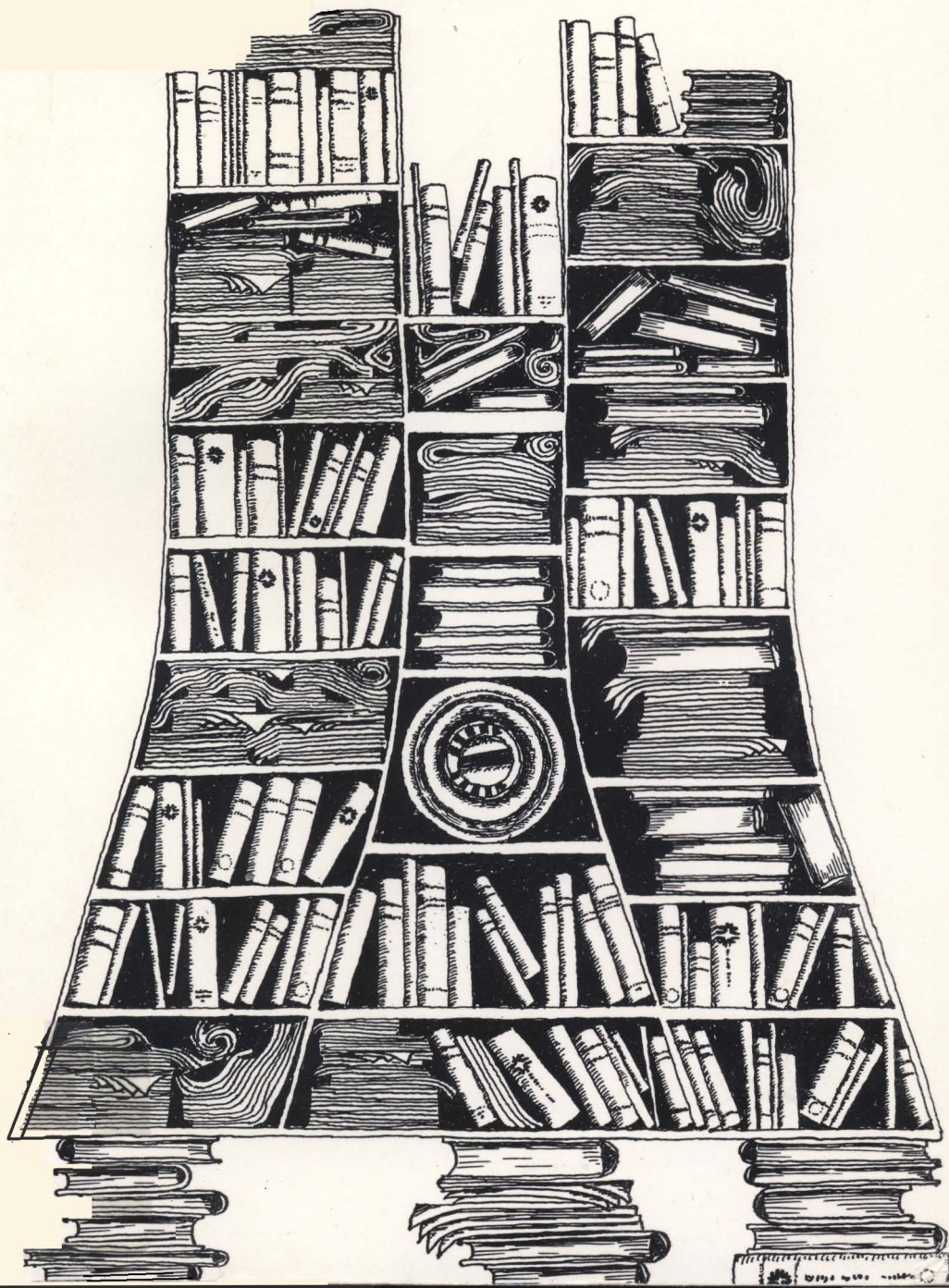


# Publications from Fermilab Experiments

November, 1987



# Publications from Fermilab Experiments

November, 1987

Editors:

Drasko Jovanovic  
Giorgio Giacomelli



Fermi National Accelerator Laboratory  
Batavia, Illinois

Operated by Universities Research Association, Inc.  
Under Contract with the United States Department of Energy

---

## Table of Contents

Introduction	ii
Publications from Fermilab Experiments	1
Ph.D. Theses from Fermilab Experiments	105
Fermilab Experiments	119
Fermilab Experiments by Beamline	122

---

## Introduction

This report is a compendium of publications related to the Fermilab research program of experiments for the years 1979-1986. It is a follow-up of a previous publication<sup>1</sup> which covered the period before 1979.

