

CERN/ISR/EXP/10
January 1976

EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

PROGRAMME OF ACCEPTED EXPERIMENTS

CERN INTERSECTING STORAGE RINGS

Table 1 : ISR Experiments running or accepted

Table 2 : ISR Experiments completed by January 1976

Figure : General Layout of ISR Experiments

B.G. Pope
ISR Co-ordinator.

Table 1

ACCEPTED CERN ISR EXPERIMENTS

Intersection 1

Expt. Code	ISRC Ref. Number	Description of Experiment	Composition of Group	NPRC Acceptance	Status
R107	CERN/ISRC/73-7 and 73-7/Add.1+2 CERN/ISRC/75-27	Multiple Gamma-Ray Production in pp Collisions	Brookhaven-Rome Collaboration: Amaldi, Beneventano, Borgia, Dell, de Notaristefani, Dooher, Dore, Longo, Pistilli, Sestili, Uto, Yuan	NPRC 122 14.11.1973 8.10.1975	Data Taking
R108	CERN/ISRC/73-13 and Add.1+2 CERN/ISRC/74-5 CERN/ISRC/74-54	Search for $e^{\pm}, e^{+}e^{-}$ multi-pion correlations with superconducting solenoid	CERN-Columbia-Oxford-Rockefeller Collaboration: Blumenfeld, Camilleri, Cool, Di Lella, Dimcovski, Hollebeek, Lederman, Lyons, Pope, Rothenberg, Segar, Smith A.M., Stanko, Tannenbaum, Vidal, Wallace-Hadrill, White T.O.	NPRC 127 17.4.1974	In Preparation

Table 1 (cont'd)

ACCEPTED CERN ISR EXPERIMENTSIntersection 2

Expt. Code	ISRC Ref.Number	Description of Experiment	Composition of Group	NPRC Acceptance	Status
R207	CERN/ISRC/74-20 CERN/ISRC/74-24 CERN/ISRC/75-5	Small Angle Diffraction Dis- sociation at ISR Energies	CERN-Holland-Manchester Colla- boration:Armitage,Benz,Bobbink, Erné,Kooijman,Loebinger, Montgomery,Murphy,Poorthuis, Rudge,Sens,Stork,Timmer	NPRC 130 17.7.1974	Taking Data

Table 1 (cont'd)

ACCEPTED CERN ISR EXPERIMENTS

Intersection 3

Expt. Code	ISRC Ref.Number	Description of Experiment	Composition of Group	NPRC Acceptance	Status
R301	CERN/ISRC/74-33	Search for Magnetic Dipoles	Bologna-Fermi Lab.Chicago Collaboration: Carrigan, <u>Giacomelli</u> , Nezrick	NPRC 133 13.11.1974	Taking Data

Table 1 (cont'd)

