENT, N -.08
DELTA N .01
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

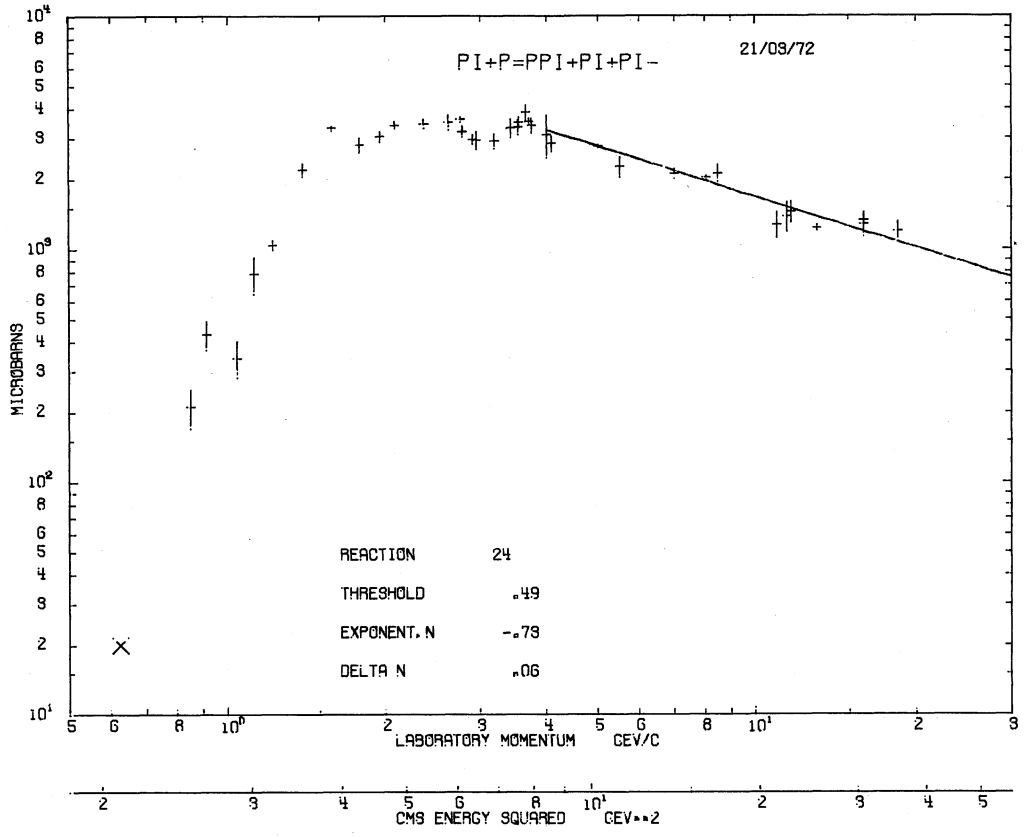

PI+P=PI+P
21/02/72
MICROBARNS
REACTION 2
THRESHOLD .01
EXPONENT, N -.28
DELTA N .06
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

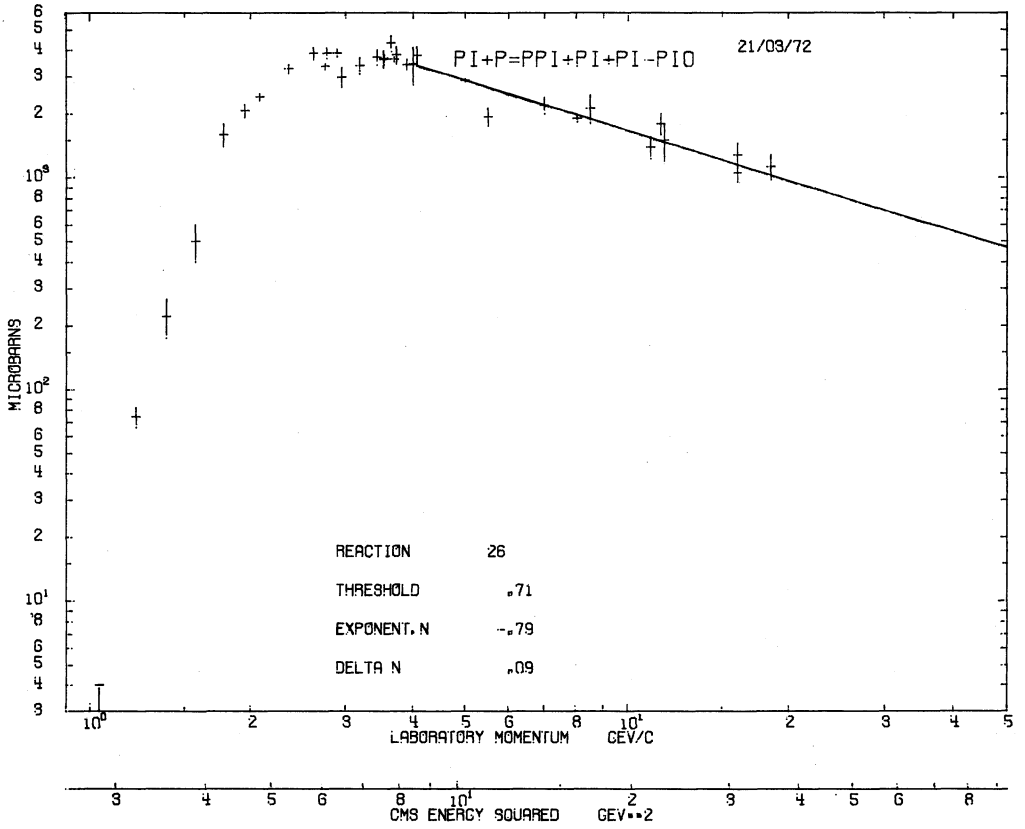

PI+P=STRANGE PARTICLES
21/03/72
MICROBARNS
REACTION 4
THRESHOLD 1.14
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

