



a) PROPOSAL

PROPOSALS AND LETTERS OF INTENT RECEIVED UP TO AUGUST 1976

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SPSC/G 11
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CM-P00046415

No.	Expt. Code	Labs.	Spokesman	Experiment	Apparatus	Remarks	References
P 1	WA 1	CERN, Dortmund, Heidelberg, Saclay	J. Steinberger	High-energy ν interactions	Magnetic muon spectrometer + hadronic shower detector	WANF. Approved by NPCR 17.4.1974 as described in CERN/SPSC/74-38/M 25 H ₂ D ₂ target and vertex localiser approved by NPCR on 3.2.1975.	SPSC/P 73-1 SPSC/P 73-1/Add. SPSC/74-6/P 1/Add.2 SPSC/75-33/P 1/Add.3 SPSC/M 73-11 SPSC/74-20/M 17 SPSC/74-24/M 19 SPSC/74-26/M 21 SPSC/74-38/M 25 SPSC/74-53/M 30 SPSC/75-81/M 53
P 2	WA 2	Bristol, Geneva, Heidelberg Orsay RHEL, Strasbourg	J.-M. Gaillard	1) Elastic scattering and production of strange particle resonances by diffractive excitation in $\Sigma^+ p$ and $\bar{p} p$ interactions between 7c and 150 GeV/c. 2) Study of the leptonic decays $\bar{\nu}_\mu \rightarrow e^- \nu_e \bar{\nu}_\mu$ and $\Sigma^+ \rightarrow \nu_e \mu^+$	Hyperon beam; MWPC (backward) + forward spectrometer	WA Study of leptonic decays approved by NPCR on 12.6.1974	SPSC/P 73-2 SPSC/74-32/P 2/Add.1 SPSC/I 73-11 SPSC/74-48/M 28
P 3		CERN, Hamburg, Karlsruhe, Oxford, RHEL, Westfield College	K. Winter	Study of inelastic ν interactions using a counter set-up	Target-calorimeter and air-cored muon spectrometer	WANF Not recommended by NPCR on 26.2.75	SPSC/P 73-3 SPSC/74-8/P 3/Add.1 SPSC/75-7/P 3/Aud.2 SPSC/I 73-23 SPSC/74-26/M 21 SPSC/74-40/M 26 SPSC/74-98/M 37 SPSC/75-11/M 44
P 4		Bari, Caen, CERN, Liverpool, Milan	B. French	1) Dependence of high P_t events on the incident particle ($\pi^+ K^- p^-$) 2) Composition of the events as a function of P_t and the nature of the high P_t particle on which one triggers. 3) Occurrence of jet like correlations, suggestive of parton-parton scattering. 4) Jet cross section multiplicity composition and mass distribution. 5) Existence of massive objects such as e.g. heavy "fire-balls" resonances charmed particles, etc. Negative beam at 150 GeV/c.	MWPC magnetic vertex detector and forward lever arm with C counters and drift chambers	Not recommended by NPCR on 24.4.1974 for WA	SPSC/74-3/P 4 SPSC/74-46/P 4/Add.1 SPSC/I 73-50

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P 5	WA 5	Indiana University Saclay	P Bareyre	Measurement in the 20-120 GeV/c range, of two-body and quasi two-body baryon exchange reactions for $ u \leq 1$ (GeV/c) ² . π^{\pm} K ⁻ and \bar{p} on unpolarized and polarized protons	Two spectrometers ("Mimosa" and "Goliath") with hodoscopes and MWPC vertex detector	Approved by NPRC on 17.7.1974 for backward scattering part with unpolar protons. On common beam line with P 8 (H3) Withdrawn, replaced by P 5B WA 11	SPSC/74-10/P 5 SPSC/74-41/P 5/Add.1 SPSC/76-3/P 58 (EEC/74-24) (EEC/75-12)
P 6	NA 1	Frascati Milan, Pisa, Rome	L. Foa	Comparative study of hadron fragmentation, induced by different projectiles interacting with protons and nuclei. (Lifetime of $\eta_c(2.8)$) Energy range from 100 GeV/c upwards	Forward magnetic spectrometer with 5 standard PS beam transport magnets. Vertex detector with MWPC inside magnet	NA (H 2) Forwd. part without vertex magnet approved by NPRC on 12.3.75	SPSC/74-15/P 6 SPSC/74-23/P 6/Add.1 SPSC/74-83/P 6/Add.2 SPSC/76-23/P 6/Add.3 SPSC/I 73-36 SPSC/75-20/M 47
P 7	WA 3	Amsterdam, CERN, Munich, Oxford, RHEI	P Weillhammer	Study of the quasi-two-body hadron reactions $\pi^{\pm}p \rightarrow (\pi^{\pm}\pi^{\mp})n$, $(K^{\pm}K^{\mp})n$, $(pp)n$, $\pi^{\pm}p \rightarrow (\pi^{\pm}\pi^{\mp})n$, $K^{\pm}p \rightarrow (K^{\pm}\pi^{\mp})n$, $\pi^{\pm}p \rightarrow (K^{\pm}K^0)p$, and $K^{\pm}p \rightarrow (K^0\pi^{\mp})p$ over a wide kinematic range and at energies up to 80 GeV	Modified version of CERN-Munich spectrometer. beam spectrometer. target with 4 π anticoincidence counters; forward spectrometer with MWPC, Čerenkov hodoscopes and trigger	WA Approved by NPRC on 12.6.1974. Downstream of P 9 in H 1	SPSC/74-14/P 7 SPSC/I 73-47 SPSC/74-56/I 62 SPSC/74-55/M 31
P 8	WA 6	CERN, Trieste, Vienna	G. Fidecaro	Measurement of polarization in pp and πp elastic scattering at large momentum transfer in 50-150 GeV/c range	Polarized target with magnet for recoil particle analysis by MWPC. Forward spectrometer with MWPC, threshold Čerenkov counter and hodoscope	WA (H 1) Approved by NPRC on 4.9.74 on common beam line (H 3) with P 5	SPSC/74-17/P 8 SPSC/74-54/P 8/Add.1 SPSC/I 73-9 SPSC/76-4/M 54 (EEC/74-24) (EEC/75-12)