ACCEPTED CERN ISR EXPERIMENTS

Intersection 4

Expt. Code	ISRC Ref. Number	Description of Experiment	Composition of Group	NPRC Acceptance	Status
R401	CERN/ISRC/69-14 and Add. 1-5 CERN/ISRC/74-43 CERN/ISRC/75-26	Isobar production at ISR energies (with the forward part of the SFM detector and additional n-, trigger and monitor counters). Special MWPC's for compensator magnet are added	CERN-Hamburg-Orsay-Vienna Coll: Aubert, Bartl, Brandt, Broll, Coignet, Dibon, Favier, Flügge, Gottfried, Massonet, Nagy, Neuhofer, Niebergall, Regler, Schmidt-Parzefall, Schubert, Schuhmacher, Vivargent, Winter	NPRC 83 4. 7.1969 5. 2.1974	Taking Data
R410/ R413	CERN/ISRC/72-7 and Add.1-6 CERN/ISRC/74-10 CERN/ISRC/74-50 CERN/ISRC/74-58 CERN/ISRC/75-7 CERN/ISRC/75-30	High Transverse Momentum Events and Central Correlations at the Split Field Magnet	Liverpool-L.A.P.P. (Annecy)-Rutherford-Scandinavian Collaboration: Albrow, Almed, de Bouard, Booth, Bøggild, Carroll, Catz, Dahl-Jensen, E., Dahl-Jensen, I., von Dardel, Damgaard, Guilleminet, Hansen, Jackson, Jarlskog, Jensen, Jönsson, Klovning, McCubbin, Lillethun, Lu, Lörstad, Morris, Ølgaard-Nielsen, O-Petersen, Rock, Sanford, Skard, Villeneuve	NPRC 120 5. 9.1973 13.3.1975 3.12.1975	Taking Data
R411	CERN/ISRC/72-33 CERN/ISRC/75-24	Double Diffraction Dissociation	Pavia-Princeton Collaboration: Cavalli-Sforza, Conta, Fraternali, Goggi, Impellizzeri, Mantovani, Pastore, Ratti, Rossini, Sadrozinski, Scannicchio, Rimoldi	NPRC 112 1.11.1972 22.1.1975 3.12.1975	Taking Data
R414	CERN/ISRC/75-46	Study of High-Mass Muon Pair Production at the Split-Field Magnet	CERN-Hamburg-Heidelberg -LAP-Vienna Collaboration: Bartl, Brandt, Bußser, Dibon, Eichinger, Gottfried, de Kerret, Neuhofer, Niebergall, Orr, Schmidt-Parzefall, Schuhmacher, Schubert, Winter	Research Board 1 15.1.1976	In Preparation

Table 1 (cont'd)

ACCEPTED CERN ISR EXPERIMENTSIntersection 6

Expt. Code	ISRC Ref. Number	Description of Experiment	Composition of Group	NPRC Acceptance	Status
R606	CERN/ISRC/75-33 CERN/ISRC/75-42 CERN/ISRC/75-43	An Improved Set-Up to Search for Muon-Electron Coincidences and Hadronic States of New Particles	Aachen-CERN-Harvard-Munich-Riverside Collaboration: Baksay, Baum, Böhm, Block, Ceradini, Couchman, Glauber, Irion, Kernan, Layter, Marsh, <u>Müller</u> , Naroska, Orkin-Lecourtois, Rubbia, Schinzel, Shen, Staude, Voss	NPRC 143 3.12.1975	Setting-Up

Table 1 (cont'd)

ACCEPTED CERN ISR EXPERIMENTSIntersection 7

Expt. Code	ISR Ref. Number	Description of Experiment	Composition of Group	NPRC Acceptance	Status
R702	CERN/ISRC/74-51 CERN/ISRC/74-55	Search for Charmed Particles and Electron Pairs at the ISR	CERN-ETH Zürich-Saclay Collaboration: Aubert, Banner, Bar-Nir, Chêze, Darriulat, Dittmann, Eggert, Hoffmann, Jenni, Lapuillade, <u>Modis</u> , Pansart, Perez, Pernegr, Richter, Smadja, Strauss, Strolin, Tarnopolski, Teiger, Vialle, Zacccone, Zalewski, Zylberstejn	NPRC 135 22.1.1975	Taking Data

Table 1 (cont'd)

ACCEPTED CERN ISR EXPERIMENTS

Intersection 8

Expt. Code	ISRC Ref. Number	Description of Experiment	Composition of Group	NPRC Acceptance	Status
R804	CERN/ISRC/28 + ISRC/28/Add.1	High Mass Muon Pairs and Associated Hadrons	Frascati-Genoa-Harvard-MIT-Naples-Pisa Coll.: Becker, Bellettini, Biggs, Braccini, Castaldi, Carrara, Cavasinni, Cervelli, Cook, Diambri-Palazzi, Del Prete, Everhardt, Goldhagen, Laurelli, Massai, Morgauti, Newman, Perasso, Sanguinetti, Sannino, Strauch, Ting, Valdata	NPRC 123 5.12.1973 9.1.1974	In Preparation
R805	CERN/ISRC/74-17	Real to imaginary ratio of forward scattering amplitude (Coulomb interference)	CERN-Rome Collaboration: Amaldi, Baroncelli, Bosio, Cocconi, Diddens, Dorenbosch, Meyer, J., Wetherell	NPRC 130 17.7.1974	Taking data
R806	CERN/ISRC/73-33 CERN/ISRC/74-21 CERN/ISRC/74-28 CERN/ISRC/75-32	Study of Large Transverse Momentum Phenomena	BNL-CERN-Syracuse-Yale Collaboration: Cobb, Fabjan, Feinberg, Goldberg, Horwitz, Iwata, Kourkouvelis, Lankford, Linscott, Mannelli, Moneti, Nappi, Palmer, Rahm, Rehak, Struczinski, Stumer, Willis	NPRC 142 12.11.'75	Taking data