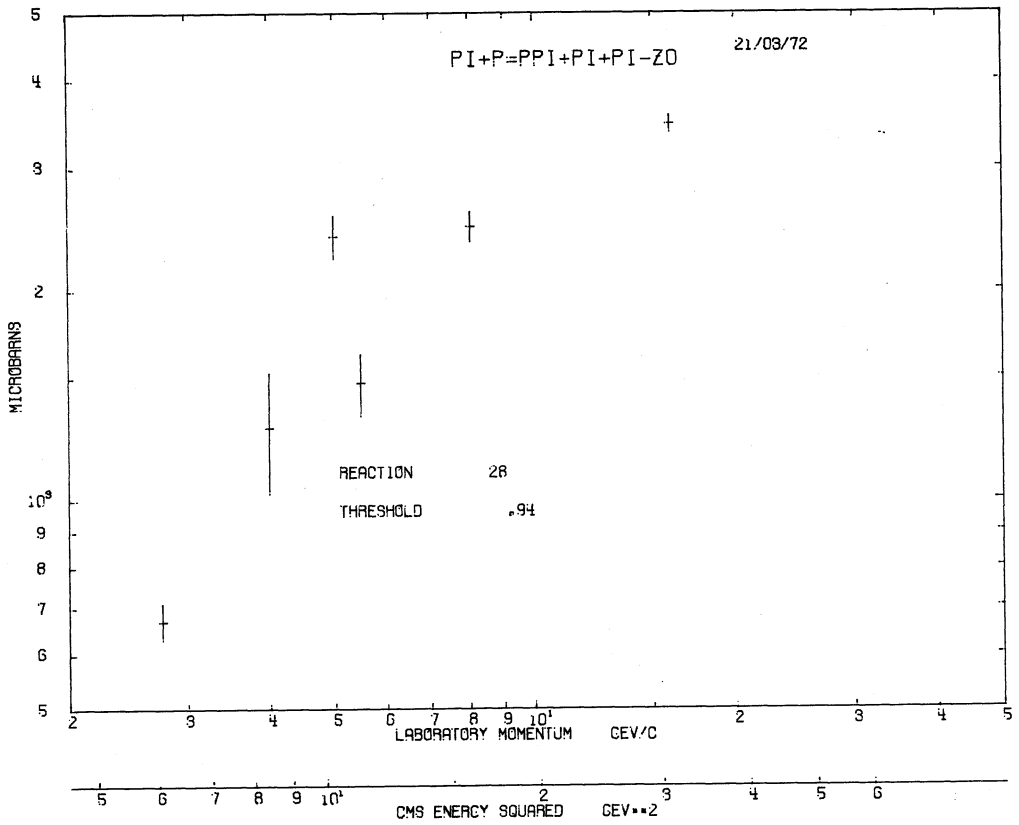

PI+P=2 PRONGS
01/05/72
MICROBARNS
REACTION 6
THRESHOLD .03
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

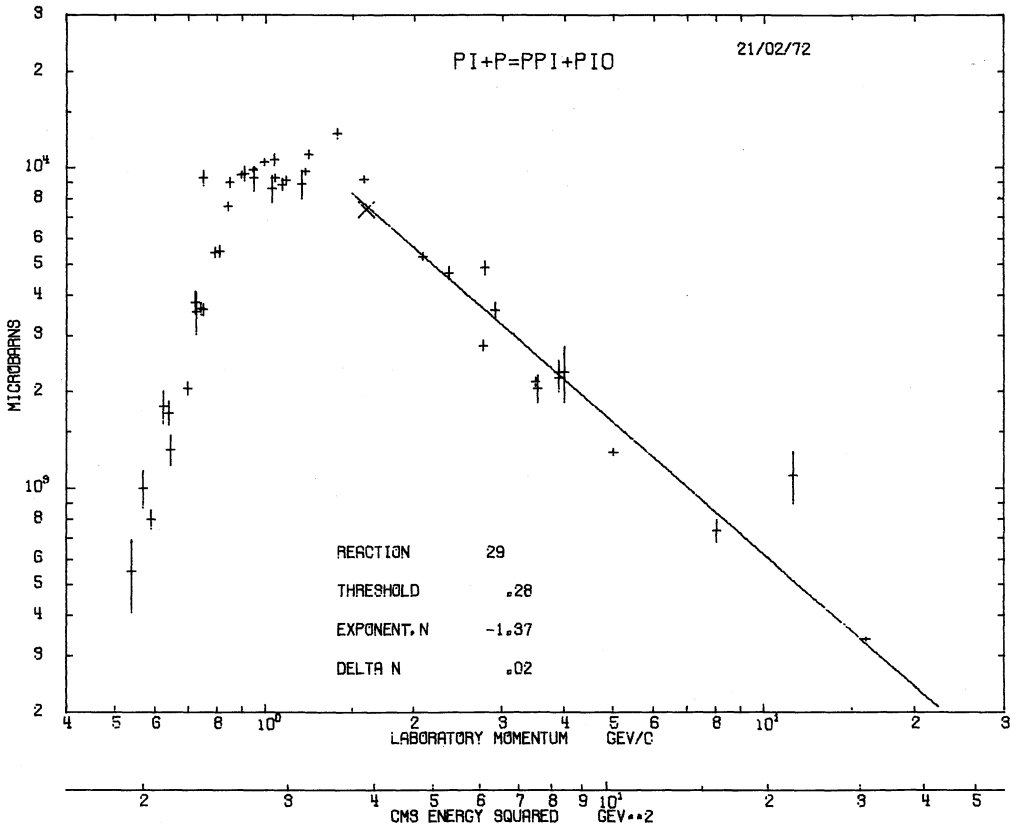

PI+P=4 PRONGS
01/05/72
MICROBARNS
REACTION 9
THRESHOLD .49
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

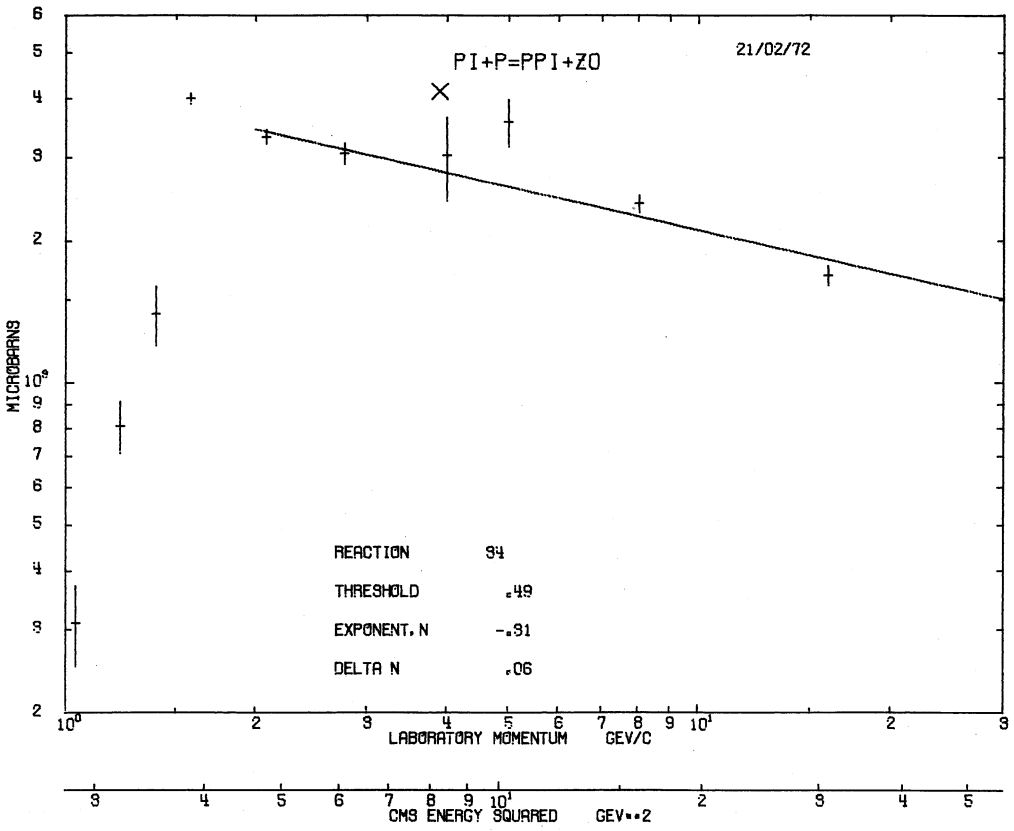

PI+P=8 PRONGS
01/05/72
MICROBARNS
REACTION 14
THRESHOLD .94
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

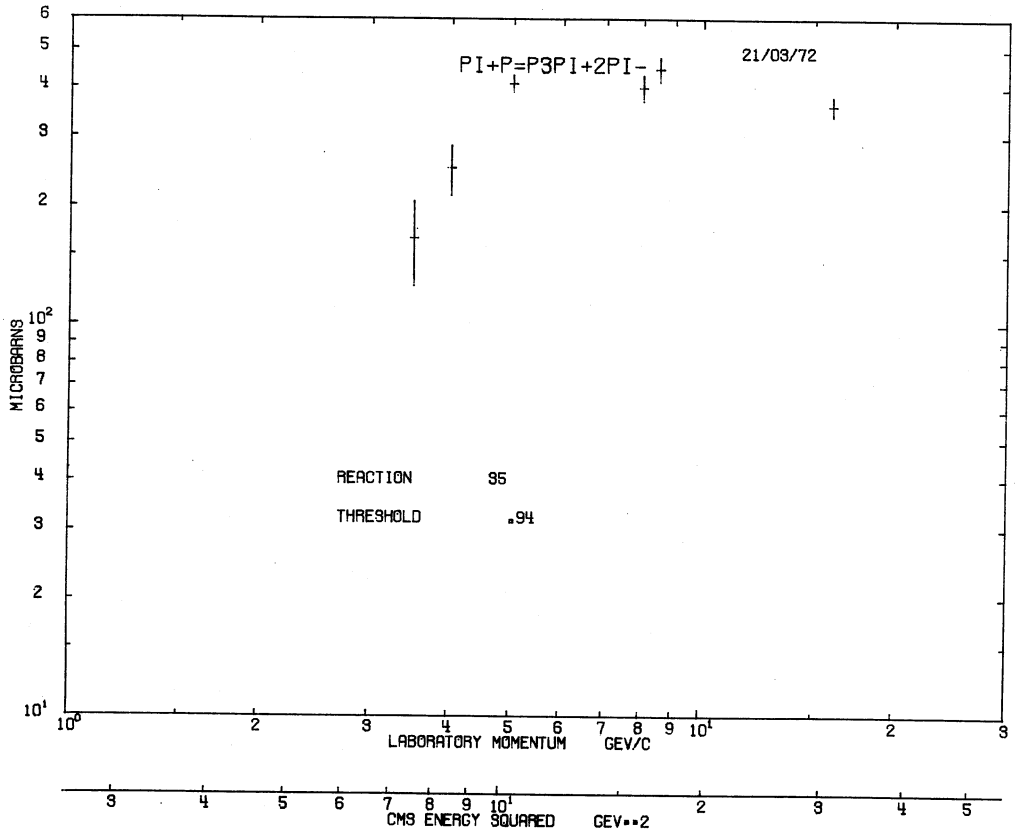

PI+P=PPI+PI+PI-
21/03/72
MICROBARNS
REACTION 24
THRESHOLD .49
EXPONENT.N -.78
DELTA N .06
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

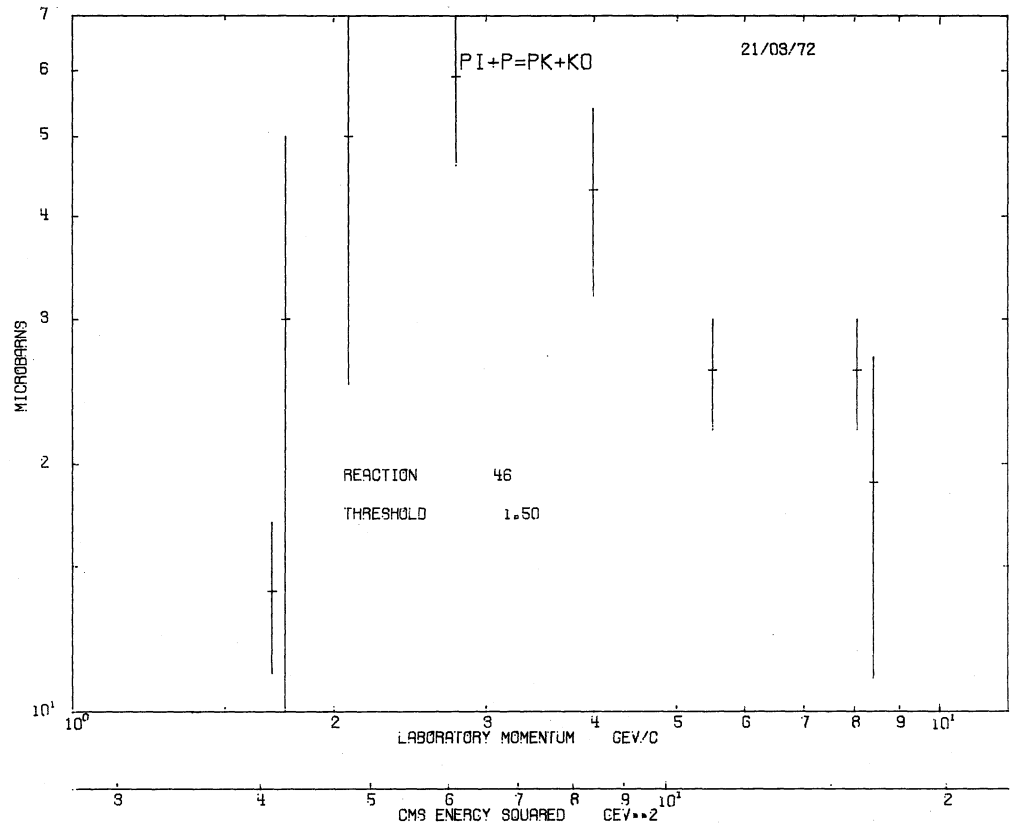

PI+P=PPI+PI+PI-PIO
21/03/72
MICROBARNS
REACTION 26
THRESHOLD .71
EXPONENT.N -.79
DELTA N .09
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

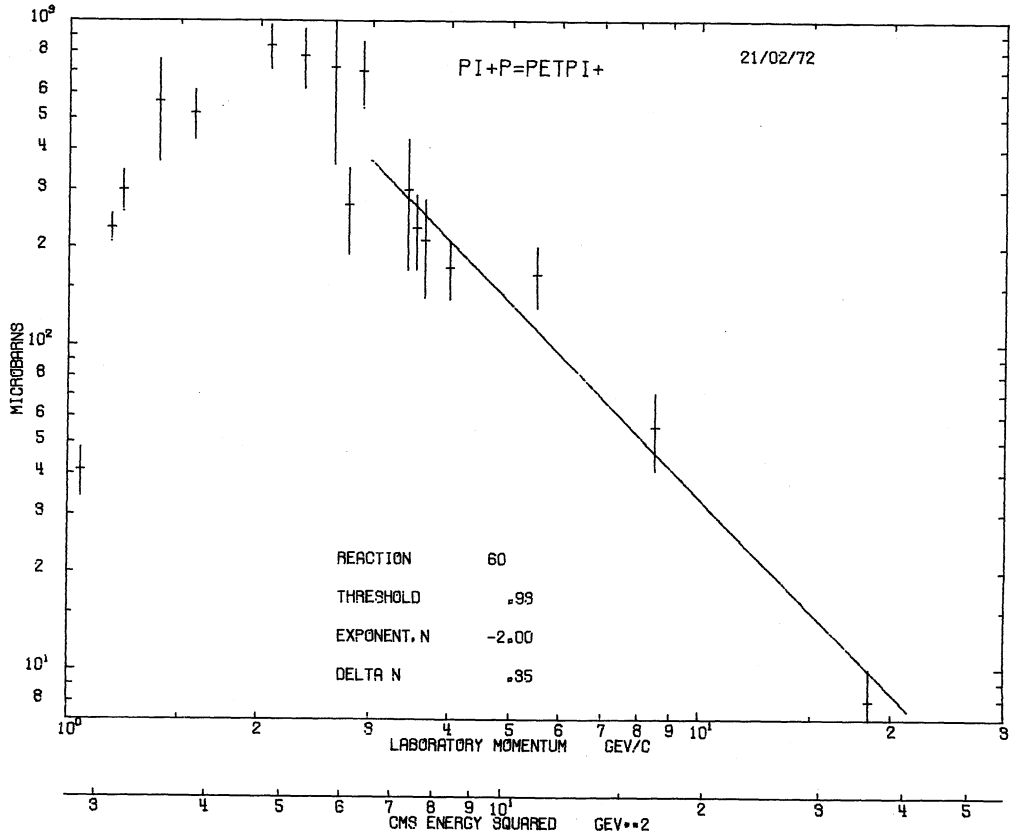

PI+P=PPI+PI+PI-ZO
21/03/72
MICROBARNS
REACTION 28
THRESHOLD .94
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

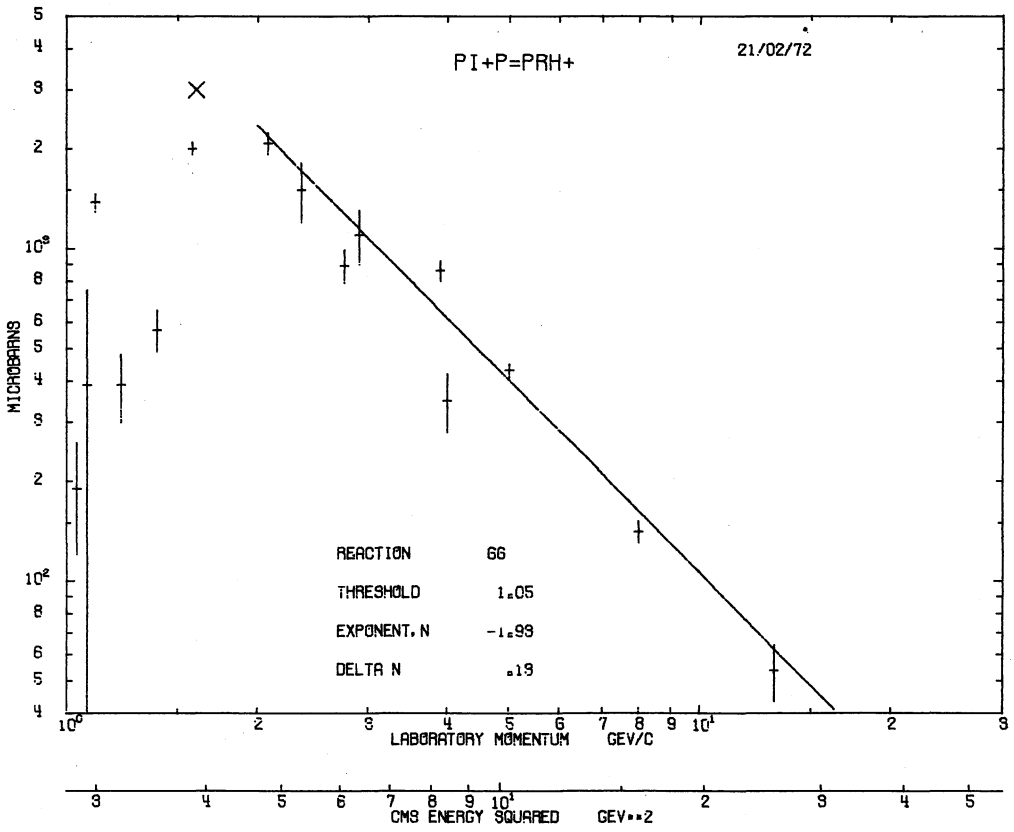

PI+P=PPI+PIO
21/02/72
MICROBARNS
REACTION 29
THRESHOLD .28
EXPONENT.N -1.37
DELTA N .02
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

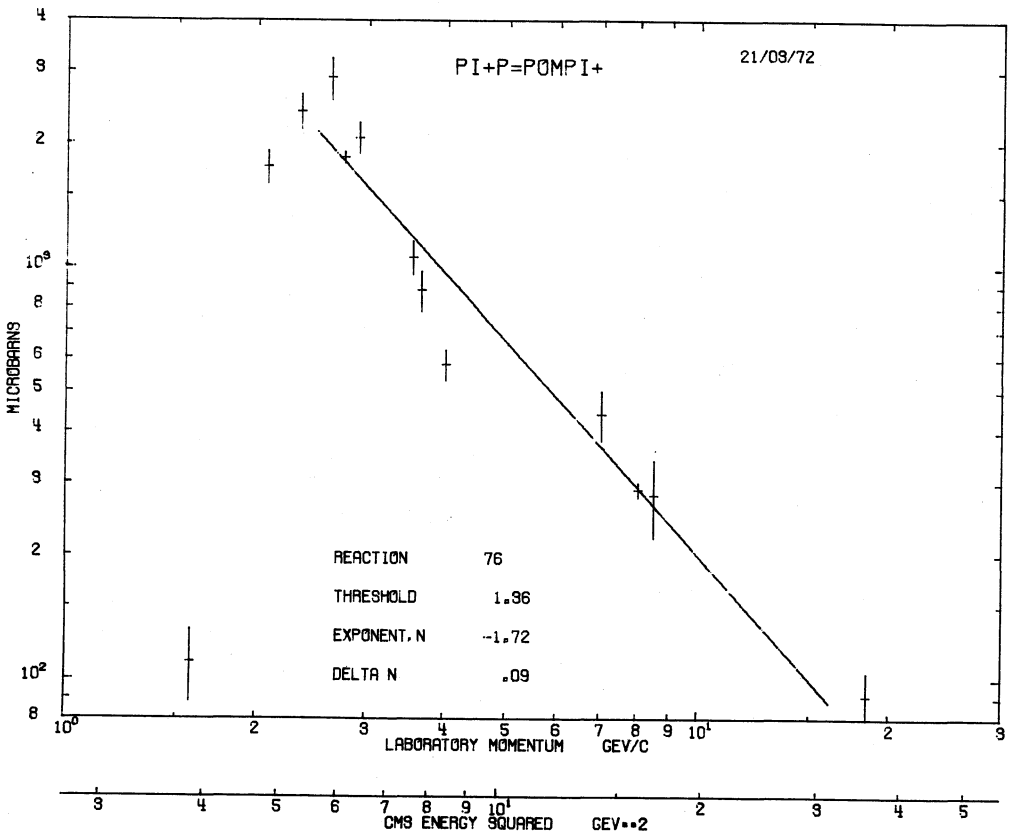

PI+P=PPI+ZO
21/02/72
MICROBARNS
REACTION 34
THRESHOLD .49
EXPONENT. N -.31
DELTA N .06
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