There has been an interest in having ready access to results from the Fermilab experimental research program from a computer file. A computerized publications system, SPIRES (Stanford Public Information Retrieval System), was created a few years ago at Stanford University. The SLAC and DESY libraries accumulate lists of high-energy physics publications for summaries which they distribute. Through a cooperative program among laboratories, all of the source data is available at the SLAC computer center where SPIRES resides.

After obtaining assistance and support, appropriate entries in the SPIRES publications files were identified by the Fermilab experiment numbers under which the experimental data were obtained. Spokespersons or others well acquainted with each experiment were contacted to check whether the results of their research were properly listed.

The SLAC data files also contain entries for preprints and conference papers related to Fermilab experiments; however, they are not given in this compilation, which concerns only experimental papers published in refereed journals. Care has been taken to make this compilation accurate and complete. This is difficult, in particular for technical papers which may be only marginally related to some Fermilab experiments. We hope to be informed of any errors or omissions, and apologize for them.

Papers are ordered by increasing Fermilab experiment number. We have combined the papers by one group of physicists, even though the results come from several different experiment numbers. For example, we list together all the papers from several neutral hyperon experiments performed by approximately the same collaboration. These groupings of experiments may make it difficult to find papers from one specific experiment number. Because of this, we include a list of the approved Fermilab experiments with their short titles and spokespersons. A second list gives the experiments by the Fermilab experimental area where the work was done (Meson, Neutrino, and Proton areas).

We also give a list of Ph.D. theses which resulted from Fermilab experimental work. The list of theses given in this booklet is reasonably complete, but certainly not perfect. The list is ordered alphabetically by the name of the Ph.D. candidates,

---

with the Fermilab experiment number, from which the experimental data were obtained, given below each entry.