Table 2

ISR EXPERIMENTS COMPLETED JANUARY 1976

Area	Expt. Code	Description of Experiment	Authors	Completion of Data-taking	Status
I-1	R101	Emulsion exposures giving angular distribution of charged and stopping particles between 35° and 90°	CERN-Cracow-Bucharest-Tata Emulsion Collaboration: Annoni, Cordaillat, Czyzewski, Friedländer, Gierula, Gurtu, Haiduc, Herz, Marin, Vicky, Wolter	September 1971	Published
I-1	R-102	a) Study of interactions in which γ rays and electrons with large transverse momentum are emitted. b) Search for "Quarks" at large angles	Saclay-Strasbourg Collaboration: Banner, Cheze, Hamel, Stirling, Teiger, Zaccone, Pansart; Bassompierre, Croissiau, Gresser, Morand, Schneegans, Riedinger	April 1972	Published
I-1	R103	Search for massive dileptons	CERN-Columbia-Rockefeller Coll.: Büsser, Camilleri, Di Lella, Placci, Pope, Smith, Yoh, Zavattini; Blumenfeld, Lederman; Cool, Litt L., Segler	December 1972	Published
I-1	R104T	An exploratory experiment on the search for multigamma events	Brookhaven-Grumman-Rome Collaboration: Yuan, Uto, Dell, Doohar, Amaldi, Ed., Beneventano, Borgia, Pistilli	December 1972	Published
I-1	R-105	To measure high transverse momentum charged particles and neutral pions	CERN-Columbia-Rockefeller-Saclay Coll.: Banner, Blumenfeld, Büsser, Camilleri, Chèze, Di Lella, Hamel, Pansart, Pope, Rothenberg, Segler, Smadja, Smith, Tannenbaum, Teiger, White, Zaccone, Sylberstejn	September 1974	Partly published
I-1	R-106	Search for magnetic monopoles with the plastic detector technique	Bologna-CERN/Saclay-Rome Collaboration: Capiluppi, Giacomelli, Rossi, Vannini, Bussièrre, Baroni, Diliberto, Petrera, Romano	September 1974	Partly published
I-2	R-201	Particle production at small angles	CERN-Holland-Lancaster-Manchester Collaboration: Albrow, Barber, Brooks, Bogaerts, Bosnjakovic, Chang, Clegg, Ernó, Kooyman, Loebinger, McCubbin, Murphy, Rudge, Sens, Sessans, Timmer	March 1974	Published

Table 2 (cont'd)