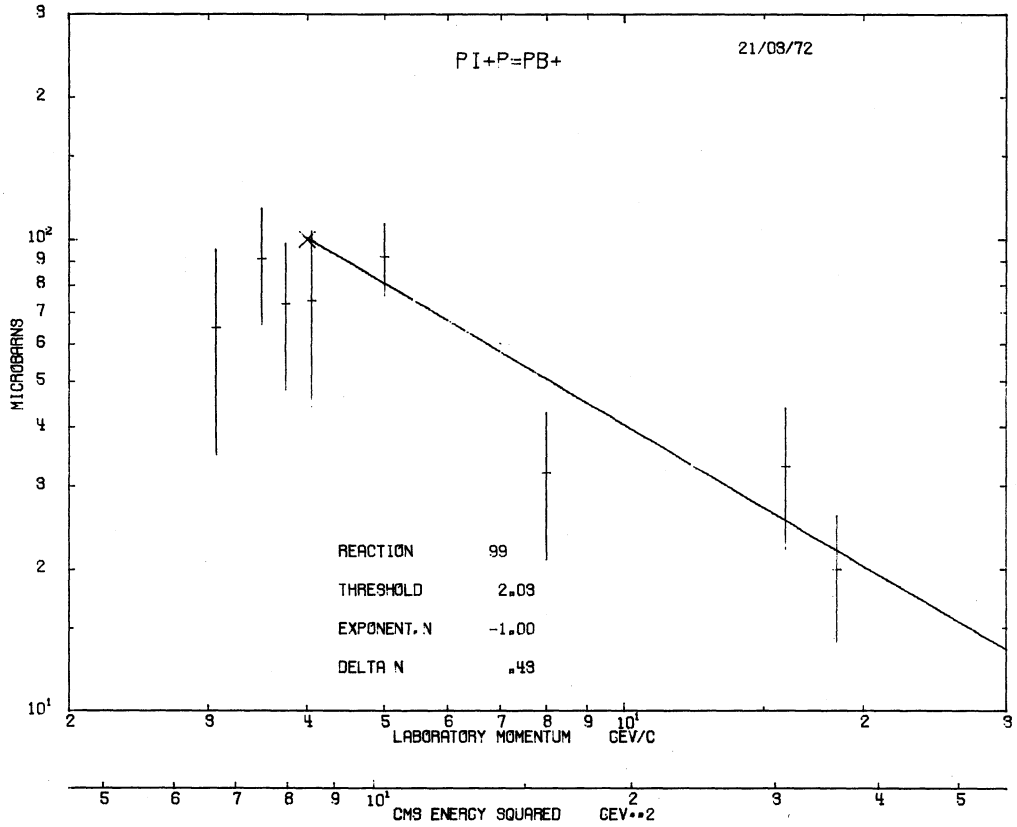

PI+P=P3PI+2PI-
21/03/72
MICROBARNS
REACTION 35
THRESHOLD .94
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

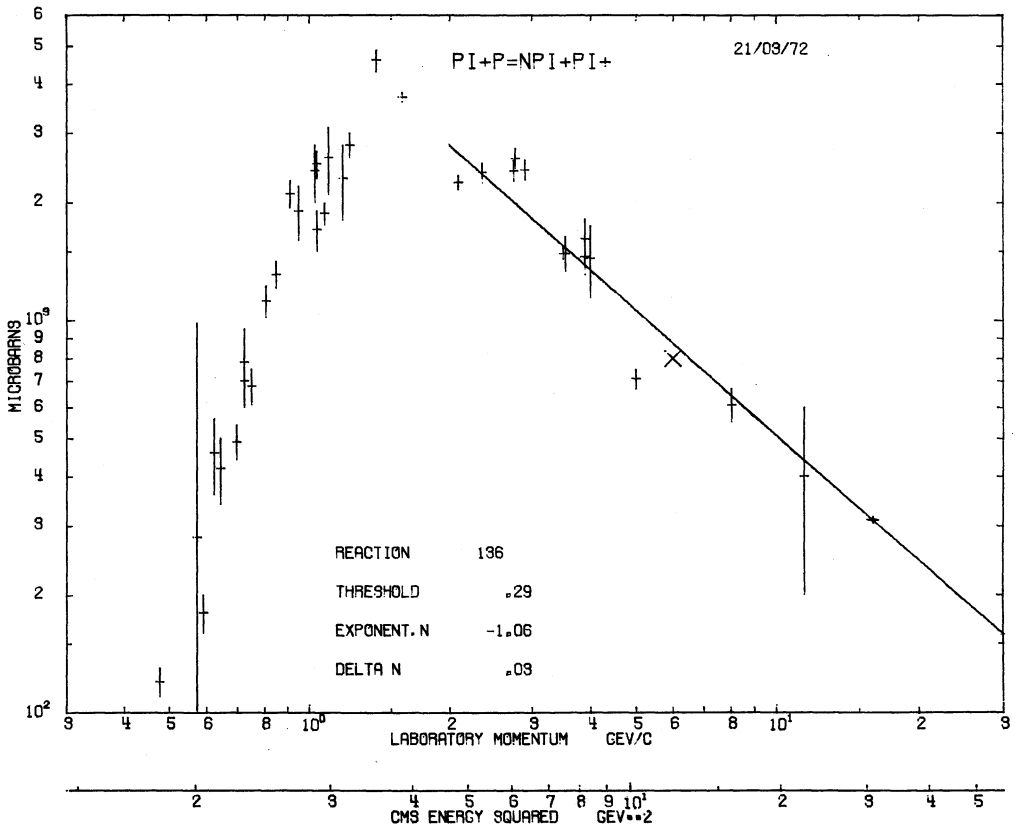

PI+P=PK+KO
21/08/72
REACTION 46
THRESHOLD 1.50
MICROBARNS
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

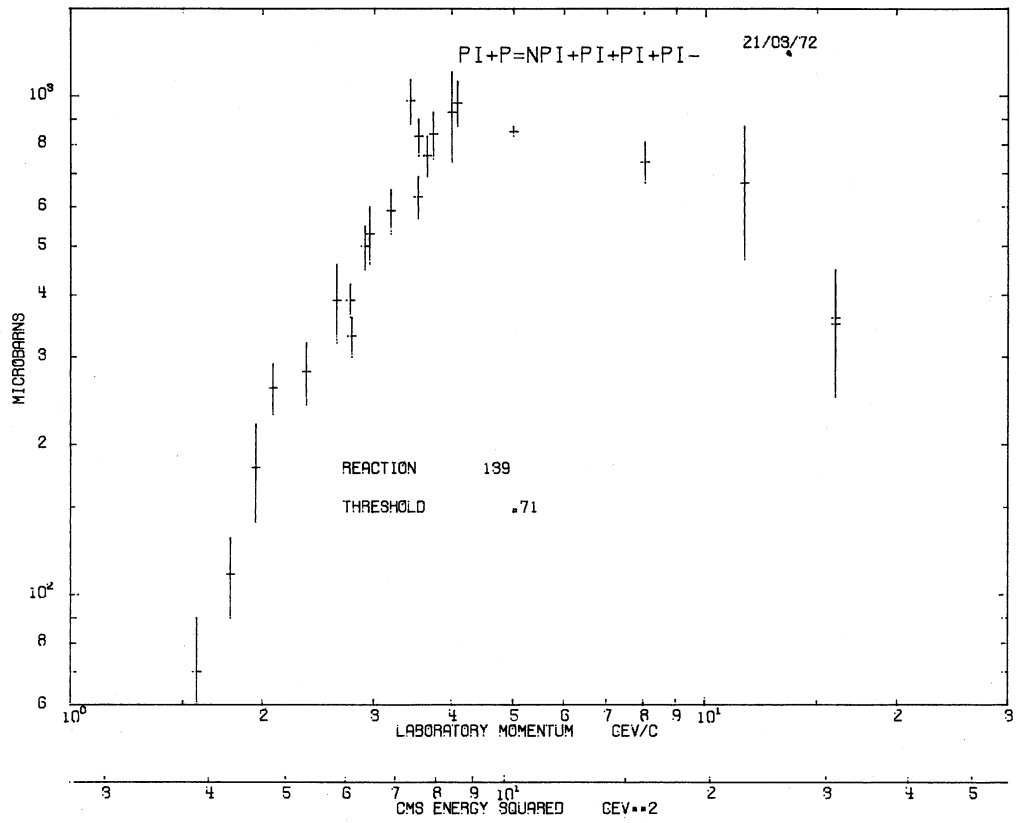

PI+P=PETPI+
21/02/72
REACTION 60
THRESHOLD .98
EXPONENT, N -2.00
DELTA N .35
MICROBARNS
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

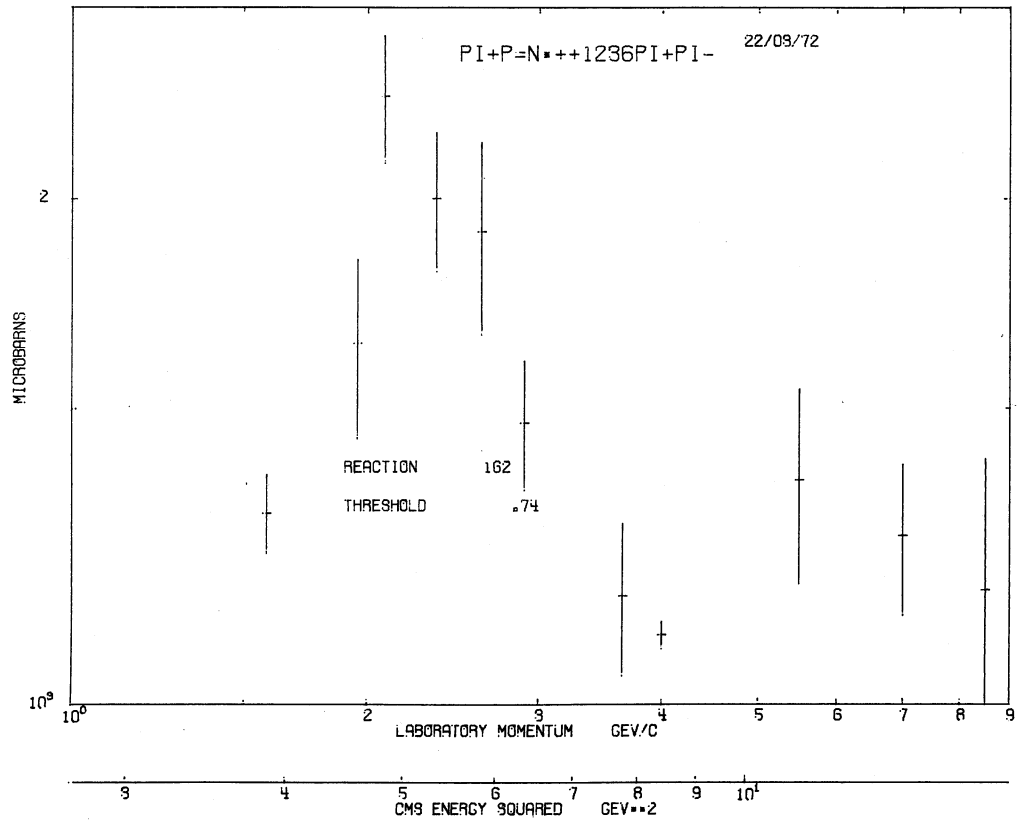

PI+P=PRH+
21/02/72
MICROBARNS
REACTION 66
THRESHOLD 1.05
EXPONENT, N -1.99
DELTA N .19
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

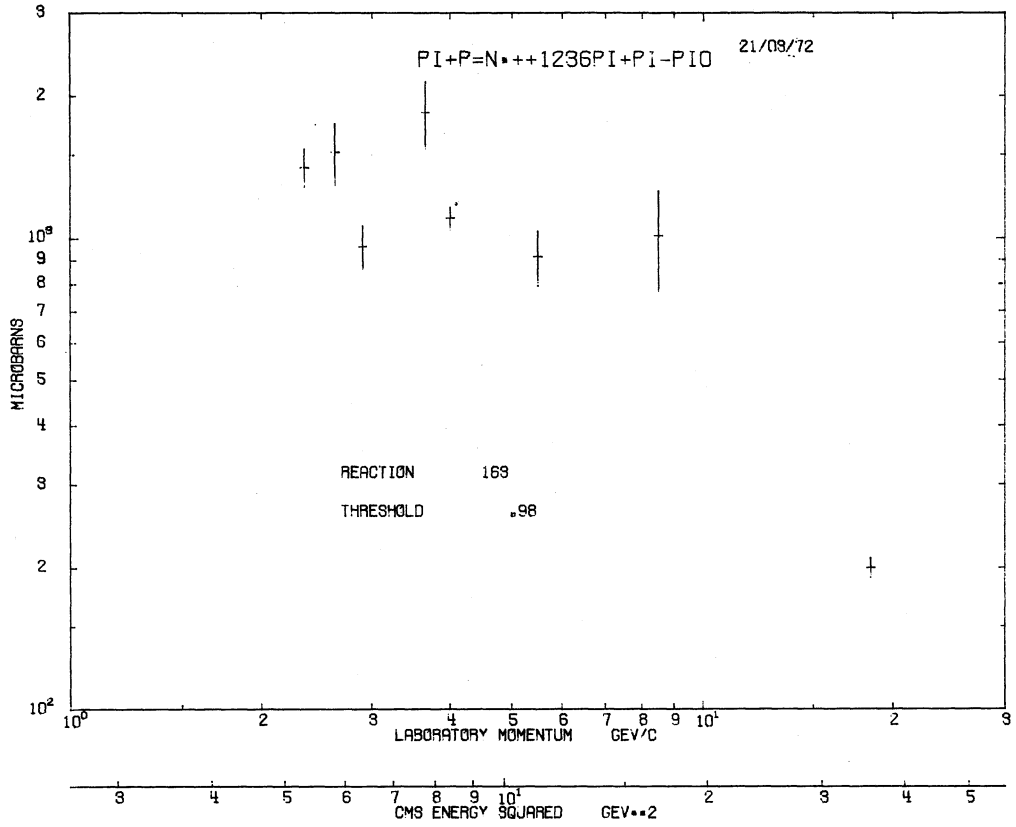

PI+P=POMPI+
21/09/72
MICROBARNS
REACTION 76
THRESHOLD 1.96
EXPONENT, N -1.72
DELTA N .09
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