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P 9	WA 7	CERN, Geneva, Orsay Oslo, University College London	V Gracco	$\pi^+ p \rightarrow \pi^+ p$ and $pp \rightarrow pp$ would be measured in the angular range 20° to 90° cm with incident momenta 20, 40, 60 and 80 GeV/c. In the forward region one gets data on $K^+ p \rightarrow K^+ p$, $\bar{p} p \rightarrow \bar{p} p$ ($+\pi^+\pi^+$ and K^+K^+)	AEG magnet (+ one C-magnet at higher energies) MWPC + C-counter for forward particles MWPC or drift ch. for recoil protons	WA (H 1) Approved by NPRC on 4.9.74. Upstream of P 7 in H 1.	SPSC/74-28/P 9 SPSC/74-49/P 9/Add 1 SPSC/74-61/P 9/Add.2 SPSC/76-13/I 80 SPSC/74-109/M 39 SPSC/74-110/M 40 SPSC/76-12/M 55 (PHYS III/74-47)
P 10	WA 4	Bonn, CERN, Daresbury DESY Ecole Polytechnique, Glasgow Lancaster Manchester Orsay Sheffield	J Litt	Photoproduction and electroproduction of hadrons for incident particle energies from 10 to 60 GeV (Charm search)	Omega with tagged photon beam	WA Approved by NPRC on 12.6.1974 for tagged photon particle Charm particle search approved by RB on 15.04.76	SPSC/74-29/P 10 SPSC/76-17/P 10/Add.1 SPSC/I 73-8 (EEC/75-39) (EEC/75-43)
P 11	WA 10	Geneva, Lausanne	M. Martin	Study of $K^+ p \rightarrow K^0 \pi^+ p$ and reactions of similar topology with high statistics (Zweig's rule test Charmed events)	Recoil proton detector with MWPC and scintillation counter Forward arm without magnet, with MWPC and γ -detector	WA Approved by NPRC on 12.3.1975	SPSC/74-31/P 11 SPSC/I 73-43 SPSC/74-114/M 41 SPSC/75-6/M 43 SPSC/76-25/M 56

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P 12		CERN, Orsay Oxford	L. Dick	Spin-dependent effects in hadron-proton interactions. measurement of polarisation in πp , $K p$ and pp elastic and inclusive scattering (or inelastic "diffractive" processes) between 25 and 100 GeV/c	Polarized target; recoil spectrometer with C-magnet, hodoscopes and Čerenkov counter with TOF; forward arm with hodoscopes	WA Not recommended by SPSC on 24.4.1974	SPSC/74-44/P 12 SPSC/75-9/P 40 SPSC/I 73-33 SPSC/74-111/I 56
P 13		Athens Democritus Liverpool, Vienna.	H. Muirhead	To take 50,000 pictures at antiproton momenta of 25 50 and (hopefully) 100 GeV/c (i.e. 150,000 pictures) The aim is to test the feasibility of annihilation studies at high momenta and to examine inclusive and exclusive pp reactions especially in relation to pp data at corresponding energies	BERC	WA Merged with P 22 + P 47 See P 63	SPSC/74-60/P 13 SPSC/I 73-32
P 14		Brussels CERN, Genova, Mons	J.B. Kinson	500,000 picture exposure in 70 GeV/c K^+ separated beam, with external particle identifier (EPI) Systematic study of hadronic reactions	BERC + EPI	WA Merged with P 17 + P 32 + P 56, See P 62	SPSC/74-47/R 14 SPSC/I 73-19 SPSC/I 73-21
P 15		Saclay	L. van Rossum	Measurement of polarization parameter or target asymmetry in inclusive πp and pp reactions at large transverse momentum. Momentum region from 50 to 150 GeV/c	Polarized target, analyzing magnet, forward- and side arm detectors PT magnet and detectors in side arms from proposal P8	NA Not recommended by SPSC on 2.4.75	SPSC/74-71/P 15 SPSC/I 73-9 SPSC/I 73-39 SPSC/74-25/M 20
P 16		Amsterdam, Bologna, Padova, Pisa Saclay Turin.	A.G. Tenner	ν - and $\bar{\nu}$ -reactions in D_2 ; study of weak hadronic current with protons and neutrons separately 1 Mpx	BERC (D_2)	WANF, NB with 400 GeV p s then NB	SPSC/74-72/P 16 SPSC/74-105/P 16/Add.1 SPSC/76-5/P 16/Add.2 SPSC/I 73-56 SPSC/74-9/I 56/Add.1

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P 17		Athens, Democritos Liverpool, Nijmegen, Tel-Aviv	R.T. Van de Walle	400 k pictures with K^+ at 70 GeV/c. Study of charge multiplicities topological cross sections, exclusive and inclusive reactions	BEBC (TEFI)	WA Merged with P 14 + P 32 + P 56, See P 62	SPSC/74-73/P 17 SPSC/I 73-10 SPSC/74-75/M 35
P 18	NA 2	CERN Daresbury DESY Freiburg Kiel Lancaster Liverpool Orsay Oxford, Sheffield, R.M.C. Shrivvenham, Turin, Wuppertal	E. Gabathuler	Test of scale invariance in muon-nucleon scattering at large momentum transfer followed by programme of muon physics	Forward spectro-meter	NA (EHN 2) Forw spectrom. part approved by NPRC on 1. 3 1975	SPSC/74-78/P 18 SPSC/I 73-15 SPSC/I 73-15 Rev SPSC/75-62/M 51
P 19	NA 4	CERN Dubna, Munich, Rome, Saclay	C. Rubbia	Inclusive muon scattering on hydrogen and deuterium to the highest energies and four-momentum transfers available	H ₂ -target (50 m long) surrounded by magnetized iron torus	NA (EHN 2) Reduced version approved by NPRC on 7. 5 1975	SPSC/74-79/P 19 SPSC/74-103/P 19/Add.1 SPSC/74-108/P 19/Add.2 SPSC/74-120/P 19/Add.3 SPSC/74-120/P19/Ad.3 corr. SPSC/74-82/M. 36
P 20		Orsay	B. Dauteray	120 k pictures with π^+ at 110 GeV/c 4-C physics inclusive production of K^0 Λ , $\bar{\Lambda}$, γ π^0 etc; correlations and cluster production in high multiplicity events	BEBC	WA Withdrawn	SPSC/74-80/P 20 SPSC/I 73-24 SPSC/I. 73-25
P 21	WA 8	Birmingham	J.D. Dowell	Study of rare meson system in K^+p collisions at 18 GeV/c and 32 GeV/c	Omega with RF separated beam.	WA Approved by NPRC on 22 1.1975	SPSC/74-84/P 21 SPSC/74-50/I 61
P 22		Brussels Mons	J. Lemonne	2 x 200 k pictures (1) & (2) with \bar{p} at 70 GeV/c. Study of multiparticle final states and properties of annihilation reactions	BEBC + EPI (1) BEBC+TST+EPI (2)	WA Merged with P 13 + P 47 See P 63	SPSC/74-87/P 22 SPSC/I 73-19