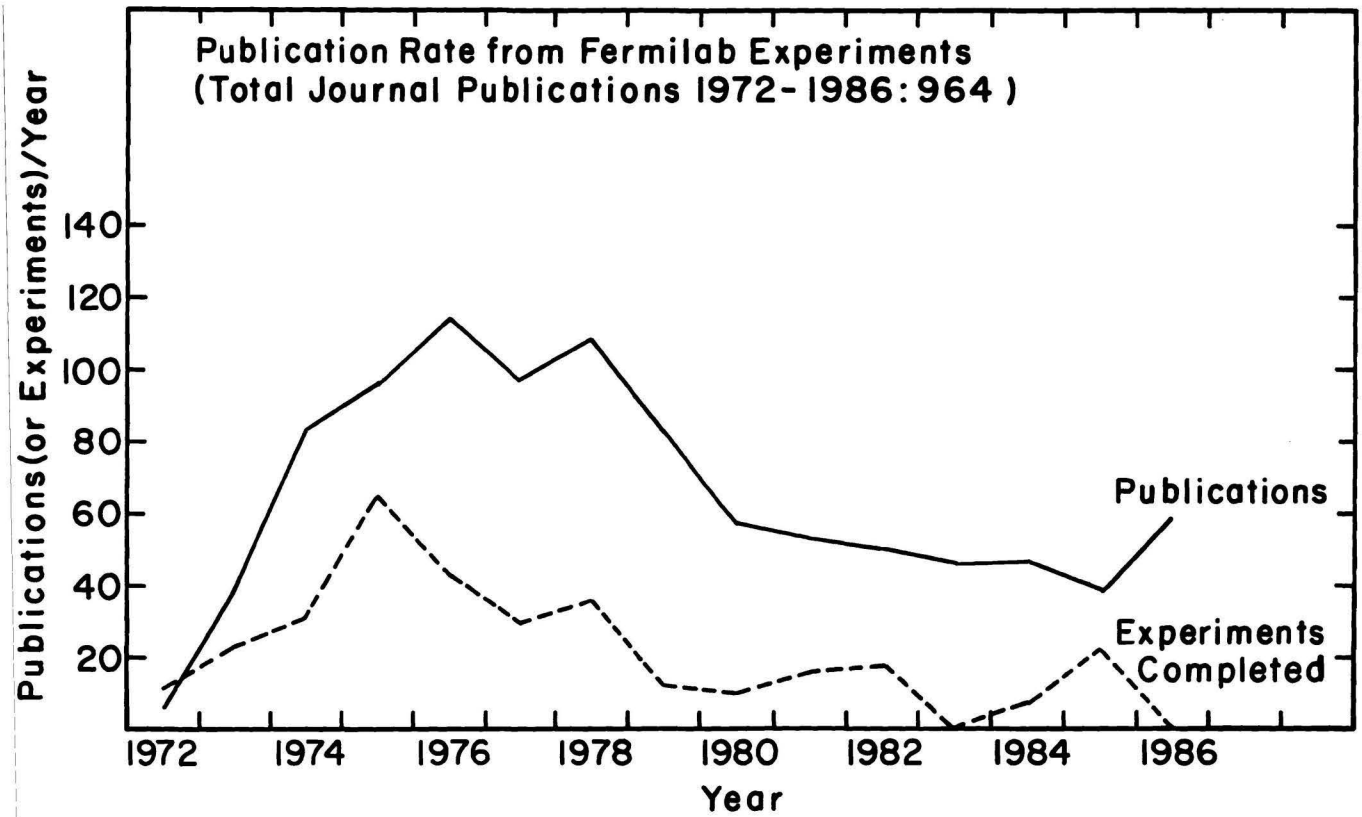
We hope that students or thesis advisors will send Ph.D. theses to the Fermilab Library. It has been found that Ph.D. theses provide the most complete descriptions of equipment, techniques, or even results from experiments. Therefore, they are not only valuable sources of information, but also illustrate the importance of the training students receive as part of the Fermilab research program.

We would like to acknowledge the assistance of many people who helped with this project. We thank Richard Fenner of the Fermilab Publications Office, who performed most of the SPIRES searches and organized this booklet. Louise Addis of SLAC provided information in the use of SPIRES. We appreciate Angela Gonzales for her artistry in preparing the booklet's cover. Our appreciation is also extended to personnel from the experimental groups for checking the publication information. Finally, this is a display of results representing the scientific accomplishments of a large community of physicists.

G. Giacomelli  
D. Jovanovic  
*Editors*

<sup>1</sup> A. F. Greene and K. E. Shafer, eds., *Publications from Fermilab Experiments*, April 1979.

---



-4-

Publication Rate from Fermilab Experiments. The number of publications each year is plotted from the time the experimental program started in 1972. For purposes of comparison, the number of experiments completed each year at Fermilab is shown.

## Publications from Fermilab Experiments

\*\*\*\*\*

NEUTRAL HYPERON #008  
LAMBDA BETA DECAY #361  
PARTICLE PRODUCTION #415  
LAMBDA MAGNETIC MOMENT #440  
XI-ZERO PRODUCTION #495  
PROTON POLARIZATION #505  
NEUTRAL HYPERON #555  
TRANSITION MAGNETIC MOMENT #619  
CHARGED HYPERON MAG MOMENT #620

\*\*\*\*

1.

MEASUREMENT OF THE SIGMA0-LAMBDA TRANSITION MAGNETIC MOMENT.  
By P.C. Petersen, A. Beretvas, T. Devlin, K.B. Luk, G.B. Thomson, R. Whitman (Rutgers U., Piscataway), R. Handler, B. Lundberg, L. Pondrom, M. Sheaff, C. Wilkinson (Wisconsin U., Madison), P. Border, J. Dworkin, O.E. Overseth, R. Rameika, G. Valenti (Michigan U.), K. Heller, C. James (Minnesota U.), 1986.  
Phys. Rev. Lett. 57 ( 1986) 949-952.