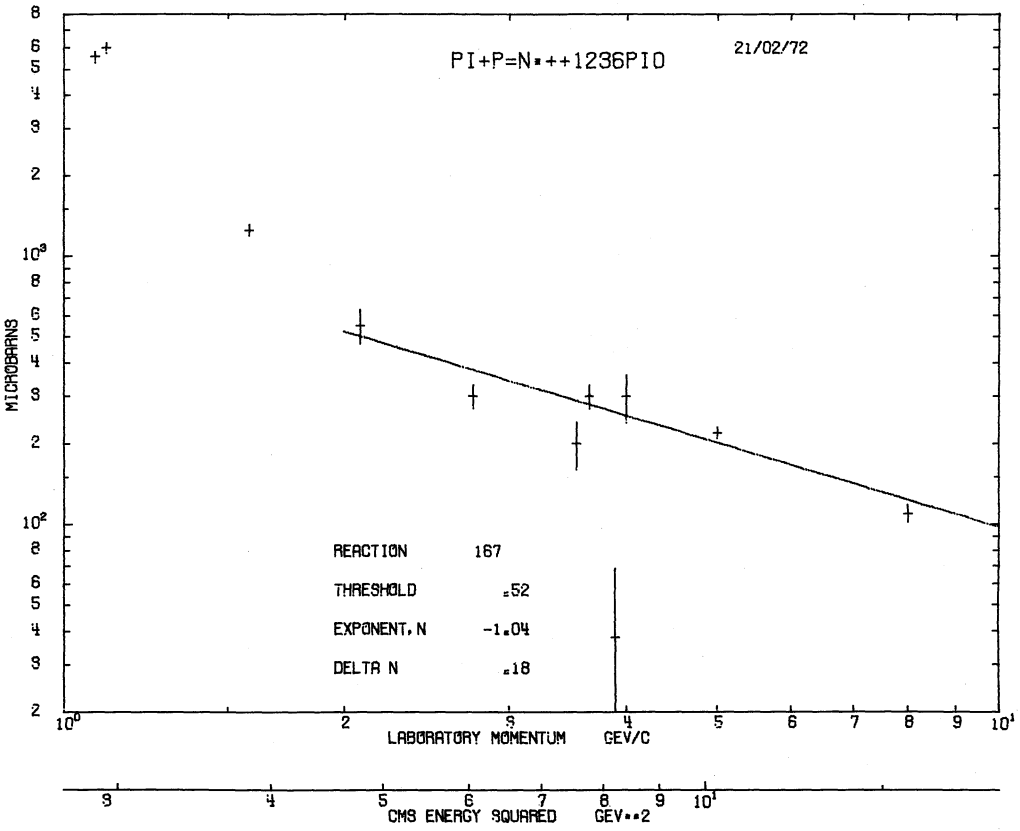

PI+P=PB+
21/03/72
MICROBARNS
REACTION 99
THRESHOLD 2.09
EXPONENT.N -1.00
DELTA N .49
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

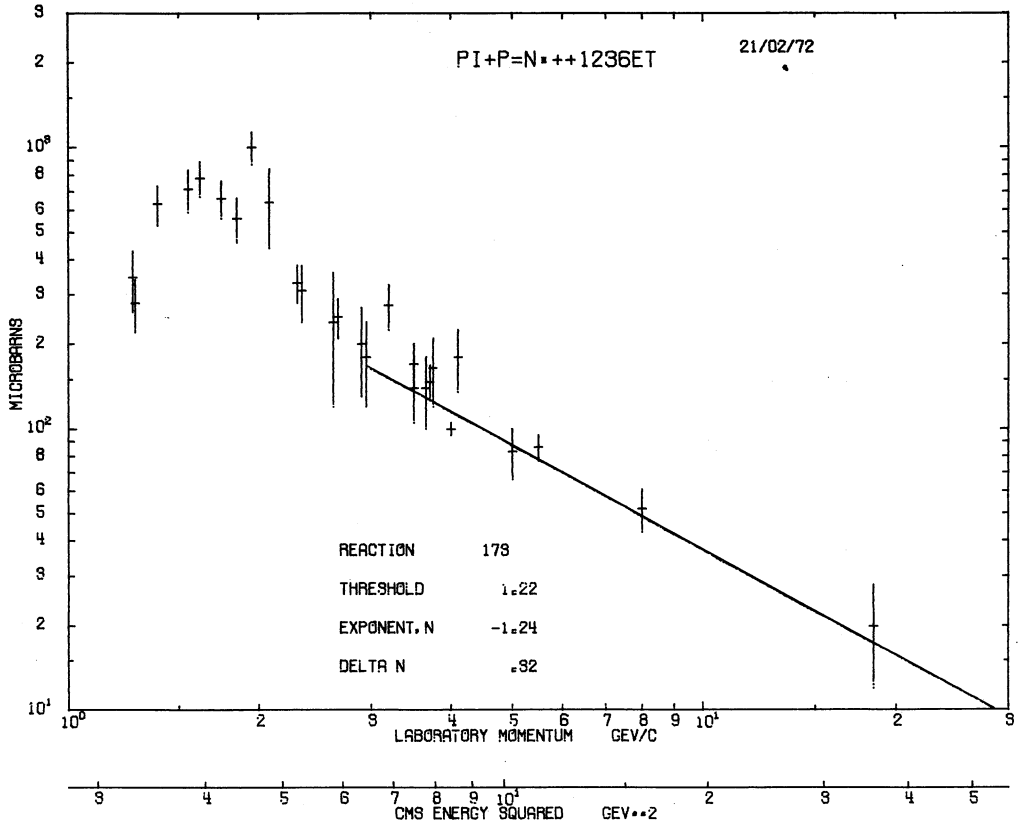

PI+P=NPI+PI+
21/03/72
MICROBARNS
REACTION 136
THRESHOLD .29
EXPONENT.N -1.06
DELTA N .03
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

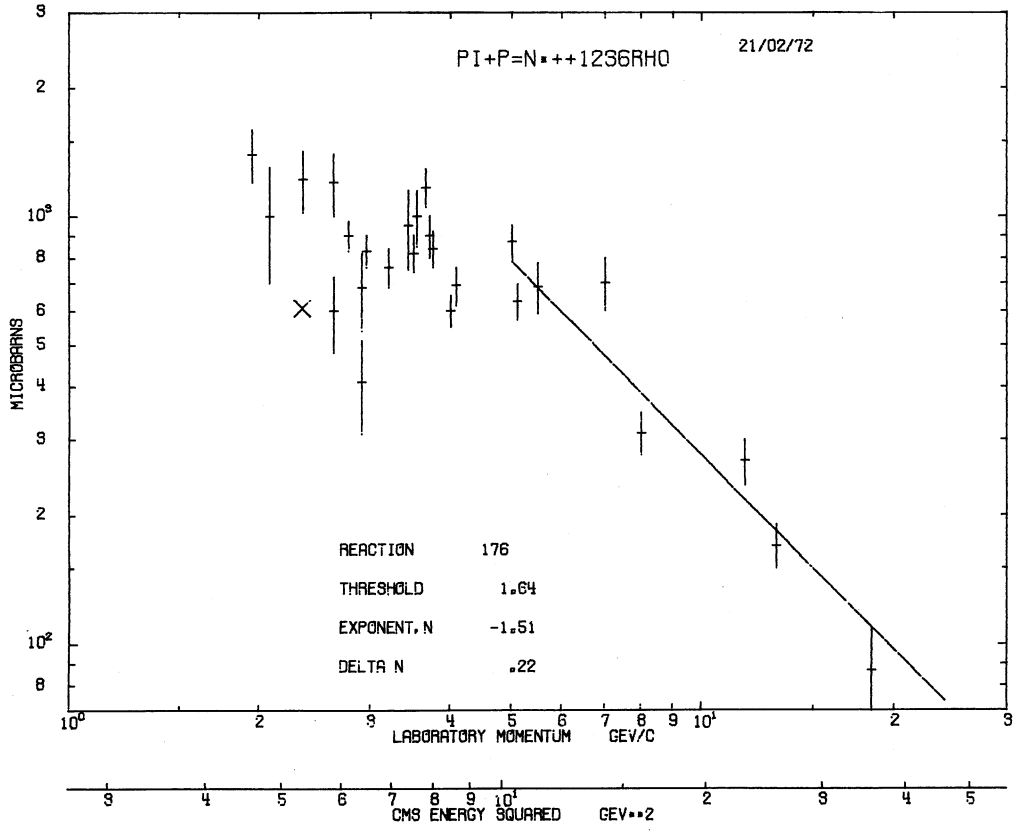

PI+P=NPI+PI+PI+PI-
21/03/72
MICROBARNS
REACTION 139
THRESHOLD .71
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

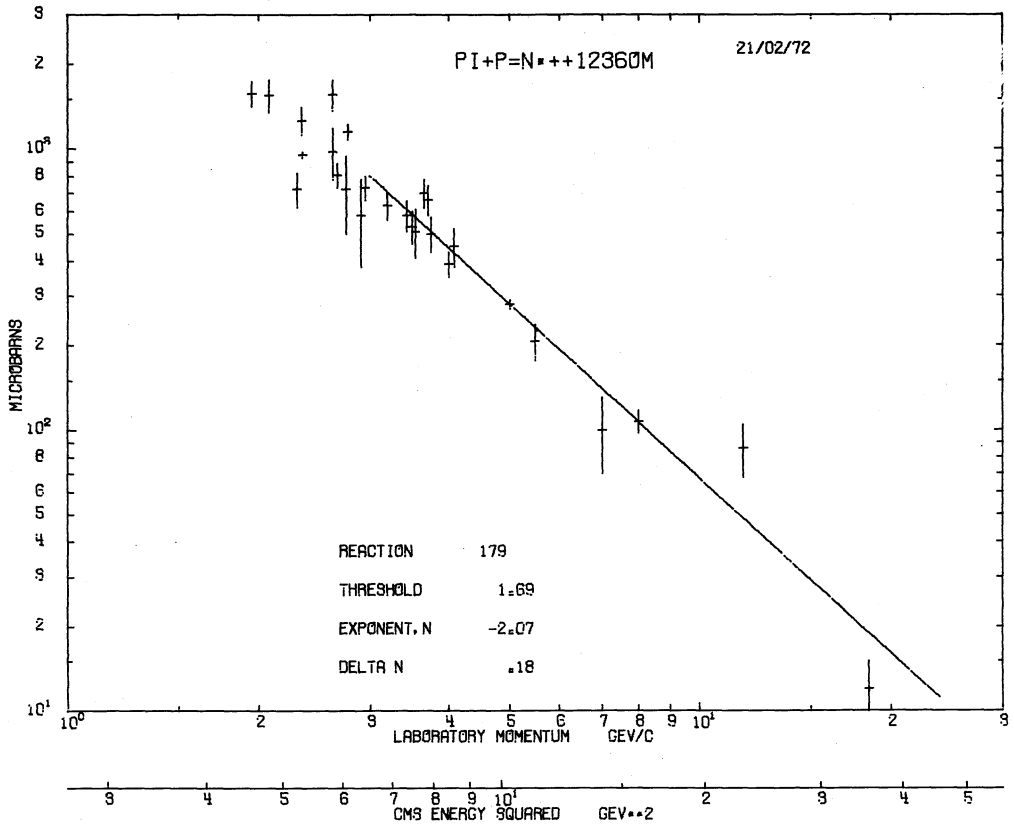

PI+P=N*++1236PI+PI-
22/03/72
MICROBARNS
REACTION 162
THRESHOLD .74
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

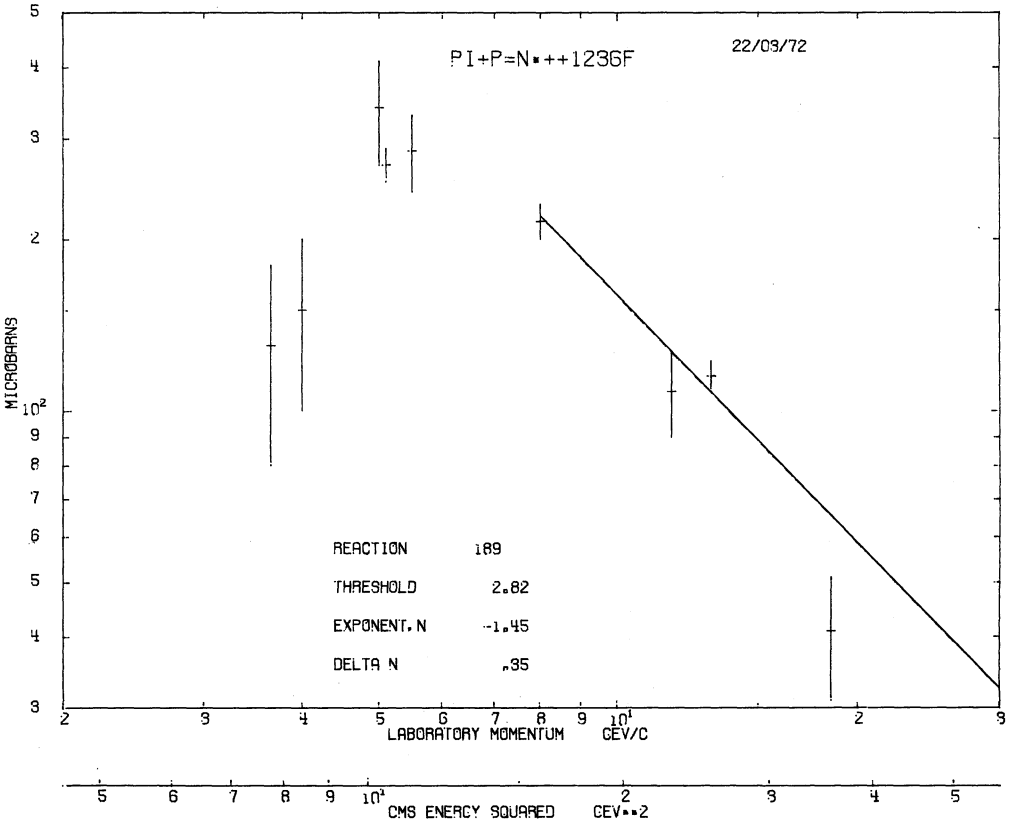

PI+P=N*++1236PI+PI-PIO
21/09/72
MICROBARNS
REACTION 169
THRESHOLD .98
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