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P 23		Aachen, CERN, Oxford	D.C. Cundy	Total and differential cross sections of ν and $\bar{\nu}$ on Neon, neutral currents 250 kpx	BEBC (Ne) + EMI	WAMF (NB)	SPSC/74-88/P 23 SPSC/I 73-14 SPSC/75-66/M 52
P 24	NA 3	CERN Coll. de France, Ec. Pol. Orsay Saclay	A. Michelini	Hadronic production of high- p_T leptons and hadrons	Forw. spectrometer e-y detectors hadron calorimeter	NA Approved by NPRC on 12.3.75.	SPSC/74-90/P 24
P 25		Aachen, Bonn, CERN, Oxford	G. Myatt	ν and $\bar{\nu}$ interactions in hydrogen 500 kpx	BEBC (H ₂) + EMI	WAMF (WB)	SPSC/74-91/P 25 SPSC/I 73-28 SPSC/- 73-40 SPSC/75-66/M 52
P 26	WA 9	Clermont-Ferrand, Leningrad, Lyon, Uppsala	T Ekelof	High precision study of elastic scattering in Coulomb interference region	Ionisation chamber recoil spectrometer forw magnetical spectrometer	WA Approved by NPRC on 22.1.1975 for minimum programme	SPSC/74-94/P 26 SPSC/75-34/P 26/Add.1 SPSC/74-56/I 62 SPSC/74-55/M 31
P 27		CERN, Imperial Coll., Oxford	B.G. Pope	Production of muons and muon pairs in hadronic interactions	Tungsten beam dump; iron shield, spectrometer with toroidal magnets	NA	SPSC/74-96/P 27 SPSC/I 73-3 SPSC/I 73-34
P 28		Pavia, Torino	G. Rinaudo	pp-interactions below 100 GeV/c (2 x 50 kpx)	BEBC	WA	SPSC/74-104/P 28 SPSC/76-18/P 28/Add 1
P 29		Bari CERN, Liverpool, Milan	B. French	Detailed study of hadronic interactions producing high- p_T particles	Vertex detector. Forward lever arm	NA SPSC decision deferred on 26.2.75	SPSC/74-112/P 29 (D.Ph.II/TEC 74-1) (D.Ph.II/PHYS 75-1)
P 30		Bari, Birmingham, Brussels, EHEC, University Coll	W. Venus	ν and $\bar{\nu}$ interactions in hydrogen filled track sensitive target, 500 kpx	BEBC + TST + EMI	WAMF (WB)	SPSC/74-116/P 30 SPSC/75-63/P 30/Add 1 SPSC/75-64/P 30/Add 2 SPSC/76-56/P 30/Add.3 SPSC/76-57/P 30/Add.4 SPSC/I 73-13

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P 31 +P 4b	WA14	Bari, CERN Ecole Polytechnique, Milan, Orsay	A. Pullia	Leptonic processes dilepton events, ν_e interactions on nucleons and coherent production of vector mesons induced by ν	GCM + EMI	WANF (WB) Approved by RB on 8.7 76	SPSC/74-117/P 31 SPSC/75-74/P 31/Add.1 SPSC/76-9/P 31/Add.2 SPSC/I 73-6 SPSC/I 73-44
P 32		LPNHE Paris	M. Baubullier J. Laberrigüe	K^+p -interactions at 70 GeV/c. 600 kpx	BEBC + EPI	WA Merged with P14 + P17 + P56 See P62	SPSC/74-118/P 32 SPSC/I 73-14
P 33		Ecole Polytechnique, LPNHE Paris	P. Petiau	Search for charmed particles, study of neutral current channels with ν and $\bar{\nu}$ 500 kpx	BEBC (D ₂) + steel plates	WANF (WB)	SPSC/74-119/P 33 SPSC/75-42/P 33/Add.1 SPSC/76-36/P 33/Add.2 SPSC/I 73-26 SPSC/I 73-51
P 34 +P 39	WA15	Aachen, Bergen, Brussels Strasbourg, Univ Coll. London	F.W. Bullock	Study of purely leptonic and other rare $\bar{\nu}$ interactions	GCM + EMI	WANF (WB) Approved by RB on 8.7 76	SPSC/74-122/P 34 SPSC/75-73/P 34/Add.1 SPSC/I 73-5
P 35		Aachen, CERN, Oxford	K. Schultze	ν interactions with protons and neutrons. 500 kpx	BEBC (D ₂) + EMI	WANF (NB)	SPSC/74-123/P 35 SPSC/75-66/M 52
P 36		Aachen Bari Brussels CERN University Coll. London	W Van Doninck	Detailed study of muonless events induced by ν interactions on protons and neutrons 500 kpx	BEBC (H_2^+ Ne) + TST (D ₂) + EMI	WANF (NB)	SPSC/74-126/P 36 SPSC/I 73-13
P 37	NA 5	Karlsruhe, MPI Munich	P. Seyboth	Search for "charmed" mesons and baryons	Vertex detector magnet with streamer ch. downstream lever arm with streamer ch. trigger spectrometer	NA Approved by MPRC on 4 6.1975	SPSC/75-1/P 37 SPSC/75-38/P 37/Add.1 SPSC/76-62/P 37/Add.2 SPSC/74-86/I 65
P 38		Glasgow LPNHE Paris RHEI, Saclay	R. Barloutaud	K^+p interactions in BEBC at 45 and 70 GeV/c 400 kpx	BEBC + EPI	WA	SPSC/75-2/P 38 SPSC/I 73-18