EXPERIMENTS COMPLETED JANUARY 1976

Area	Expt. Code	Description of Experiment	Authors	Completion of Data-taking	Status
I-2	R-202	Study of positive and negative particle production in high energy proton-proton collisions at intermediate angles	Argonne-Bologna-Michigan Coll.: Antinucci, Babcock, Bertin, Bussi�re, Capiluppi, D'Agostino-Bruno, Ellis, Giacomelli, Krisch, Maroni, Ratner, Roberts, Rossi, Vannini	September 1971 (Positive particles); May 1973 (Negative particles)	Published
I-2	R-203	Inclusive production of high momentum particles in proton-proton collisions at large angles	The British Universities of R204 and the Scandinavian Coll.: Alper, Boggild, Booth, Carroll, Damgaard, Von Dardel, Groves, Jackson, Jarlskog, Klovning, Leistam, Lillethun, �lgaard-Nielsen, Prentice, Quarrie, Weiss	December 1973	Published
I-2	R-204	Measurement of muons with large transverse momentum as a search for the intermediate vector boson	The British Universities: Jeffs, Leechikwong, Lintern, Pitts, Sharp, Sharrock, Gibson, Manning, Smith	December 1973	Published
I-2	R-205	Correlations associated with high transverse momentum particles	Daresbury-Liverpool-RHEL-Scandinavian Coll.: Aston, Duke, Rock; Booth, Carroll, Jackson, Morris; Albrow, Alper, Clark, Groves, Ott, Shah, Thresher, Holloway, Wenzel, Gee, Jarlskog, Jensen, Ogren, Korder	June 1975	Analysis
I-2	R-206	Multiplicity and rapidity distributions of diffractive collisions	CERN-Holland-Lancaster-Manchester Coll.: Armitage, Benz, Bobbink, Bosnjakovic, Ern�, Kooijman, Loebinger, Macbeth, McCubbin, Montgomery, Murphy, Radojicic, Rudge, Sens, Singh, Stork, Strolin, Timmer	June 1975	Published
I-4	R-402	Search for fractionally charged particles	CERN-Munich Coll.: Caldwell, Fabjan, Gruhn, Hyams, Sauli, Zahniser, Bott-Bodenhausen, Stierlin, Rochester, Winstein, Tirler	August 1972	Published

Table 2 (cont'd)

EXPERIMENTS COMPLETED JANUARY 1976

Area	Expt. Code	Description of Experiment	Authors	Completion of Data-taking	Status
I-4	R403T	Split Field Magnet detector studies	S.F.M. detector group:Charpak,Drijard, Fischer,Heck,Innocenti,Minten,Piuz, Maurin	December 1974	Published
I-4	R404T	Test to search for heavy baryon isomers	CERN-Hamburg-Vienna Coll.:Dibon,Flügge, Gottfried,Nefkens,Neuhofer,Niebergall, Regler,Schmidt-Parzefall,Schubert, Schumacher, Winter	May 1973	Published
I-4	R-405	Neutron production at small angles	CERN-Karlsruhe Coll.:Engler,Flauger, Gibbard,Monnig,Schopper,Bartel,Schmidt	October 1972	Published
I-4	R-406	Search for new particles using SFM	CERN-Bologna Collaboration: Palmonari, Valenti,Zichichi; Basile,Bollini,Cara-Romeo,Chifarelli,Giusti,Massam,Monari	August 1975	Analysis
I-4	R-407/408	Two-particle correlations in the fragmentation region using the SFM	CERN-Coll.de France-Heidelberg-Karlsruhe Coll.:Drijard,Fischer,Innocenti, Krzywdzinski,Minten,Morrison,Stein, Stroynowski;Della Negra,Frenkiel, Ghesquiere,Fontaine,Linglin;Frehse, Hoffmann,Kluge,Putzer,Schneider,Hanke, Isenbeck,Schmidt,Wegener	December 1975	Analysis and Published
I-4	R-412	Study of large transverse momentum events using the SFM and lead glass Cerenkov counters	CERN-Aachen Coll.:Darriulat,Dittman,Eggert,Holder,McDonald,Modis,Navarria, Steinberger,Strauss,Williams,Vesztergombi	November 1974	Submitted for publication
I-6	R-601	pp small angle scattering and total cross section	CERN-Rome Coll.:Allaby,Amaldi,Bartel, Biancastelli,Bosio,Cocconi,Diddens, Dobinson,Matthiae,Wetherell	December 1972	Published
I-6	R-602 (I)	Measurement of the elastic scattering cross section beyond the Coulomb interference region.Search for "Quarks" at small angles	CERN-Aachen-Univ.Calif.-Genova-Harvard-Torino Coll.:Baksay,Boehm,Bozzo,Di Zorzi, Ellis,Ferrero,Foeth,Maderni,Meyer,Naroka,Pilcher,Rubbia,Schlein,Sette,Staude, Strolin,Sulak,Trippe,Webb	Phase I: August 1973	Published