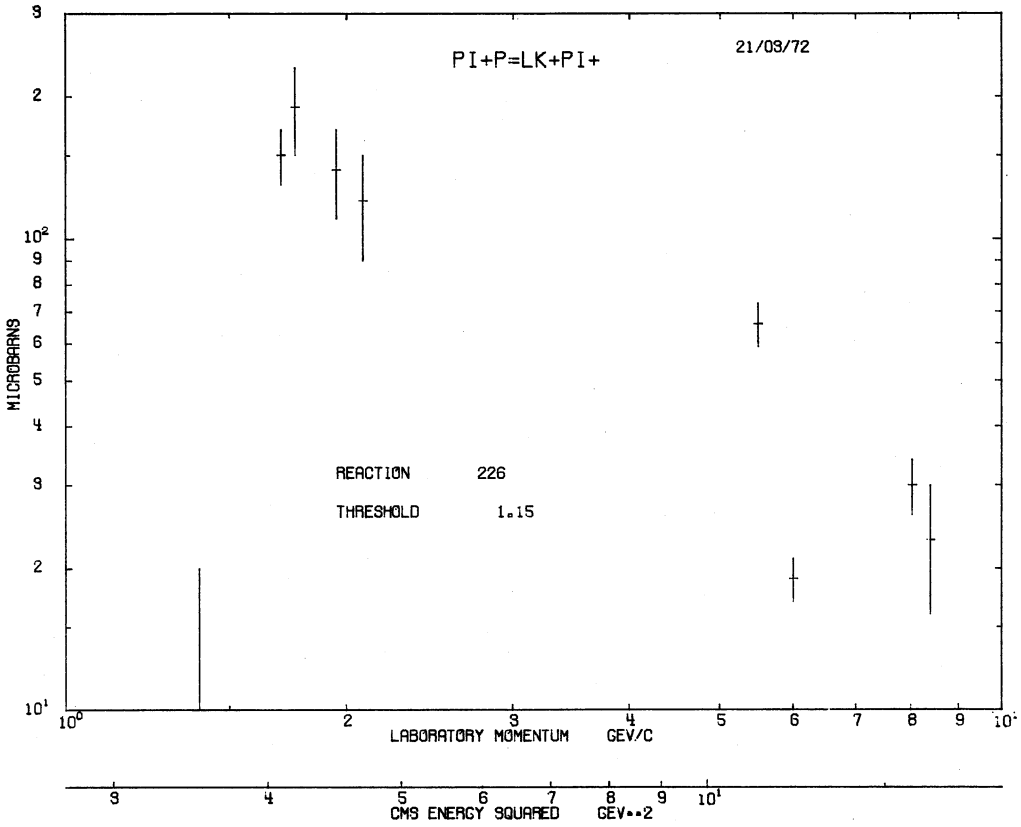

PI+P=N*++1236PIO
21/02/72
MICROBARNS
REACTION 167
THRESHOLD .52
EXPONENT, N -1.04
DELTA N .18
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

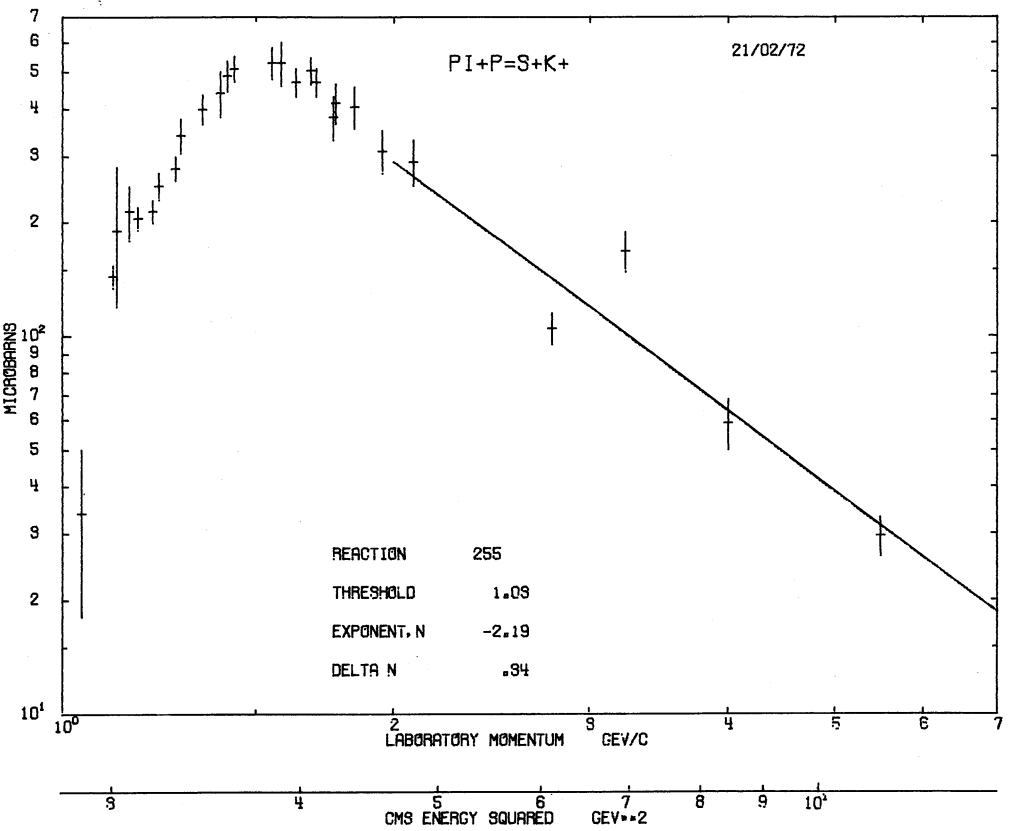

PI+P=N*++1236ET
21/02/72
MICROBARNS
REACTION 178
THRESHOLD 1.22
EXPONENT.N -1.24
DELTA N .82
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

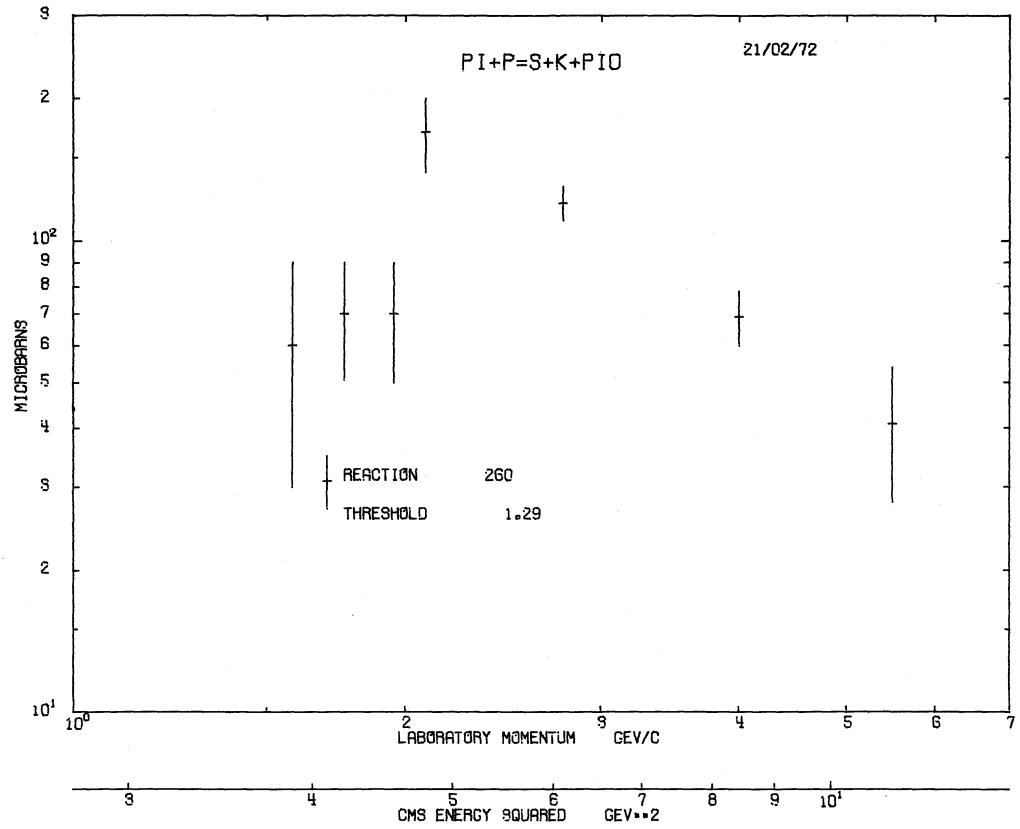

PI+P=N*++1236RHO
21/02/72
MICROBARNS
REACTION 176
THRESHOLD 1.64
EXPONENT.N -1.51
DELTA N .22
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

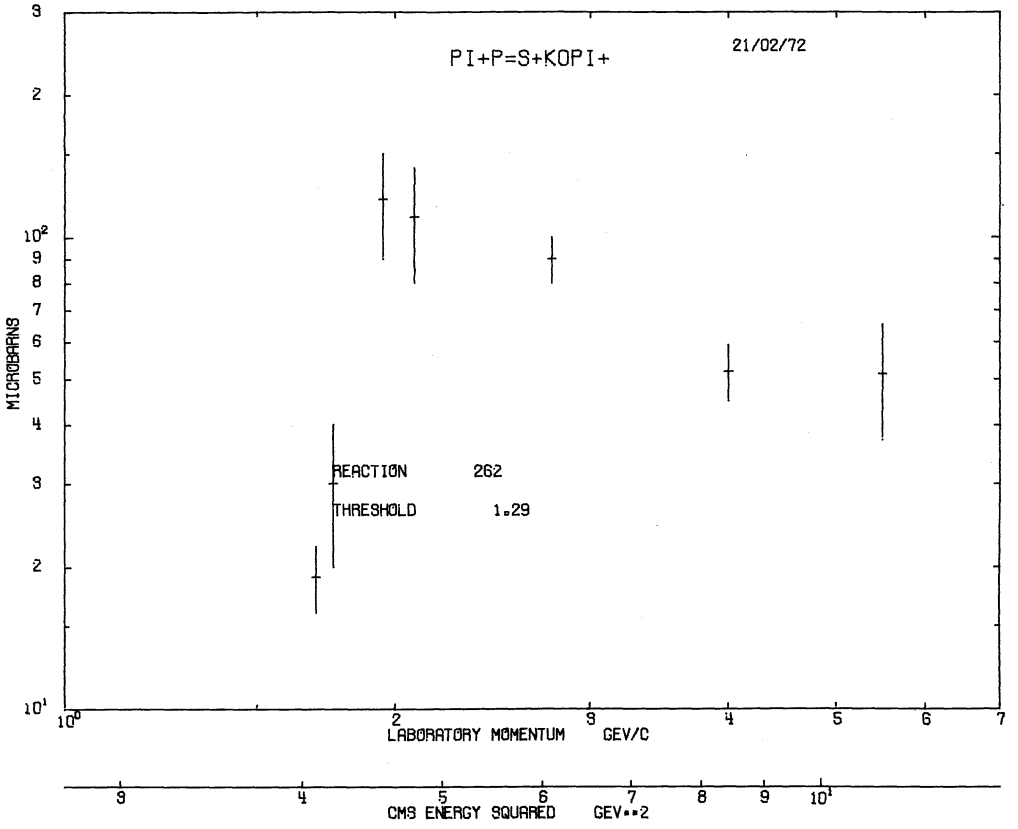

PI+P=N*++12360M
21/02/72
MICROBARNS
REACTION 179
THRESHOLD 1.69
EXPONENT.N -2.07
DELTA N .18
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

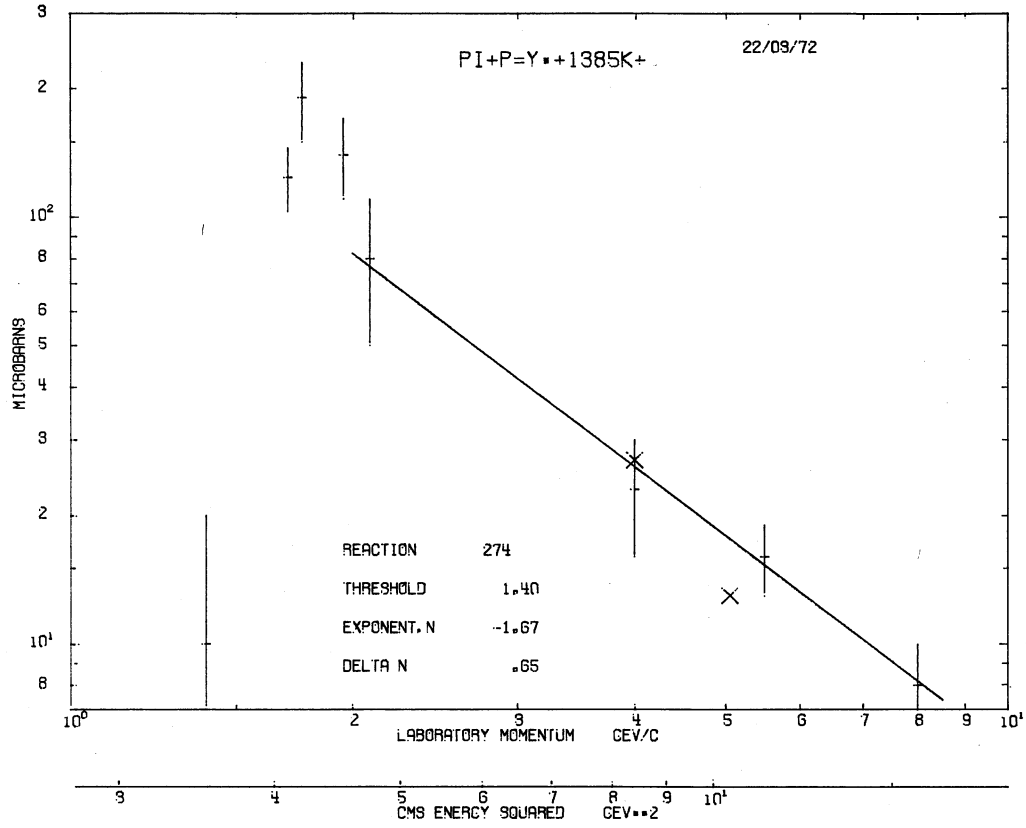

PI+P=N*++1236F
22/09/72
MICROBARNS
REACTION 189
THRESHOLD 2.82
EXPONENT.N -1.45
DELTA N .35
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