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P 39		Aachen	J. Morfin	Purely leptonic and other rare $\bar{\nu}$ interactions in propane-freon mixture. 600 kpx	GGM	WANF See also P 34	SPSC/75-5/P 39 SPSC/75-73/P 34/Add.1 SPSC/74-2/I 59
P 40		CERN IPN Orsay Oxford	L. Dick	Spin effect and differential cross sections in elastic hadron-hadron scattering	Solenoid spectrometer. polarised proton target, position sensitive scintillation counters forward	NA Not recommended by SPSC on 2.4.75	SPSC/75-9/P 40 SPSC/74-44/P 12 SPSC/I 73-33 SPSC/74-111/I 56
P 41		Cambridge, Michigan State	J.G. Rushbrooke	$\bar{p}p$ annihilation at 150 GeV/c	Rapid Cycling Bubble Chamber; downstream particle identification	NA	SPSC/75-13/P 41
P 42		CERN, Heiöelberg Orsay Oxford, Rutgers Stockholm	L. Montanet	Study of multihadron events involving identified particles	RCBC, ISIS Cerenkov and downstream spectrometer	NA Part A approved by RB on 24.6.76	SPSC/75-15/P 42 SPSC/75-22/P 42/Add.1 SPSC/76-43/P 42/Adg.2 Rev SPSC/75-40/I 68 SPSC/75-21/M 48 SPSC/75-30/M 49 SPSC/74-45/T 14 SPSC/74-95/T 14/Add.1
P 43		Brussels, MIT Padova Strasbourg	A. Fridman	$\bar{p}p$ interactions at 50 100 150 and 200 GeV/c	RCBC with secondary particle identification.	NA	SPSC/75-16/P 43 SPSC/74-127/I 67
P 44		CERN MIT, Nijmegen	E.W. Kittel	Study of K^+p -interactions at 250-300 GeV/c	RCBC with downstream spectrometer and particle identification	NA	SPSC/75-18/P 44

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P 45		Firenze Padova, LPNHE Paris VII Rome Trieste	D. Zanelli	External γ -ray detector for BEBC with TST	γ -detector	WA	SPSC/75-24/P 45 SPSC/75-60/P 45/Add.1 SPSC/I 73-35
P 46		Bergen, Ecole Polytechnique	M. Haguenaer	Study of ν induced rare events and of neutral current interactions	GGM; NB beam with 140 GeV parents	WANF See also P 31	SPSC/75-77/P 46 SPSC/75-72/P 46/Add.1 SPSC/75-74/P 46/Add.2 SPSC/75-74/P 31/Add.1 SPSC/76-9/P 33/Add.2 SPSC/76-43/P 46/Add.3 SPSC/76-43/P 46/Add.4 SPSC/76-43/P 52/Add.1
P 47		Helsinki, Stockholm	G. Ekspong	Study of \bar{p} p-interactions at 70 GeV/c	BEBC	WA See P 63	SPSC/75-49/P 47 SPSC/I 77-57
P 48		Bari I.C. London, MPI Munich	R. Hartmann	Study of $\bar{\nu}$ and ν interactions at highest available SPS energies	BEBC (Ne + H ₂) with D ₂ -TST. \bar{W} B beam	WANF	SPSC/75-50/P 48 SPSC/75-78/P 48/Add.1
P 49	WA18	CERN, Hamburg, Moscow (ITEP) Rome	K. Winter	High energy ν and $\bar{\nu}$ interactions	Target calorimeter surrounded by magnetized iron	WANF - study of semi leptonic n.c. processes and of μ^- polarization approved by RB on B.7 76	SPSC/75-59/P 49 SPSC/76-51/P 49/Add.1 SPSC/74-1/I 58
P 50		Turin	C. Franzinetti	γ -ray detector in BEBC for ν experiments	BEBC + metal plates or Neon bag	WANF	SPSC/75-61/P 50
P 51		Aachen, CERN, Oxford	G. Myatt	Beam dump test in BEBC Ne + H ₂ experiments	BEBC (Ne + H ₂)	WANF	SPSC/75-65/P 51
P 52		CERN, Milan, Orsay	Ph. Heusse	Study of neutral current interactions with ν and $\bar{\nu}$ dichromatic beams	GGM; NB beam with 60 GeV parents	WANF	SPSC/75-69/P 52 SPSC/76-45/P 52/Add.1 SPSC/76-45/P 46/Add.4 SPSC/I 73-53

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P 53	WA16	CERN, Orsay Strasbourg, Ecole Polytechnique	B. Aubert	Exploratory experiment at very high ν energy	GGM; NB beam	WANF Approved by RB on 8 7 76	SPSC/75-71/P 53 SPSC/I 73-30 SPSC/I 73-53
P 54		Turin	C. Franzinetti	ν interactions in freon with narrow band beams from π 's and K 's of 60, 140 and 275 GeV/c	GGM; NB beam	WANF	SPSC/75-77/P 54
P 55		Turin	C. Franzinetti	Experiment in dichromatic ν -beam	GGM, NB beam with 140 GeV parents	WANF	SPSC/75-80/P 55
P 56		Serpukhov	P V Chliapnikov V.A. Yarba	Study of K^+p and K^-p interactions at 70 GeV/c (2 x 300 kpx)	BEBC + EPI	WA, Merged with P14 + P17 + P32 See P 62	SPSC/75-84/P 56 SPSC/75-53/I 71
P 57		Aachen, Berlin, CERN, Cracow Imperial Coll. London, Vienna, Warsaw	P.J. Dornan	K^+p and $\bar{p}p$ interactions at highest available momentum (~ 110 GeV/c) (300 kpx + 200 kpx)	BEBC (\rightarrow EPI)	WA	SPSC/75-86/P 57 SPSC/76-26/P 57/Add 1
P 58	WA 11	Saclay Indiana Univ	P Borgeaud	Search of multiparticle decays of high mass states produced with the ν (3.1 GeV)	Vertex spectrometer (Collath) two pairs of fwd. spec- trometer arms. Scintillator hodo- scope: muon detec- tor	WA, Approved by RB on 19.02.76 on common beam line with WA6 (H3)	SPSC/76-3/P 58

