



national accelerator laboratory

TM-370
2800

LIST OF APPROVED PROPOSALS

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National Accelerator Laboratory

May 16, 1972



<u>Experiment Number</u>	<u>Institutions</u>	<u>Scientific Spokesman</u>	<u>Subject</u>
1-A	Wisconsin Pennsylvania Harvard	Cline	NAL Neutrino Proposal
2-I	Michigan State Maryland Iowa State ANL, Duke Notre Dame Toronto, Wisc. Purdue	Smith	Multiparticle Interactions in 30-inch Bubble Chamber and Optical Spark Chamber Hybrid System. 30" b.c. 450K pictures.
3	LBL	Eberhard	Search for Magnetic Monopoles at NAL
4-I	Michigan, ANL	Longo	Neutron Total Cross Sections up to 200 GeV
4-II	Michigan, ANL	Longo	Neutron-Proton Diffraction Scattering
6	Michigan, ANL	Krisch	Proton-Proton Elastic Scattering at High Transverse Momentum
7	Michigan, ANL, NAL, Purdue	Meyer	Measurement of $\pi^{\pm}p$ and p-p Differential Elastic Scattering Cross Sections from 50 to 170 GeV/c
8	Wisconsin Michigan	Pondrom	Experiments in a Neutral Hyperon Beam
12	Ohio State Michigan State Carleton	Reay	A Study of Neutron-Proton Charge-Exchange Scattering
14	Columbia SUNY Stony Brook	Franzini	Proposal to Study Inelastic Proton-Proton Collisions in the Diffractive Region
19-A	Wyoming	Tompkins	A Search for Monopole Production
21	Caltech NAL	Barish	Neutrino Physics at High Energies
22	VPI, BNL	Collins	Search for Multigamma Events from Magnetic Monopole Pairs

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23-A	Washington	Rothberg	Inclusive πp and $K p$ Scattering
25-A	UCSB	Caldwell	Measurement of the Total Photo-Absorption Cross Sections
26	Cornell, UCSD, Michigan State	Hand	High Momentum Transfer Inelastic Muon Scattering and Test of Scale Invariance
27-A	Rochester, NAL Northwestern	Rosen	Study of the Coherent Dissociation of Neutrons
28	Wisconsin, CERN	Fry	Neutrino Experiment in 15-ft Bubble Chamber
31-A	ANL, Carnegie-Mellon	Derrick	Anti-neutrino Experiment in 15-ft Bubble Chamber
32	Stanford	Hofstadter	Test and Calibrate a Large NaI TANC Detector
34	Louisiana State Max-Planck	Huggett	Ionization Spectrometer Test and Development
36-A	Rockefeller Rochester, NAL Dubna, USSR	Cool	Small Angle $p-p$ Scattering
37-A	NAL, UCLA	Malamud	30" b.c. - pp , 50K pictures
45-A	NAL, Michigan	Nezrick	Neutrino Experiment in 15-ft Bubble Chamber
48	Yale, BNL NAL	Adair	A Measurement of the Intensity and Polarization of Muons Produced Directly by the Interactions of Protons with Nuclei
51	Northeastern, Stanford	von Goeler	Boson Production and Decay
53-A	Columbia, BNL	Baltay	Neutrino Experiment in 15-ft Bubble Chamber with Neon
61	LBL, Harvard ANL, North-western, Wyoming, Yale, NAL	Chamberlain	Proposal to Measure Polarization in Elastic Scattering at 50, 100, and 150 GeV/c
63	NAL	Walker	Survey of Particle Production in Proton Collisions at NAL

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67	Rutgers Upsala College Mississippi State	Maglic	Search for Baryon Resonances up to 10 GeV Mass Produced in p+p→p+MM
69-A	Yale, NAL	Willis	Elastic Scattering of the Hadron
70	Columbia Rockefeller NAL	Lederman	Study of Lepton Pairs from Proton-Nuclear Interactions
72	BNL, Yale	Leipuner	Quark Search
74	General Elect. NAL	Fleischer	Search for Magnetic Monopoles
75	NAL	Yamanouchi	A Proposal to Search for Fractionally Charged Quarks
76	NAL	Carrigan	Search for Magnetic Monopoles
81	ANL, BNL, Chicago Carnegie-Mellon Purdue SUNY (Buffalo)	Butler	Preliminary Survey of 200-GeV Proton Interactions with Complex Nuclei
82	Chicago, SLAC U of California- San Diego, NAL	Telegdi	Investigate Regeneration of Neutral K-Mesons at Very High Energies
86-A	U of Washington Orsay	Lubatti	Study Inelastic Diffractive Processes by Observing Coherent Production of Multi-Pion Final States from He Nuclei
87-A	Columbia Hawaii Cornell, Illinois	Lee	Search for Heavy Leptons and Intermediate Bosons from Photon-Nuclei Collisions
90	Cracow	Gierula	Emulsion Experiment
94	Louisiana State	Goza	Emulsion Experiment
95-A	Johns Hopkins U NAL	Cox	Proposal for Examination of Wide Angle Gamma Rays at NAL
96	Stanford U of Bari Brown, CERN ANL, Cornell MIT, NAL Northeastern	Ritson	Focusing Spectrometer Facility

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97	NAL, Yale	Lach	Elastic Scattering of the Hyperons
98	Chicago Harvard Oxford	Mo	Muon-Proton Inelastic Scattering Experiment
100	Chicago, Princeton	Cronin	Study Particle Production at High Transfer Momenta
103	U. of Tennessee	King	Emulsion Experiment
104	BNL, NAL Rockefeller	Kycia	Measurement of Total Cross Sections on Hydrogen and Deuterium
105	Tata Inst.	Malhotra Ganguli	Emulsion Experiment
108	NAL	Awschalom	A Beam Dump Experiment
110	Caltech, NAL, SUNY Stony Brook, UCLA Chicago	Pine	People's Spectrometer
111	Caltech, LBL, NAL	Tollestrup	Proposal to Study $\pi^- p \rightarrow \pi^0 n$ and $\pi^- p \rightarrow \eta n$ at High Energy
114	SUNY (Buffalo)	Jain	Emulsion Experiment
115	LBL	Stevenson	Search for Long Lived Particles
116	Ottawa, Barcelona, McGill, NAL Toronto, Strasbourg	Hébert	Emulsion Experiment
117	Osaka City U. Hiroshima U. INS Tokyo U.	Kusumoto	Emulsion Experiment
120	Harvard Wisconsin	Cline	Early π^0 Particle Production Survey with Gas Jet Target
121-A	UC, Davis	Lander	30" b.c. - $\pi^+ p$, 50K pictures
125	CERN	Morrison	30" b.c. - $\pi^- p$, 50K pictures
137	NAL, LBL, U. of Calif.	Huson	30" b.c. - $\pi^- p$, 50K pictures

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138-I	Rochester Michigan	Ferbel	30" b.c. - pp, 50K pictures
138-II	Michigan Rochester	VanderVelde	30" b.c. - pp, 50K pictures
141-A	ANL	Fields	30" b.c. - pp, 50K pictures
143	BNL	Kalbfleisch	30" b.c. - π^- p, 50K pictures
154	MIT, Brown, Ill., IIT Johns Hopkins, Rutgers, Stevens, Yale, NAL, Indiana, U of Tenn.-Oak Ridge	Pless	Feasibility Study of Proportional Chamber Hybrid Systems with 30-inch b.c.
155	LBL, Hawaii	Stevenson	Construction and Test of External Muon Identifier for 15-ft Bubble Chamber
156	U of Tokyo	Niu	Emulsion Experiment