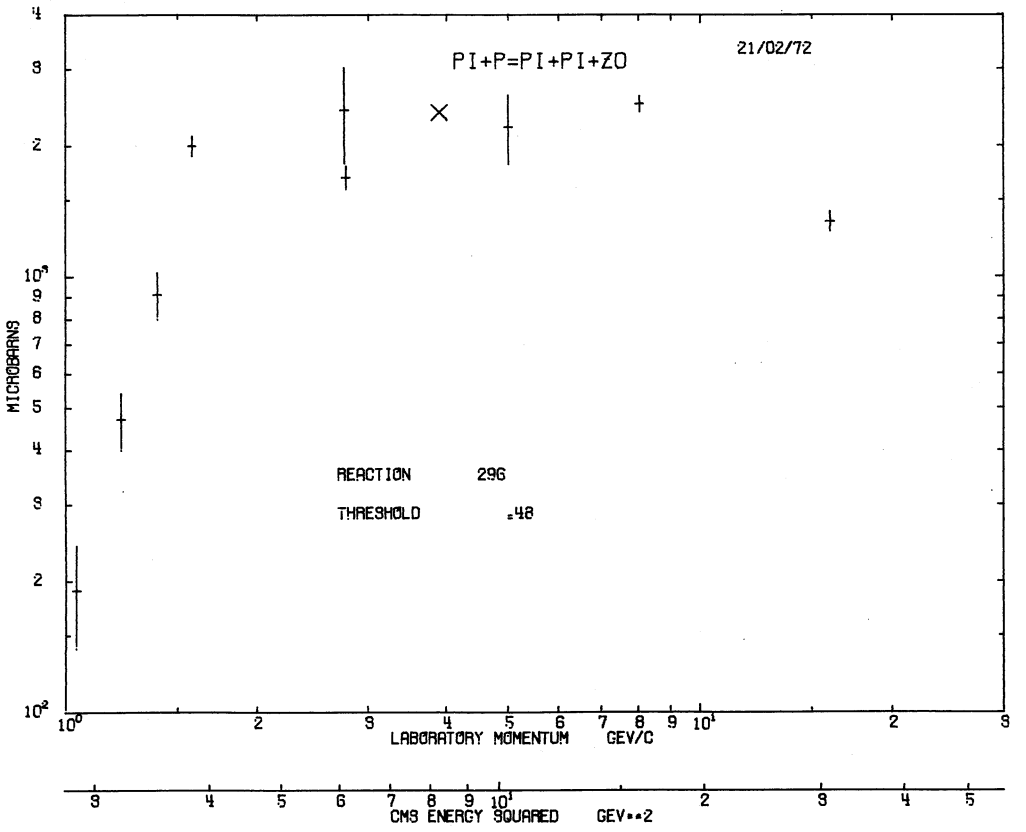

PI+P=LK+PI+
21/03/72
REACTION 226
THRESHOLD 1.15
MICROBARNS
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

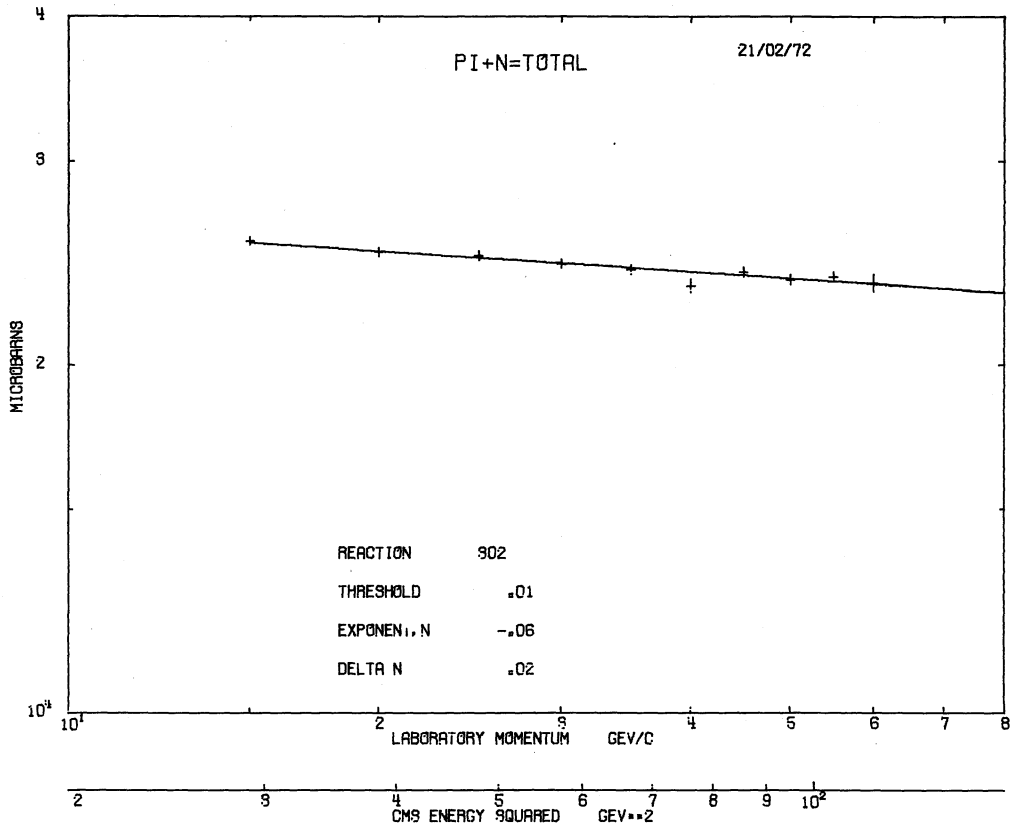

PI+P=S+K+
21/02/72
REACTION 255
THRESHOLD 1.08
EXPONENT, N -2.19
DELTA N .34
MICROBARNS
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

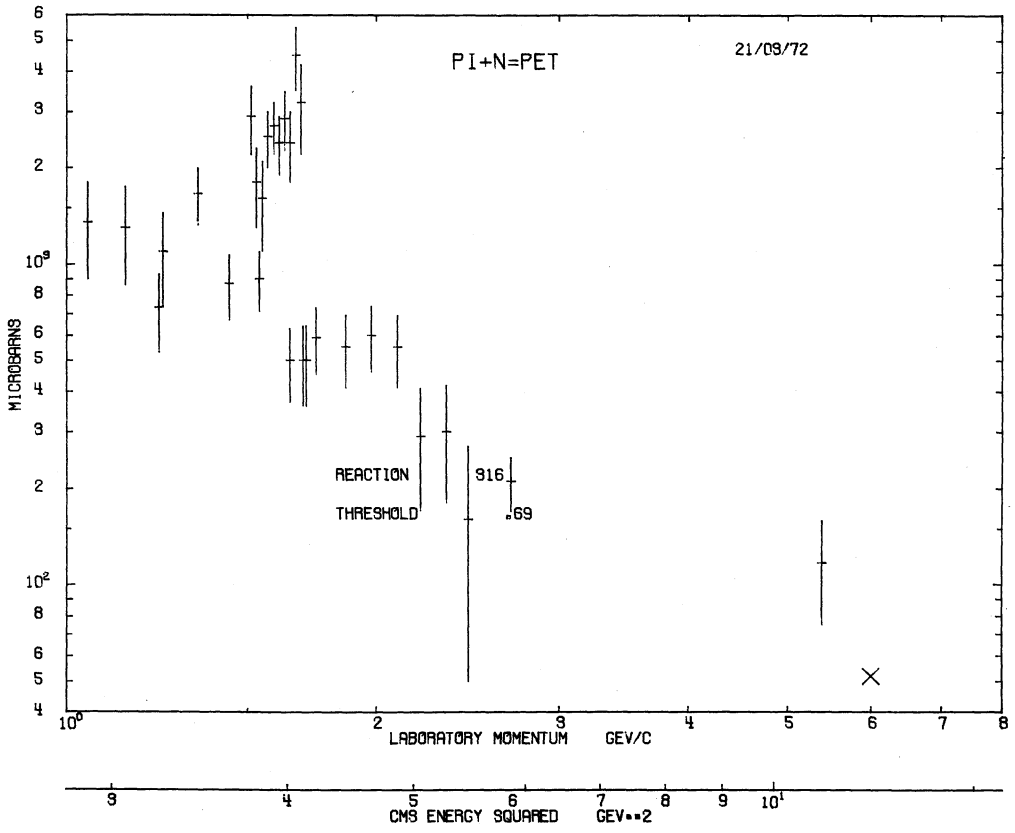

PI+P=S+K+PIO
21/02/72
MICROBARNS
REACTION 260
THRESHOLD 1.29
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

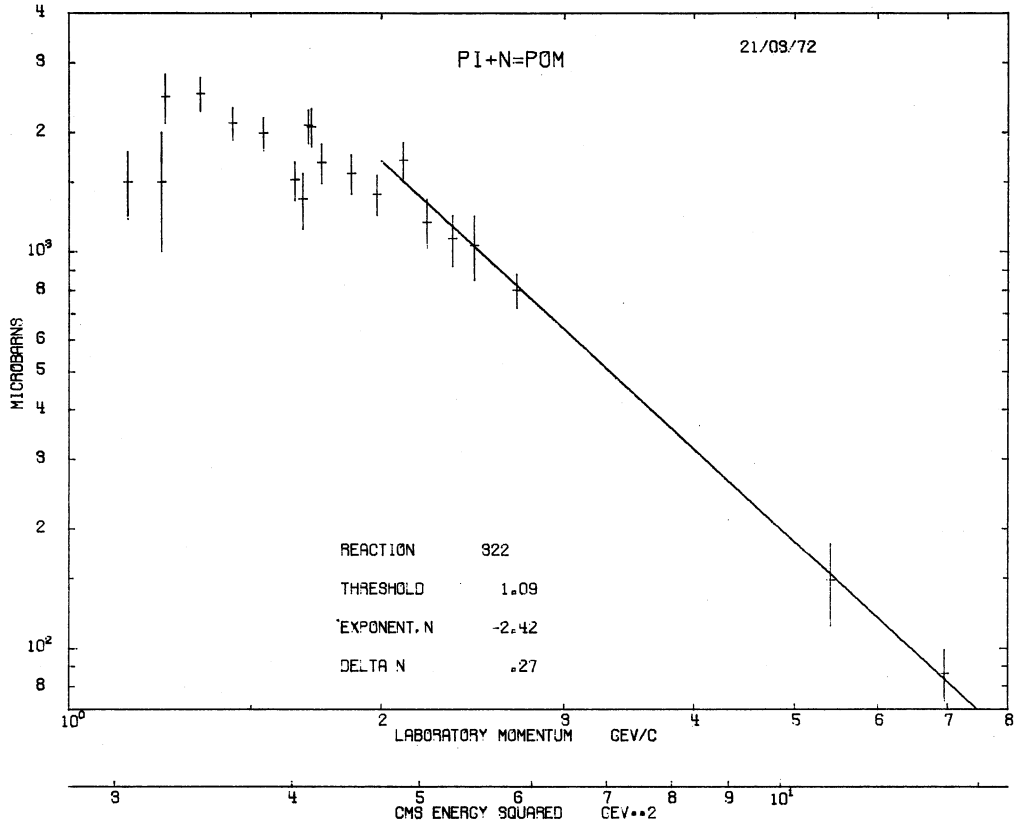

PI+P=S+KOPI+
21/02/72
MICROBARNS
REACTION 262
THRESHOLD 1.29
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