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P 59		Mons	F. Grard	Study of strange meson production and of reactions with high p_T in $\bar{p}p$ and π^+p interactions at 100 GeV/c	RCBC (hybrid system)	NA	SPSC/76-8/P 59
P 60		Cambridge, Imperial College	T.C. Bacon	Study of high energy $K_L^0 p$ interactions (100 kpx + 100 kpx)	BEBC	WA	SPSC/76-11/P 60
P 61	WAL2	Birmingham, CERN, Neuchâtel RHEL	P. Sonderegger	Beam dump experiment in Omega	Omega	WA; First phase approved by RB on 24.6.76	SPSC/76-14/P 61
P 62		Brussels, CERN Genova, Mons Nijmegen Serpukhov Tel-Aviv	R. T. Van de Walle	Study of 70 GeV/c $K^+ p$ interactions	BEBC + EPI	WA	SPSC/76-15/P 62
P 63		Brussels, Helsinki, Liverpool, Mons Stockholm	N. Yamdagni	Study of $\bar{p}p$ interactions at 70 GeV/c	BEBC	WA	SPSC/76-16/P 63
P 64		Bologna, Glasgow RHEL, Saclay Torino	G. Kalmus	Investigation of direct electron production in hadron interactions	BEBC + TST (+EMI)	WA	SPSC/76-19/P 64 SPSC/76-59/P 64/Add.1 SPSC/76-71/I 79
P 65		Brussels Liverpool, Mons Stockholm	J. Lemonne	Study of prompt lepton production in $\bar{p}p$ interactions at 70 GeV/c	BEBC + TST	WA	SPSC/76-20/P 65
P 66		CERN, Glasgow, Liverpool	I.S. Hughes	Search for new bosons and charmed states in $\bar{p}p$ interactions in 4.1 GeV c.m. energy region	Omega	WA	SPSC/76-24/P 66 SPSC/76-54/P 66/Add.1 SPSC/76-60/P 66 Rev SPSC/76-46/T 16

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P 67	WA13	Berlin-Zeuthen CERN, Collège de France	P Sonderegger	Hadronic two-body reactions at large p_T	Omega	WA; \bar{p} -run approved by RB on 8.7 76	SPSC/76-30/P 67
P 68		Cambridge, Michigan-State	D.R. Ward	Production of neutral particles in $\bar{p}p$ interactions at 150 GeV/c	BEBEC	WA	SPSC/76-34/P 68
P 69		Liverpool, Oxford	J.R. Fry	Study of \bar{p} annihilation mechanism in 4π and 6π final states at 15 GeV/c	Omega	WA	SPSC/76-35/P 69 SPSC/76-27/I 81
P 70	WA17	Ankara, Brussels CERN, Dublin, UC London, Rome, Strasbourg, Turin	M. Conversi	Investigation of di-muon events and search of "new particles" in ν -interactions	BEBEC + Emulsion + EMI	WANF Approved by RB on 8.7 76	SPSC/76-41/P 70
P 71		Imperial College	T.C. Bacon	Direct photon production in $p\bar{p}$ -collisions	BEBEC (H_2+Ne)	WA	SPSC/76-50/P 71 SPSC/76-48/I 84
P 72		Imperial College, Saclay	B. Tallini	Comparison of n.c and c.c. reactions induced by ν_μ and ν_K	BEBEC (H_2+Ne) + EMI	WANF (NB)	SPSC/76-52/P 72 SPSC/76-47/I 83
P 73		Bologna, Saclay	A. Muller	Systematic search of long-lived heavy particles in the Si-beam	\bar{C} -counters and MWPC in Si beam	WA	SPSC/76-55/P 73
P 74		Pavia Tel-Aviv Torino	G. Rinaldo	Direct electron production from pp collisions at 70 GeV	BEBEC + TST	WA	SPSC/76-61/P 74
P 75		Imperial College, Southampton	A. Duane	Addition of electromagnetic shower detector behind Wall apparatus	Forward shower detector and low momentum particle counter	WA	SPSC/76-65/P 75

No.	Labs.	Spokesman	Experiment	Apparatus	Remarks	References
I 1	Marburg	R. Brandt	Nuclear chemistry (absolute monitor σ ; reactions in Cu, Au, Bi, U "strange" decays as spontaneous fission)	(no detail)	no internal irradiation facility available. Would be "Beam dump" expt. NA (WA?)	SPSC/I 73-1
I 2	Orsay	F. Yiou	Nuclear chemistry for astrophysics	Internal irradiation facility	is not available	SPSC/I 73-2
I 3	CERN	B.G. Pope	$p + \text{nucleus} \rightarrow \mu^+ + \mu^- + \text{anything at } 400 \text{ GeV to } \sigma \sim 10^{-39} \text{ cm with } 1012 \text{ p/p. } \Delta M/M = \pm 5\% \text{ for } 5 \text{ GeV} < M < 25 \text{ GeV}$	Beam dump in 1 m target 10 m steel wall MMPC-planes with $\epsilon = \pm 0. \text{ mm.}$	NA, behind zone 2	SPSC/I 73-3 SPSC/74-96/P 27
I 4	HEPL Stanford.	R. Hofstadter	Backward inelastic inclusive proc. $p + p \rightarrow p + p$ $+ p + x$ $+ \pi^+ + x$ $\rightarrow K^+ + x \text{ etc. etc.}$ Coincidence with High Res. Spectr (1 arm) + TANC detector or particle or γ -detector 2nd arm: $p + p \rightarrow p + p + x (+ \text{ elast.})$	168" 2.5 GeV/c high resolution large acceptance spectrometer 180° bend $\Delta p/p = 10^{-4}$	NA possible Not recommended by SPSC	SPSC/I 73-4
I 5	Bergen.	O. Skjeggstad	ν -physics	Gargamelle	WA	SPSC/I 73-5 SPSC/74-122/P 3A
I 6	Barr	S. Natali	ν -physics	Gargamelle	WA	SPSC/I 73-6 SPSC/74-117/P 31
I 7	-	P. Schlein	High P_t processes	Total absorption calorimeter	NA	SPSC/I 73-7

