LETTERS OF INTENT AND PROPOSALS RECEIVED UP TO NOVEMBER 9, 1973

a) Letters of Intent

Name	Labs	Expt	Apparatus	Remarks
1) R. Brandt	Marburg	Nuclear chemistry (absolute monitor σ ; reactions in Cu, Au, Bi, U; "strange" decays as spontaneous fission)	(no detail)	no internal irrad. facility available. Would be "Beam dump expt. NA (WA?)
2) F. Yiou	Orsay	Nuclear chemistry for astrophysics	internal irrad. facility	is not available
3) B.G. Pope	CERN	p + nucleus → $\mu^+ + \mu^-$ + anything at 400 GeV to $\sigma \sim 10^{-39}$ cm^2 with 10^{12} p/p. $\Delta M/M = \pm 5\%$ for 5 GeV < M < 25 GeV.	Beam dump in 1m target 10m steel wall MWPC-planes with $\varepsilon = \pm 0.5$ mm	NA, behind zone 2
4) R. Hofstadter	HEPL Stanford	Backw. inelastic inclusive proc. p + p → p + p → p + x → $\pi^{\pm}$ + x → $K^{\pm}$ + x etc., etc. Coincidence with High Res. Spectr. (1 arm) + TANC detector or particle or γ-detector 2nd arm: p + p → p + p + x (+ elast.) π^- + p → $\pi^{\pm}$ + p + x (+ elast.), etc., etc.	168" 2.5 GeV/c high resolution large acceptance spectrometer 180° bend $\Delta p/p = 10^{-4}$	NA possible
5) O. Skjeggestad	Bergen	ν-physics	Gargamelle	WA
6) S. Natali	Bari	ν-physics	Gargamelle	WA
7) P. Schlein		High P_t processes	Total absorption calorimeter	NA

Name	Labs	Expt	Apparatus	Remarks
8) P.J. Duke	Daresbury, Birmingham, Glasgow, Lancaster, Manchester, Sheffield, Orsay, Ecole Pol., Bonn	γ+e-physics 20-100 GeV	Omega	WA (NA:combined e-hadron beam planned)
9) G. Fidecaro	CERN-Trieste-Vienna	$d\sigma/dt$ and polariz. parameter P for $p\vec{p} \rightarrow pp$: $p\vec{n} \rightarrow np$ $\rightarrow pn$ between 25 $\rightarrow$ 150 GeV/c and $t \lesssim 3$ $(GeV/c)^2$	Little detail. WMPC or drift ch. > 10^8 p/p	NA (H4, H8) for high E. zone 1
10) R. van de Walle	Athens, Democritos, Liverpool, Nijmegen, Vienna	K^+p 70 GeV/c	BEBC (H_2) (+EHI?)	WA
11) G. Sauvage	Geneva, Heidelberg Lausanne, Orsay, RHEL, Strasbourg	Charged hyperon interactions; leptonic decays	Hyperon beam, MWPC (backw.) + forw. spectrometer	WA
12) D. Cundy	Aachen, CERN, Oxford	ν-physics	BEBC (Ne) +EMI	WA
13) J. Sacton	Brussels	ν-physics	Bubble chamber	WA
14) J. Duboc	LPhNHE	$K^{\pm}p$, 70 GeV/c	BEBC (H_2) hybrid (charged particle identifier, TST, ext. γ-detector)	WA

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15) E. Gabathuler	Daresbury, Lancaster, Liverpool, Oxford, Sheffield, R.M.C. Schrivenham, Coll. de France, IPN Orsay, Bonn, (DESY), Wuppertal, CERN	μ-physics up to 250 GeV	Forw. spectrometer 3 stages. Trajec. measd. by W_1-W_8: $\varepsilon = \pm 0.15$ mm Large χ detector: 2 x $2m^2$ x 1m gap C-magnet; beam through yoke. Wire ch. inside + outside or streamer	NA zone 2 magn. length: 2, 4 + 8 Tm. 200 evts/10^8p 2 litre polarized target planned.
16) D.J. Miller	University College	p, π^--proton up to 200 GeV/c	BEBC (H_2+Ne) + TST (H_2)	WA
17) F.W. Bullock	University College	ν-physics	Gargamelle	WA
18) G. Kalmus	Glasgow, Oxford, RHEL, Saclay	K^-p, 45+65 GeV/c	BEBC (H_2) EHI	WA
19) F. Grard	Mons	K^+ 30-75 GeV/c $\bar{p}$ 25-100 GeV/c	BEBC (H_2) EHI	WA
20) M. Paty	Strasbourg	ν-physics	BEBC (H_2 + Ne) or GGM + EMI	WA
21) E. Quercigh	Birmingham, CERN, Genova, Saclay	K^+, $\bar{p}$ at 40-60 GeV/c	BEBC (H_2) EHI	WA

Name	Labs	Expt.	Apparatus	Remarks
22) D.R.O. Morrison	Aachen, Berlin, Bonn, CERN, Cracow, Heidelberg, London, Vienna, Warsaw	K^-, 75-110 GeV/c	BEBC (H_2) later with Cerenkov-beam-tagging; TST	WA
23) K. Winter	CERN, Hamburg, Karlsruhe, Oxford, RHEL, Westfield College	ν-physics	Hadron ionisation calorimeter	NA
24) B. Daugeras	Orsay	π^+, highest momentum	BEBC(H_2)	WA
25) B. Daugeras	Orsay	π^+, π^-, high momentum	BEBC (H_2+Ne) TST with deuterium	WA
26) P. Petiau	Ecole Polytechnique	ν-physics	Gargamelle, BEBC (Ne)	WA
27) A. Lundby	Bari, Birmingham, CERN, Genova, Oslo, RHEL, Stockholm	Hadron physics → 150 GeV/c	Focussing spectrometer	WA
28) G. Myatt	Aachen, CERN, Oxford	ν-physics	BEBC (H_2) + EMI	WA