Table 2 (cont'd)

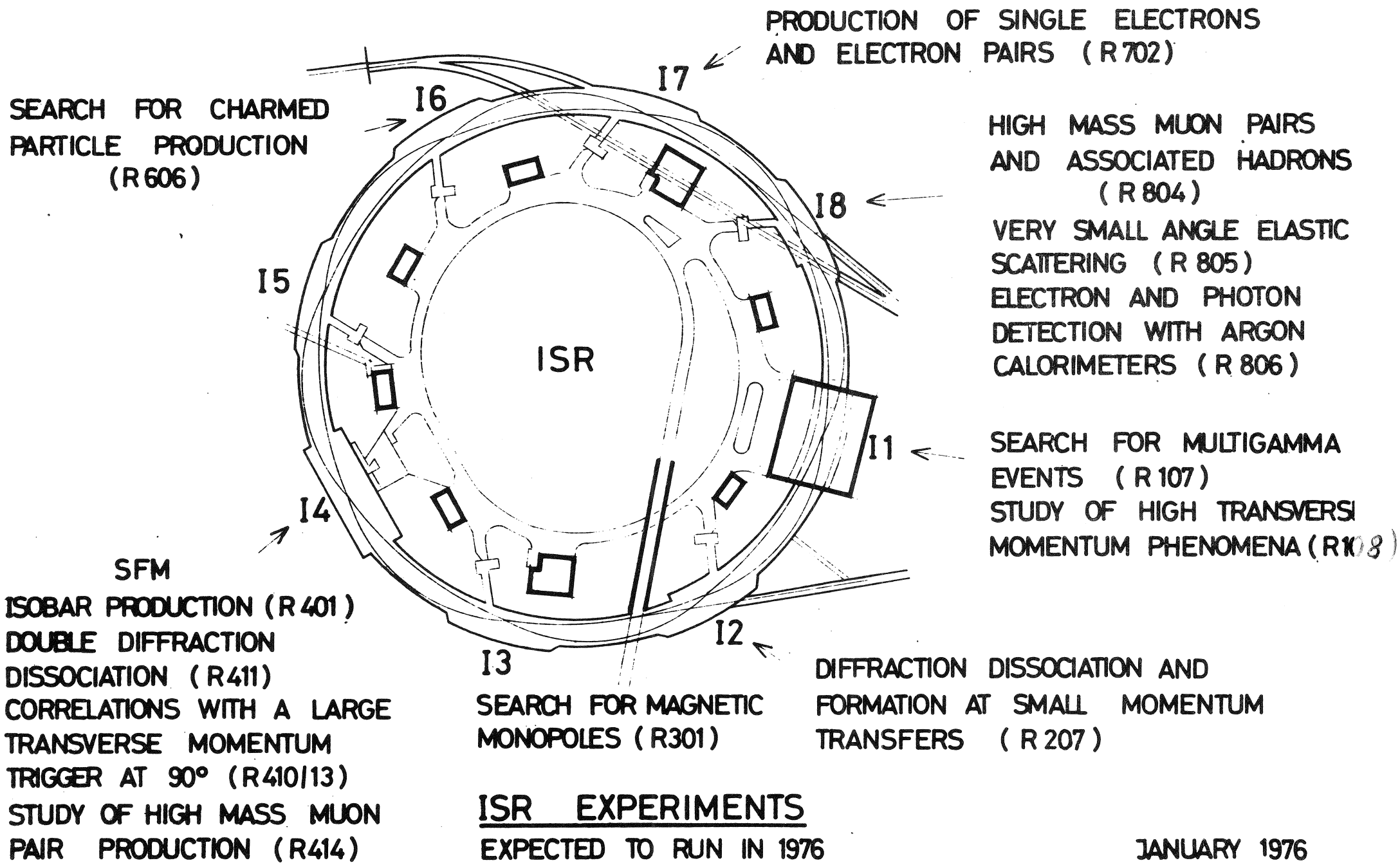
EXPERIMENTS COMPLETED JANUARY 1976

Area	Expt. Code	Description of Experiment	Authors	Completion of Data-taking	Status
I-6	R-602 (II)	Measurement of elastic scattering cross-section σ_T	CERN-Aachen-Genova-Harvard-Munich, North-Western-Riverside Coll.: Baum, Boehm, Di Zorzi, Ellis, Foeth, Hilscher, Kernan, Layter, Muller, Naroska, Rubbia, Schinzel, Sette, Staude, Strolin, Telegdi, Trilling, Von Baksay	July 1974	Partly published
I-6	R-603	Inclusive measurement of multiparticle hadron systems (Δ^{++})	Aachen-CERN-UCLA Coll.: Von Baksay, Boehm, Foeth, Staude, Ellis, Naroska, Strolin, Lockman, Medinnis, Meyer, Rander, Schlein, Webb	November 1974	Published
I-6	R-605	Search for electrons and muons directly produced in the forward direction: A hunt for charmed particles	CERN-Harvard-Munich-Northwestern-Riverside Coll.: Couchman, Derevshchikov, Golutvin, Kukhtin, McIntyre, Muller, Naroska, Orkin-Lecourtois, Tarnopolsky, Telegde; Rubbia, Glauber, Baum, Boehm, Heusch, Hilscher, Irion, Rossi, Schinzel, Staude, Voss; Block, Crawford; Kernan, Layter, Marsh, Nussbaum, Shen	December 1975	Submitted for publication
I-7	R-701	Observation of p-p collisions with streamer chambers, inclusive trigger and high transverse momentum π^0 trigger	CERN-Aachen-Heidelberg-Munich Coll.: Albrecht, Darriulat, Derado, Dittman, Eckhardt, Eggert, Gebauer, Holder, McDonald, Meinke, Modis, Pugh, Sanders, Schmitz, Schneider, Seyboth, Thomé, Tittel	August 1974	Published