No.	Labs.	Spokesman	Experiment	Apparatus	Remarks	References
I 8	Daresbury Birmingham Glasgow Lancaster Manchester Sheffield, Orsay Ecole Pol. Bonn	P.J Duke	γ e-physics 20 - 100 GeV	Omega	WA (NA, combined e-hadron beam planned).	SPSC/I 73-8 SPSC/74-29/P 10
I 9	CERN, Trieste Vienna.	G. Fiducaro	g/dt and polariz. parameter P for $pp \rightarrow pp \bar{p}n + np$ $\rightarrow pn$ between 25 \rightarrow 150 GeV/c and t \leq 3 (GeV/c)	little detail. WMPG or drift ch. > 10 ⁸ p/p	WA (H 1) for low E NA (H 4, H 8) for high E.	SPSC/I 73-9 SPSC/74-17/P 8
I 10	Athens Democritos, Liverpool, Nijmegen	R. Van de Walle	K ⁺ p 70 GeV/c	BEBC (H ₂) (+ENI?)	WA	SPSC/I 73-10 SPSC/74-73/P 17
I 11	Geneva, Heidelberg, Lausanne, Orsay RHEL, Strasbourg	G. Sauvage	Charged hyperon interactions; leptonic decays	Hyperon beam, MPC (backw.) + forw spectro- meter	WA	SPSC/I 73-11 SPSC/P 73-2
I 12	Aachen, CERN, Oxford	D. Cundy	ν -physics	BEBC (Ne) + EMI.	WA	SPSC/I 73-12 SPSC/74-88/P 23
I 13	Brussels	J Sacton	ν -physics	Bubble Chamber	WA	SPSC/I 73-13 SPSC/74-116/P 30 SPSC/74-126/P 36
I 14	LEPHE	J. Duboc	K ⁺ p, 70 GeV/c	BEBC (H ₂) hybrid (charged particle) identifier TST ext. γ -detector)	WA	SPSC/I 73-14 SPSC/74-118/P 32

No.	Labs.	Spokesman	Experiment	Apparatus	Remarks	References
I 15	Daresbury Lancaster Liverpool, Oxford, Sheffield, R.M.C. Scriivenham, Coll de France, IPN Orsay Bonn, (DESY) Wuppertal, CERN	E. Gabathuler	μ -physics up to 250 GeV	Forw spectrometer 3 stages. Trajec. mea- sured by W_1 -Wg: $\epsilon = \pm 0.15$ mm. Large \angle detector. 2 x 2m x 1m gap C-magnet, beam through yoke. Wire ch. inside + out- side or streamer	NA zone 2 magn. length. 2 4 + 8 Tm. 200 evts/10 ⁸ p 2 litre polarized target planned.	SPSC/I 73-15 SPSC/I 73-15 Rev SPSC/74-78/P 18
I 16	University College	D.J Miller	P, π^- -proton up to 200 GeV/c	BEBC (H ₂ + Ne) + TST (H ₂) + forward. γ -detector	WA	SPSC/I 73-16
I 17	University College	F W. Bullock	ν -physics	Gargamelle	WA	SPSC/I 73-17 SPSC/74-122/P 34
I 18	Glasgow Oxford, RHEL, Saclay	G. Kalmus	$K^+ p, 45 + 65$ GeV/c	BEBC (H ₂) EHI	WA	SPSC/I 73-18 SPSC/75-2/P 38
I 19	Mons	F Grard	K^+ 30-75 GeV/c, P 25-100 GeV/c	BEBC (H ₂) EHI	WA	SPSC/I 73-19 SPSC/74-47/P 14 SPSC/74-87/P 22
I 20	Strasbourg	M. Paty	ν -physics	BEBC (H ₂ + Ne) or GGM + EMI	WA	SPSC/I 73-20 SPSC/74-122/P 34 SPSC/75-71/P 53
I 21	Birmingham, CERN, Genova, Saclay	E. Quercigh	$K^+ \bar{p}$ at 40-60 GeV/c	BEBC (H ₂) EHI	WA	SPSC/I 73-21 SPSC/74-47/P 14

NO.	Labs.	Spokesman	Experiment	Apparatus	Remarks	References
I 22	Aachen, Berlin, Bonn, CERN Cracow Heidelberg London, Vienna, Warsaw	D.R.O. Morrison	K^- 75-110 GeV/c	BEBC (H ₂) later with Cerankov- beam-tagging; TST	WA	SPSC/I 73-22
I 23	CERN Hamburg Karlsruhe Oxford, RHEL, Westfield College	K. Winter	V-physics	Hadron ionisation calorimeter	NA	SPSC/I 73-23 SPSC/P-73-3 SPSC/75-59/P 49
I 24	Orsay	B. Daugerax	π^+ highest momentum	BEBC (H ₂)	WA	SPSC/I 73-24 SPSC/74-80/P 20
I 25	Orsay	B. Daugerax	π^+ π^- high momentum	BEBC (H ₂ + Ne) TST with deuterium.	WA	SPSC/I 73-25 SPSC/74-80/P 20
I 26	Ecole Polytech- nique	P Petiau	V-physics	Gargamelle, BEBC (Ne)	WA	SPSC/I 73-26 SPSC/74-119/P 33 SPSC/75-71/P 53
I 27	Bari Birmingham, CERN, Geneva OSLO, RHEL, Stockholm	C. Damerell	Hadron physics \rightarrow 150 GeV/c	Focusing spectro- meter	WA	SPSC/I 73-27
I 28	Aachen, CERN, Oxford	G. Myatt	V-physics	BEBC (H ₂) + EMI	WA	SPSC/I 73-28 SPSC/74-91/P 25