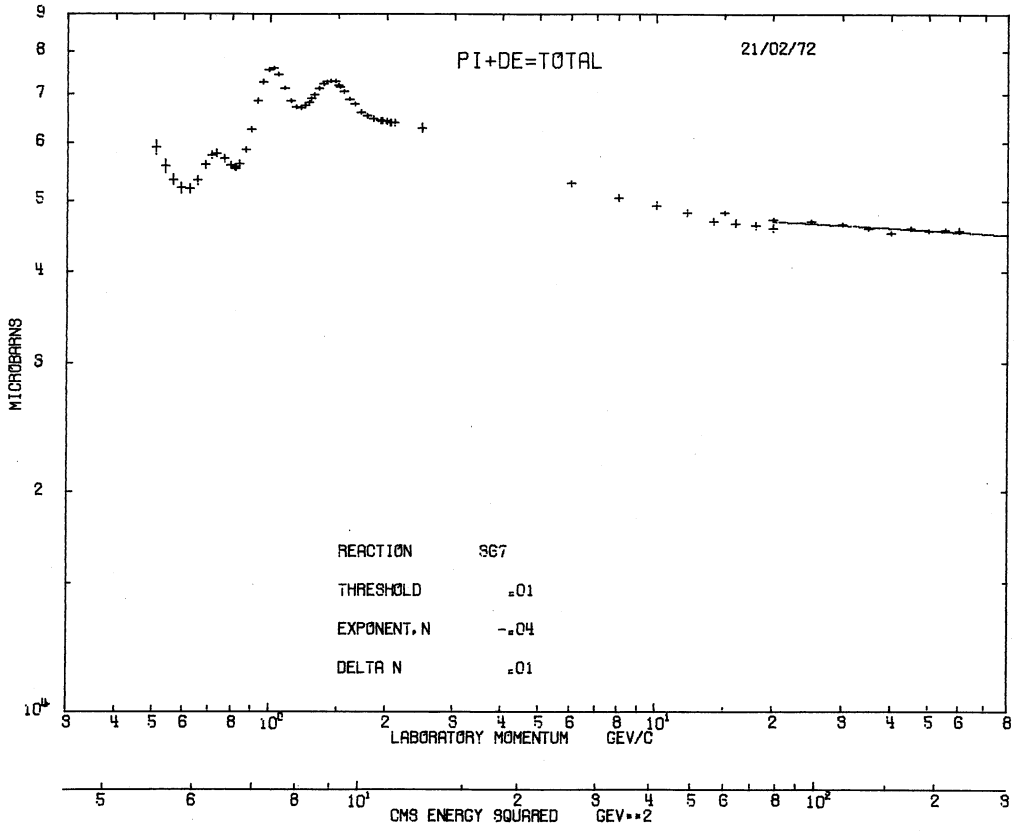

PI+P=Y*+1385K+
22/09/72
MICROBARNS
REACTION 274
THRESHOLD 1.40
EXPONENT. N -1.67
DELTA N .65
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

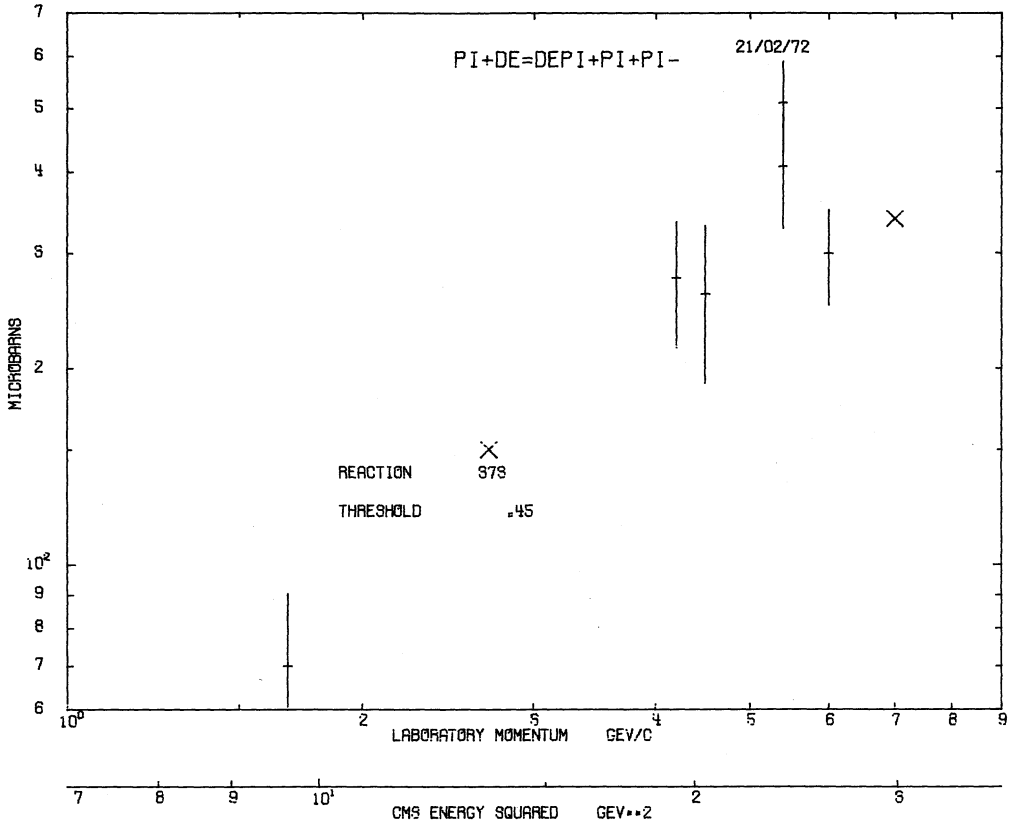

PI+P=PI+PI+ZO
21/02/72
MICROBARNS
REACTION 296
THRESHOLD .48
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

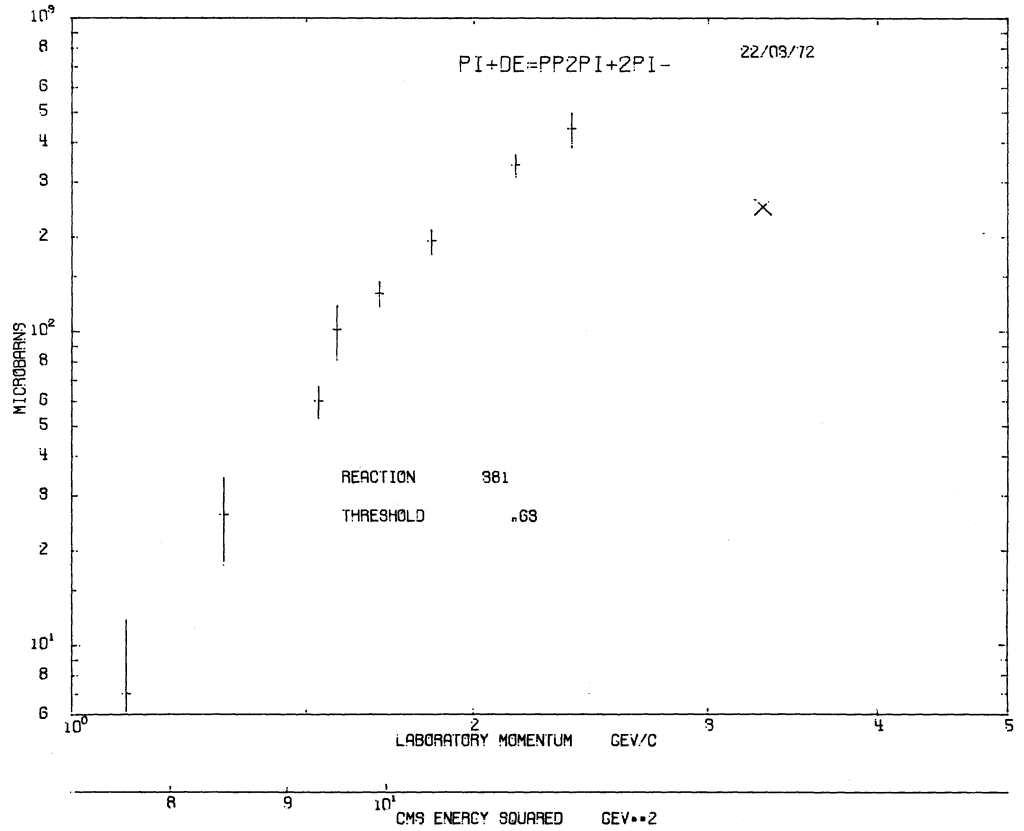

PI+N=TOTAL
21/02/72
MICROBARNS
REACTION 902
THRESHOLD .01
EXPONENT, N -.06
DELTA N .02
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

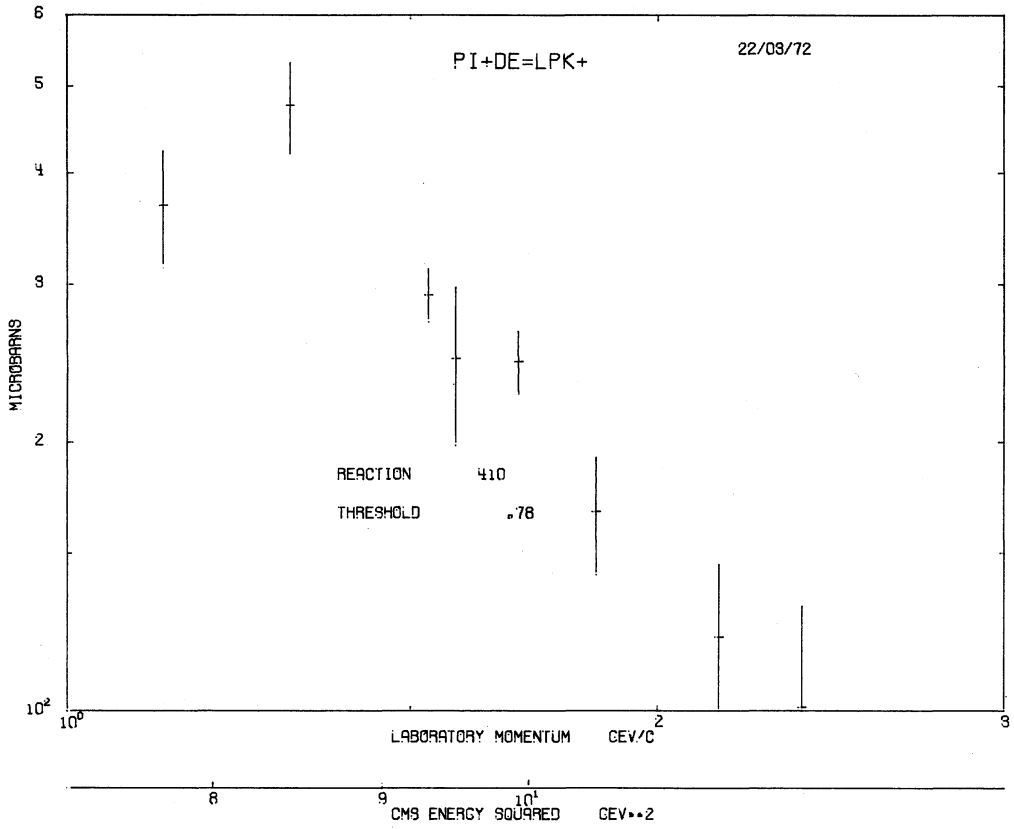

PI+N=PET
21/09/72
MICROBARNS
REACTION 916
THRESHOLD .69
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

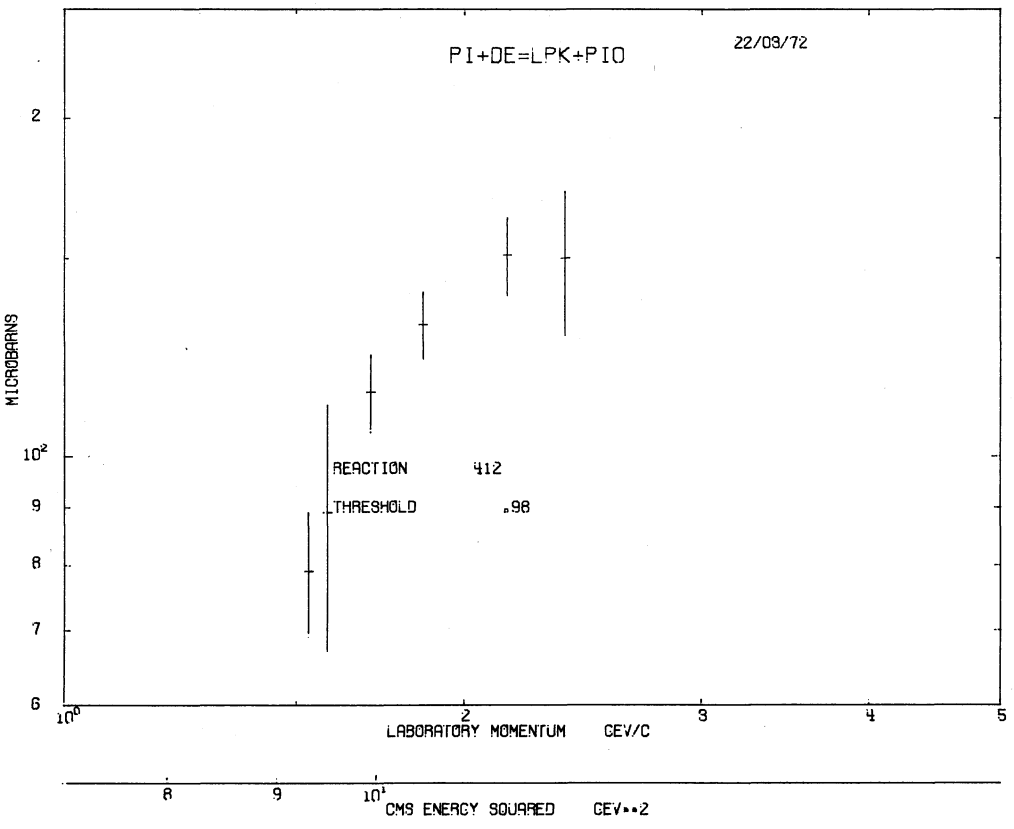

PI+N=PØM
21/09/72
MICROBARNS
REACTION 922
THRESHOLD 1.09
EXPONENT.N -2.42
DELTA N .27
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