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29) A. Lagarrigue	Aachen, Bari, Bergen, Brussels, U.C. London, CERN, Milano, Padova, Ecole Polytechn. Orsay, Strasbourg, Torino	ν-physics	Bubble chambers	WA; review of ν-programme of 12 laboratories.
30) A. Rousset	CERN	ν-physics	BEBC, GGM	WA
31) C. Ghesquière	Collège de France	π^+, $K^{\pm}$, $\bar{p}$; 30-50 GeV/c	BEBC (H_2) + EHI + wire ch. in beam + γ-detection (+TST)	WA
32) H. Muirhead	Athens (Democritos + Univ.), Liverpool, Vienna	$\bar{p}$; 50 + 100 GeV/c	BEBC (H_2) (+EHI)	WA
33) T. Willits	IPN Orsay	$\pi^- p \to \pi^0 n$; 10, 25 and 50 GeV/c	Frozen spin polar. target + n-detector + γ-detectors	WA

Name	Labs	Expt	Apparatus	REmarks
34) A.M. Segar	Oxford	Search for heavy leptons	W-target spectrometer with magnetized Fe + drift ch	NA; beam dump expt.
35) D. Zanello	Naples, Padua, Rome-Frascati, Trieste	External γ-detector for BEBC	MWPC + lead glass counters	WA
36) L. Foà	Milan, Pisa, Rome	Comparative study of hadron fragmentation	Cylindrical chambers around target + forw.spectrometer	NA
37) I.S. Hughes	Glasgow	K^+p-processes at 35 and 65 GeV/c	Omega with MWPC (and downstream Č-counter with wire ch.)	WA
38) B.R. French	Bari, Bonn, CERN, Daresbury, Glasgow, Liverpool, Milan	Meson physics with Omega in RS separated beam	as in 37)	WA
39) Y. Ducros, L. van Rossum	Saclay	Polarization measurements in πp and Kp inelastic reactions; elast. scatt. at large momentum transfer	Polarized target large angle detector system + forw. Č-counters	
40) K. Böckmann R. Hartmann W. Meincke	Bonn	ν- and $\bar{\nu}$- interactions	BEBC (H_2)	WA
41) J. Sedlák	Prague	$\bar{p}p$ interactions at 70-100 GeV/c	BEBC	WA

Name	Labs	Expt	Apparatus	Remarks
42) J. Lefrançois	Collège de France, Ecole Polytechnique, Orsay, MPI + Univ. Munich, Saclay	Hadron, electron and photon physics	Multi-particle spectrometer	NA
43) M. Martin, C.Nef	Geneva	Energy dependence of two-body reaction $K^{\pm}p \to K^{*\pm}p$ $K^{o}\pi^{\pm}$	C-counter + hodoscope in beam; proton + decay analyser with PWC	WA
44) E. Fiorini	Milan	ν-physics	Gargamelle	WA
45) E. Jeannet	Lausanne, Neuchâtel	incident part. + $p \to \Lambda^{o}$ + .., K^{o} + .. , Σ^{o} + .., Ξ^{o} + .. ; fragmentation of proton-target; coherent reactions on He	Streamer chamber "Dardanelle"	
46) O. Guisan	Geneva	Form factor of π's and K's	$\bar{\nu}$ C-counter; forw. analyzing system with wire ch (+ shower detector)	NA
47) P. Weilhammer	CERN, MPI Munich	Few body reactions	CERN-Munich spectrometer	WA
48) S.G.F. Frank	Bristol, Southampton	Form factor of π's	Forw. particle identifiers + analyzing magnet	WA
49) N.E. Booth	Oxford	ν-e interactions	100 modules each with 3 rad. lengths Fe + MWPC layer	

Name	Labs	Expt.	Apparatus	Remarks
50) B.R. French	Bari, Caen, CERN, Liverpool, Milan	Study of high p_t- events and resonance physics	Multipart. spectrometer with MWPC+2 Morpurgo magnets	WA
51) V. Brisson	Ecole Polytechn.	ν-physics	BEBC (H_2 ; D_2)	WA
52) T. Erber	Graz, Illinois Inst. of Technology, Purdue	High energy magnetic Bremsstrahlung	Pulsed megagauss fields	WA, NA
53) A. Lagarrigue	Orsay	ν-physics	GGM ; BEBC	WA
54) W. Beusch	CERN, ETH	Reggeon-nucleon scattering	Shower detector (with Omega)	WA
55) S. Ratti	Pavia	Hadron fragmentation (30-70 GeV/c)	Magnetic spectrometer	WA
56) A. Tenner	Amsterdam, Padua, Pisa, Saclay, Torino	ν-physics	BEBC (D_2)	WA

b) Proposals

Name	Labs	Expt	Apparatus	Remarks
1) J. Steinberger	CERN, Dortmund, Heidelberg, Saclay	ν-physics	Counter set-up 1850 tons total	WA