No	Labs.	Spokesman	Experiment	Apparatus	Remarks	References
I 29	Aachen, Bari Bergen, Brussels, U.C London, CERN Milano, Padova, Ecole Polyt., Orsay Strasbourg Torino	A. Rousset	v-physics	Bubble chambers.	WA review of v-programme of 12 Laboratories.	SPSC/I 73-29
I 30	CERN	A. Rousset	v-physics	BEBC, GGM	WA	SPSC/I 73-30 SPSC/75-71/P 53
I 31	College de France	C. Ghesquière	$\pi^+ K^+ \bar{p}$; 30-50 GeV/c	BEBC (H ₂) + EHI + wire ch. in beam + γ -detection (+TST)	WA	SPSC/I 73-31
I 32	Athens (Democritos + Univ) Liverpool	H. Muirhead	\bar{p} ; 50 + 100 GeV/c	BEBC (H ₂) (+EHI)	WA	SPSC/I 73-32 SPSC/74-60/P 13
I 33	IPN Orsay	T. Willits	$\pi^+ p + \pi^0 n$; 10, 25 and 50 GeV/c	Frozen spin polar target + n-detector + γ -detectors	WA	SPSC/I 73-33 SPSC/74-44/P 12 SPSC/75-9/P 40

No.	Labs.	Spokesman.	Experiment	Apparatus	Remarks	References
I 34	Oxford	A.N. Segar	Search for heavy leptons	W-target spectrometer with magnetized Fe + drift ch	NA, beam dump expt.	SPSC/I 73-34 SPSC/74-96/P 27
I 35	Naples, Padua, Rome-Frascati, Trieste	D. Zanella	External γ -detector for BEBC	MMPC + lead glass counters	WA	SPSC/I 73-35 SPSC/75-24/P 45
I 36	Milan, Pisa, Rome	L. Foà	Comparative study of hadron fragmentation	Cylindrical chambers around target + forw spectrometer	NA	SPSC/I 73-36 SPSC/74-15/P 6
I 37	Glasgow	I.S. Hughes	$K^+ p$ -processes at 35 and 65 GeV/c	Omega with MMPC (and downstream \bar{C} -counter with wire ch.)	WA	SPSC/I 73-37
I 38	Bari, Bonn, CERN, Daresbury, Glasgow, Liverpool, Milan	B.R. French	Meson physics with Omega in RF separated beam	As in I 37	WA	SPSC/I 73-38
I 39	Saclay	Y. Ducros, L. van Rossum	Polarization measurements in ηp and $K p$ inelastic reactions; elast. scatt. at large momentum transfer	Polarized target large angle detector system + forw. \bar{C} -counters		SPSC/I 73-39 SPSC/74-71/P 15
I 40	Bonn	K. Bockmann, R. Hartmann, W. Meincke	ν^- and $\bar{\nu}$ -interactions	BEBC (H ₂)	WA	SPSC/I 73-40 SPSC/74-91/P 25 SPSC/75-50/P 48
I 41	Prague	J. Sedlak	$\bar{p} p$ interactions at 70-100 GeV/c	BEBC	WA	SPSC/I 73-41

No.	Labs.	Spokesman	Experiment	Apparatus	Remarks	References
I 42	Collège de France, Ecole Polytechnique Orsay MPI + Univ Munich, Saclay	J. LeFrançois	Hadron, electron and photon physics	Multi-particle spectrometer	NA	SPSC/I 73-42
I 43	Geneva	M. Martin C. Nef	Energy dependence of two-body reaction $K^+p \rightarrow K^{*+}p$ $\begin{matrix} \swarrow & \searrow \\ \Lambda^0 & K^0 \\ \downarrow & \downarrow \\ K^0 & \pi^+ \end{matrix}$	C-counter + hodoscope in beam; proton + decay analyser with FWC	WA	SPSC/I 73-43 SPSC/74-31/P 11
I 44	Milan	E. Fiorini	γ -physics.	Gargamelle	WA	SPSC/I 73-44 SPSC/74-117/P 3; SPSC/75-59/P 52
I 45	Lausanne, Neuchâtel	E. Jeannot	Incident part. $\rightarrow p \rightarrow \Lambda^0 + K^0 +$ $\Sigma^0 + \Sigma^0 +$ fragmentation of proton-target, coherent reactions on He	Streamer chamber "Dardanelle"		SPSC/I 73-45
I 46	Geneva	O. Guisan	Form factor of π 's and K's	C-counter; forward analyzing system with wire ch. (+ shower detector)	NA	SPSC/I 73-46
I 47	CERN, MPI Munich	P. Weilhammer	Few-body reactions	CERN-Munich spectrometer	WA	SPSC/I 73-47 SPSC/74-14/P 7
I 48	Bristol Southampton	J.G.F. Frank	Form factor of π 's	Forward magnetic spectrometer from P 6	WA	SPSC/I 73-48 SPSC/74-85/I 48/Add.1
I 49	Oxford	N.E. Booth	γ -e interactions	100 modules each with 3 rad. lengths Fe + MWPC layer		SPSC/I 73-49
I 50	Bari, Caen, CERN, Liverpool	B.R. French	Study of high p_t -events and resonance physics	Multiparticle spectrometer with MWPC + 2 Morpurgo magnets.	WA	SPSC/I 73-50 SPSC/74-3/P 4.

No.	Labs.	Spokesman	Experiment	Apparatus	Remarks	References
I 51	Ecole Polytechnique.	V. Brisson	v-physics.	BEBE (H_2^+ , D_2^+)	WA	SPSC/I 73-51 SPSC/74-119/P 33
I 52	Graz, Illinois Inst. Techn. Purdue.	T. Erber	High-energy magnetic Bremsstrahlung	Pulsed megagauss fields.	Not recommended by SPSC	SPSC/I 73-52
I 53	Orsay.	A. Lagarrigue	v-Physics	GGM, BEBC	WA	SPSC/I 73-53 SPSC/75-69/P 52 SPSC/75-71/P 53
I 54	CERN, ETH.	W. Beusch	Reggeon-nucleon scattering	Shower detector (with Omega).	WA	SPSC/I 73-54 SPSC/74-51/M 29.
I 55	Pavia.	S. Ratti	Hadron fragmentation (30-70 GeV/c)	Magnetic spectrometer in Ω -beam.	WA, withdrawn 25.6.1974.	SPSC/I 73-55
I 56	Amsterdam, Bologna, Padua, Pisa, Saclay Torino.	A. Tenner	v-physics.	BEBE (D_2^+)	WA	SPSC/I 73-56 SPSC/74-9/I 56/Add.1 SPSC/74-72/P 16
I 57	Scand. BC-Collab. (Helsinki, Stockholm).	S. Nilsson	$\bar{p}p$ -reactions 30-70 GeV/c.	BEBE	WA	SPSC/I 73-57 SPSC/75-49/P 47
I 58	Frascati, Naples	G. Barbiellini	v-lepton scattering	Scintill. counter + spark chambers.	WA	SPSC/74-1/I 58 SPSC/75-59/P 49
I 59	Aachen.	J. von Krogh/ K. Schultze	v-physics.	GGM	WA	SPSC/74-2/I 59 SPSC/75-5/P 39