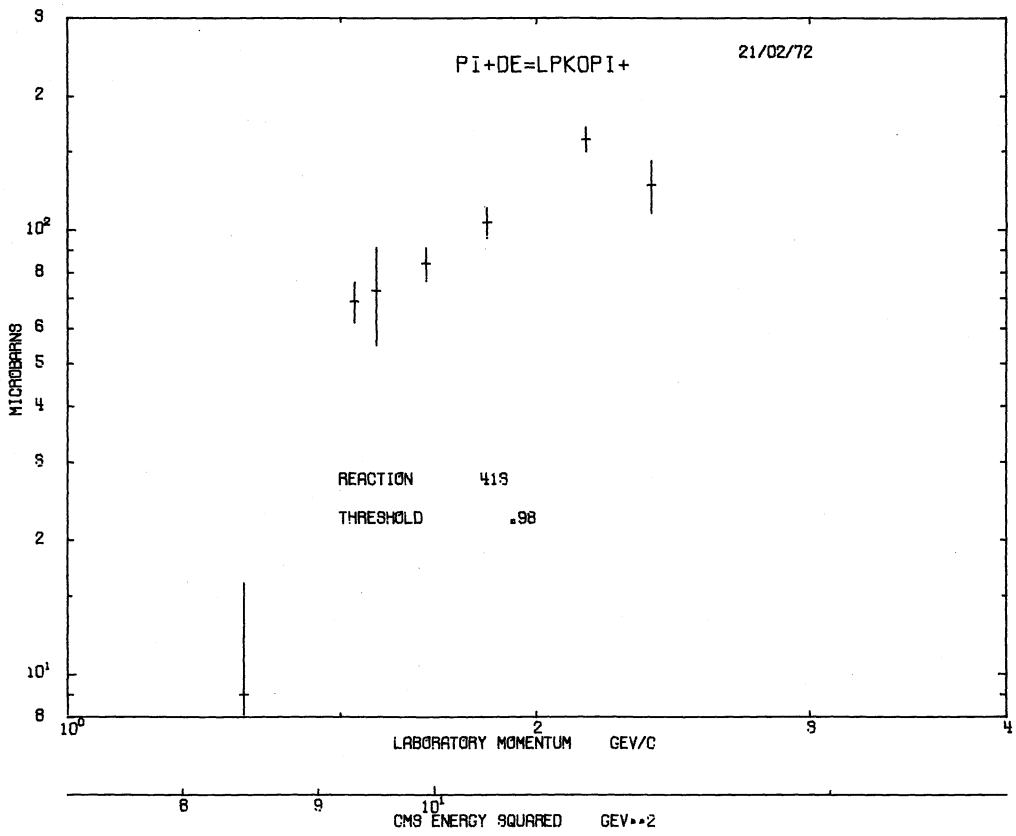

PI+DE=TØTAL
21/02/72
MICROBARNS
REACTION SG7
THRESHOLD .01
EXPONENT.N -.04
DELTA N .01
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

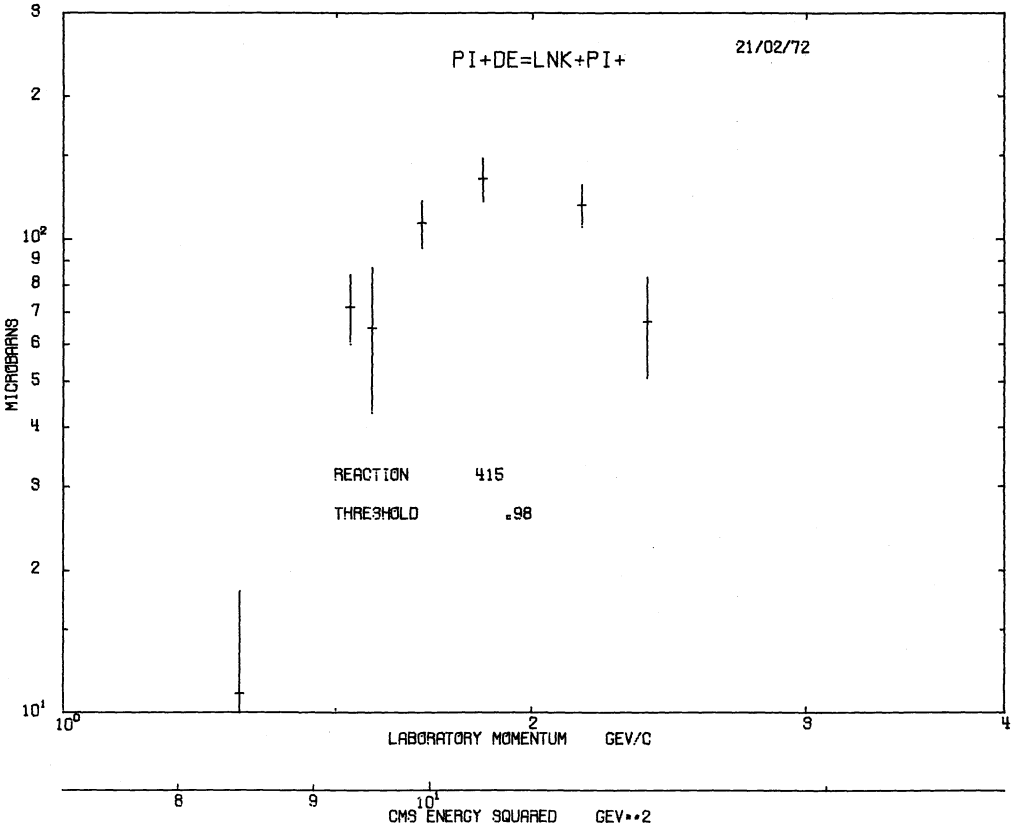

PI+DE=DEPI+PI+PI-
21/02/72
REACTION 378
THRESHOLD .45
MICROBARNS
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

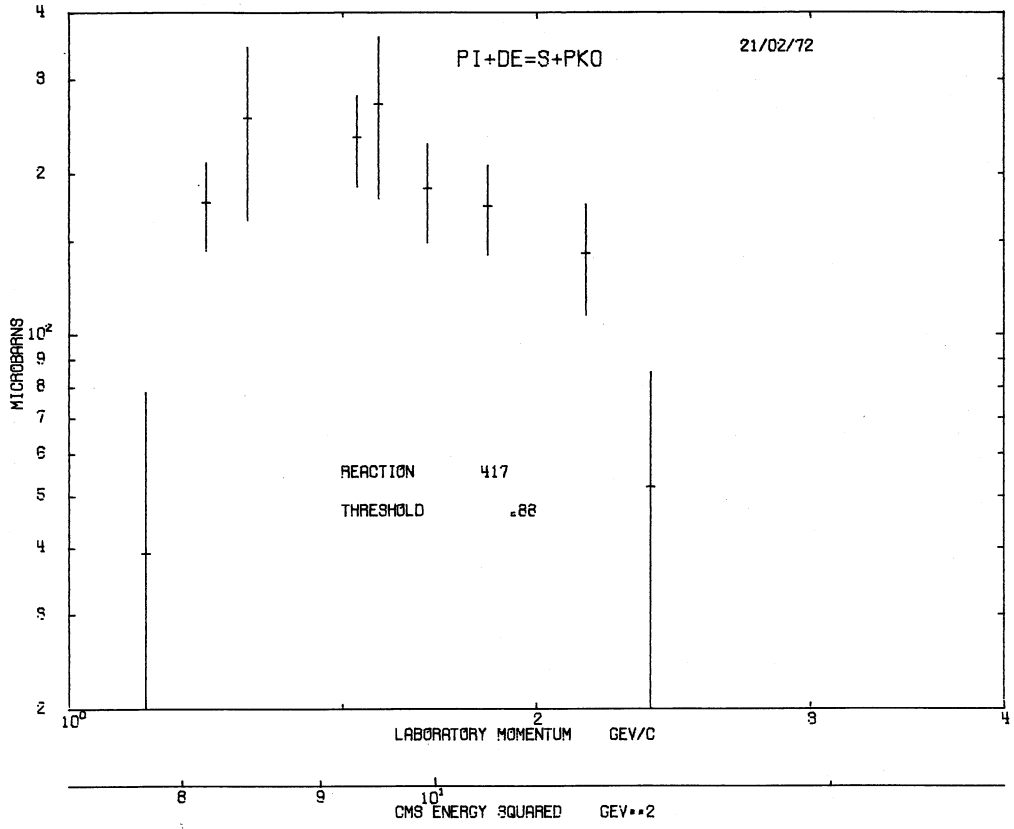

PI+DE=PP2PI+2PI-
22/03/72
REACTION 381
THRESHOLD .68
MICROBARNS
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

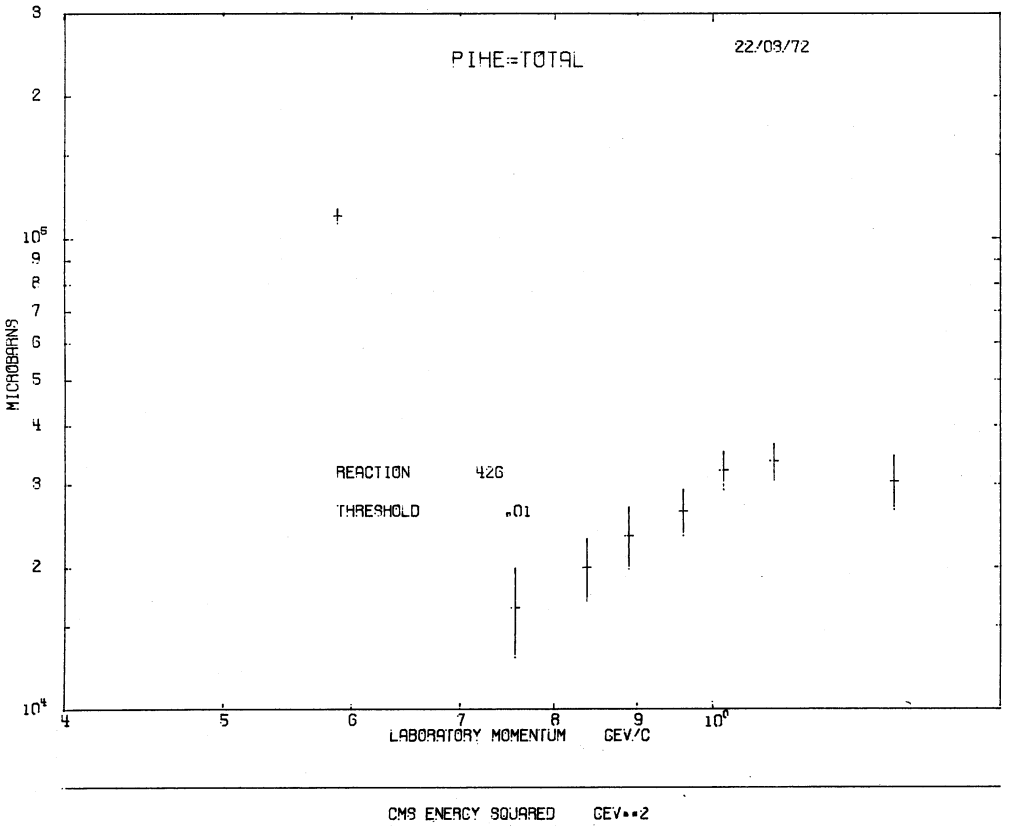

PI+DE=LPK+
22/03/72
MICROBARNS
REACTION 410
THRESHOLD .78
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2

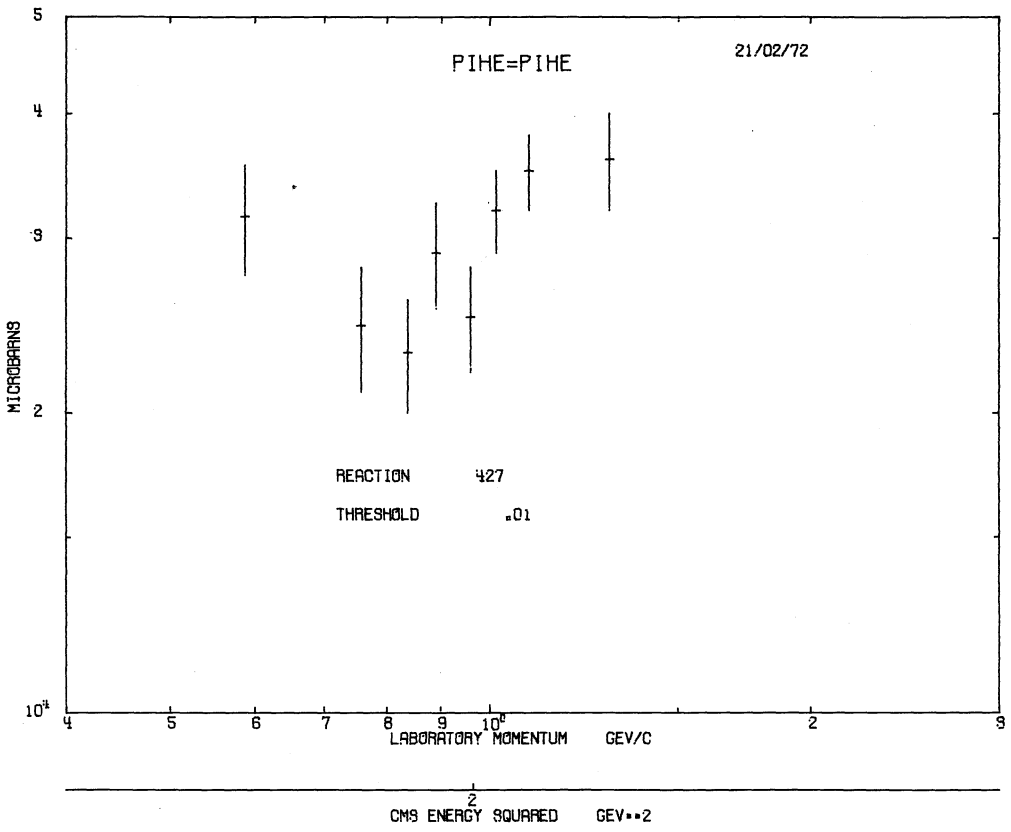

PI+DE=LPK+PIO
22/03/72
MICROBARNS
REACTION 412
THRESHOLD .98
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2


PI+DE=LPKOPI+
21/02/72
MICROBARNS
REACTION 419
THRESHOLD .98
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2


PI+DE=LNK+PI+
21/02/72
MICROBARNS
REACTION 415
THRESHOLD .98
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2


PI+DE=S+PKO
21/02/72
REACTION 417
THRESHOLD .88
MICROBARNS
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2


PIHE=TOTAL
22/09/72
REACTION 426
THRESHOLD .01
MICROBARNS
LABORATORY MOMENTUM GEV/C
CMS ENERGY SQUARED GEV**2


PIHE=PIHE
21/02/72
MICROBARNS
5
4
3
2
10^{1}
REACTION 427
THRESHOLD .01
4
5
6
7
8
9
10^{0}
2
3
LABORATORY MOMENTUM GEV/C
2
CMS ENERGY SQUARED GEV**2