I-8	R-801	Measurement of σ_{tot} and correlations with counter hodoscopes and lead glass Cerenkov counters	CERN-Pisa-Stony Brook Coll.: Amendolia, Bellettini, Braccini, Castaldi, Cervelli, Del Prete, Foà, Jöstlein, Krachmalnicoff, Laurelli, Valdata, Finocchiaro, Grannis, Kephart, Owen, Thun	December 1974	Published

Table 2 (cont'd)

EXPERIMENTS COMPLETED JANUARY 1976

Area	Expt. Code	Description of Experiment	Authors	Completion Data-taking	Status
I-8	R-802	Particle production in the forward direction using a magnetic spectrometer, multi-wire proportional chambers and neutron counter	CERN-Rome Coll.: Amaldi, Allaby, Cocconi, Diddens, Dimcovski, Dobinson, Duinker, Meyer, Wetherell; Thorndike, Baroncelli, Bosio, Matthiae	December 1974	Published
I-8	R-803	Study of inclusive particle production at very low p_t and $X = 0$	British-Scandinavian-MIT Coll.: Bøggild, Duane, Duff, Güttler, Gibson, Henning, Jarlskog, Korder, Leistam, Little, Newman, Ogren, Prentice, Sanford, Sharrock, Sau-Lan Wu	December 1974	Analysis
I-8	R806T	Study of large transverse momentum phenomena with transition radiation and calorimeters	Brookhaven-CERN-Syracuse-Yale Coll.: Cobb, Palmer, Rahm; Fabjan, Nappi, Struczinski, Willis, Feinberg, Goldberg, Horwitz, Linscott, Moneti, Kourkumelis, Lankford, Rehak	September 1975	Partially published



ISR EXPERIMENTS

EXPECTED TO RUN IN 1976

JANUARY 1976