No.	Labs.	Spokesman	Experiment	Apparatus	Remarks	References
I 60	DESY	H. Meyer	v-e scattering	Streamer chamber with CH ₂ plates and scintillation counters.	WA	SPSC/74-5/I 60
I 61	Birmingham.	J.D. Dowell	Rare meson systems from K ⁺ p collisions at 16 and 32 GeV/c	Omega (with lever arm for 32 GeV/c).	WA	SPSC/74-50/I 61 SPSC/74-84/P 21
I 62	Leningrad, Uppsala.	T. Ekelöf	Hadronic interactions at very small momentum transfers.	Ion chamber spectrometer (recoil) + magnetic spectrometer.	WA	SPSC/74-56/I 62 SPSC/74-94/P 26
I 63	Imperial College	P Astbury D Websdale	Measurement of helicity amplitudes in hypercharge exchange between 5 and 12 GeV/c	Magnet spark chamber in shortened S 1 beam	WA	SPSC/74-57/I 63
I 64	Univ of Michigan.	A.D. Krisch	Elastic pp-scattering at high transverse momentum, 200 GeV	Double arm spectrometer	NA Not recommended by SPSC	SPSC/74-68/I 64
I 65	MPI Munich.	P Seyboth	Multi-particle hadron physics	Streamer chamber and vertex magnet	NA	SPSC/74-86/I 65 SPSC/75-1/P 37
I 66	CERN IPN Orsay Oxford	L. Dick	Measurement of spin effect (P ₀ and R) and differential cross-sections in hadron-hadron elastic scatterings	Polarized target, solenoid spectrometer. position sensitive scintillation counters f forward detector	NA	SPSC/74-111/I 66 SPSC/74-44/P 12 SPSC/75-9/P 40
I 67	Brussels MIT Padova, Strasbourg	A. Fridman	Study of $\bar{p}p$ interactions at 50 100 150 and 200 GeV/c	Rapid cycling bubble chamber + EPI	NA	SPSC/74-127/I 67 SPSC/75-16/P 43

No.	Labs.	Spokesman	Experiment	Apparatus	Remarks	References
I 68	Heidelberg	K. Tittel	Study of multihadron events in hybrid detector	Rapid cycling chamber	NA	SPSC/75-40/I 68 SPSC/75-15/P 42
I 69	Karlsruhe, Moscow	J Engler Yu Galaktionov	Neutron small angle elastic scattering at high energies	Proton recoil detector + liq Ar neutron calorimeter	NA	SPSC/75-47/I 69
I 70	Serpukhov	Yu D. Prokoshkin	Hadron scattering at large P_T	Multipurpose spectrometer for neutral and charged particles	NA	SPSC/75-52/I 70
I 71	Serpukhov	P V Chliapnikov	Study of K^+p and K^-p interactions at 70 GeV/c	BEBC	WA	SPSC/75-53/I 71 SPSC/75-84/P 56
I 72	Serpukhov	S.B. Nurushev	Measurement of polarization in hadron-hadron interactions	Polarized target fwd. spectrometer with MWPC threshold Cerenkov counter and hodoscope; recoil arm with MWPC and hodoscope	WA	SPSC/75-54/I 72
I 73	Moscow (INEP)	V.S. Kaftanov	Study of ν e-scattering	Spark chambers	WA	SPSC/75-55/I 73
I 74	Kurchatov Inst. Novosibirsk	I.I. Gurevich	Magnetic monopole search	Beam dump	NA	SPSC/75-56/I 74
I 75	Yerevan	A.G. Oganesian	Hadron identification by transition radiation detector in polarization measurements		WA	SPSC/75-57/I 75
I 76	Padua	M. Baldo-Ceolin	Study of ν -electron interactions	Spark chambers + γ shower counters	WANF	SPSC/75-79/I 76
I 77	Serpukhov	V.A. Yarba	Study of ν and $\bar{\nu}$ interactions (1 Mpx)	BEBC + TST (D2)	WANF	SPSC/75-83/I 77

No	Labs.	Spokesman	Experiment	Apparatus	Remarks	References
I 78	Rome	M. Conversi	Study of di-muon events and search of new short-lived particles produced by neutrinos in emulsion stack coupled to BEBC	BEBC + emulsion stack	WANF	SPSC/76-2/I 78
I 79	RHEL	G. Kalmus	Investigation of direct electron production in hadron interactions	BEBC + TST (+EMI)	WA	SPSC/76-7/I 79 SPSC/76-19/P 64
I 80	CERN, Geneva, Orsay Oslo Univ. College	A. Lundby	Production of massive muon pairs in hadronic interactions	Double arm spectrometer with μ -detectors	WA	SPSC/76-13/I 80 SPSC/74-28/P 9 SPSC/76-12/M 55
I 81	Liverpool, Oxford	J.R. Fry	Antiproton annihilation mechanism in 4π and 6π final states at 16 GeV/c	Omega	WA	SPSC/76-27/I 81 SPSC/76-35/P 69
I 82	Cambridge	J.G. Rushbrooke	Study of 200 GeV/c K^+p and K^+p	BEBC	WA	SPSC/76-39/I 82
I 83	Imperial College, Saclay	B. Tallini	Comparison of neutral and charged current ν -interactions induced by $\bar{\nu}_\mu$ and ν_μ at the same energy	BEBC	WANF	SPSC/76-47/I 83 SPSC/76-52/P 72
I 84	Imperial College	T.C. Bacon	An investigation of direct photon production in pp collisions at 100 GeV/c	BEBC (N ₂ +Ne)	WA	SPSC/76-48/I 84 SPSC/76-50/P 71
I 85	Aachen, Bonn, CERN, Oxford	D.R.O. Morrison	Study of ν and $\bar{\nu}$ interactions	BEBC	WANF (NB)	SPSC/76-64/I 85