\*\*\*\*

2.

ELECTRON IDENTIFICATION USING A SYNCHROTRON RADIATION DETECTOR.  
By J.S. Dworkin, P.T. Cox, E.C. Dukes, O.E. Overseth (Michigan U.), R. Handler, R. Grobel, A. Jaske, B. Lundberg, G. Ott, L. Pondrom, M. Sheaff, C. Wilkinson (Wisconsin U., Madison), K. Heller (Minnesota U.), A. Beretvas, L. Deck, T. Devlin, K.B. Luk, R. Rameika (Rutgers U., Piscataway), 1986.  
Nucl. Instrum. Methods A247 ( 1986) 412-419.

\*\*\*\*

3.

PRODUCTION OF XI0 AND ANTI-XI0 HYPERONS BY 400-GEV PROTONS.  
By A. Beretvas, L. Deck, T. Devlin, K.B. Luk, R. Rameika, P. Skubic (Rutgers U., Piscataway), P.T. Cox, J.S. Dworkin, O.E. Overseth (Michigan U.), R. Grobel, R. Handler, L. Pondrom, M. Sheaff, C. Wilkinson (Wisconsin U., Madison), K. Heller (Minnesota U.), G. Bunce (Brookhaven), 1986.  
Phys. Rev. D34 ( 1986) 53-74.

\*\*\*\*

4.

MEASUREMENTS OF PRODUCTION POLARIZATION AND DECAY ASYMMETRY FOR XI-HYPERONS.  
By R. Rameika, A. Beretvas, L. Deck, T. Devlin, K.B. Luk, R. Whitman (Rutgers U., Piscataway), P.T. Cox, E.C. Dukes, J. Dworkin, O.E. Overseth (Michigan U.), R. Handler,

B. Lundberg, L. Pondrom, M. Sheaff, C. Wilkinson (Wisconsin U., Madison), K. Heller (Minnesota U.), 1986.

Phys. Rev. D33 ( 1986) 3172-3179.

\*\*\*\*

5.

ON PRIMAKOFF PRODUCTION OF SIGMAZERO HYPERONS

By T.Devlin, P.C.Petersen and A.Beretvas.

Phys. Rev. D34,1626 (1986).

\*\*\*\*

6.

MEASUREMENT OF THE XI- MAGNETIC MOMENT.

By R. Rameika, A. Beretvas, L. Deck, T. Devlin, K.B. Luk, R. Whitman (Rutgers U., Piscataway), P.T. Cox, C. Dukes, J. Dworkin, O.E. Overseth (Michigan U.), R. Handler, B. Lundberg, L. Pondrom, M. Sheaff, C. Wilkinson (Wisconsin U., Madison), K. Heller (Minnesota U.), 1984.

Phys. Rev. Lett. 52 ( 1984) 581-584.

\*\*\*\*

7.

POLARIZATION OF XI0 AND LAMBDA HYPERONS PRODUCED BY 400-GEV/C PROTONS.

By K. Heller (Minnesota U.), P.T. Cox, J. Dworkin, O.E. Overseth (Michigan U.), L. Pondrom, R. Grobel, R. Handler, M. Sheaff, C. Wilkinson (Wisconsin U., Madison), T. Devlin, L. Deck, K.B. Luk, R. Rameika, P. Skubic (Rutgers U., Piscataway), G. Bunce (Brookhaven), 1983.

Phys. Rev. Lett. 51 ( 1983) 2025-2028.

\*\*\*\*

8.

THE POLARIZATION AND MAGNETIC MOMENT OF THE SIGMAMINUS HYPERON.

By L. Deck, A. Beretvas, T. Devlin, K. B. Luk, R. Rameika, R. Whitman, R. Handler, B. Lundberg, L. Pondrom, M. Sheaff, C. Wilkinson, P. T. Cox, C. Dukes, J. Dworkin, O. E. Overseth and K. Heller. Phys. Rev. D28, (1983) 1.

\*\*\*\*

9.

PRECISE MEASUREMENT OF THE ASYMMETRY PARAMETER IN THE DECAY XI0 ---> LAMBDA PI0.

By R. Handler, R. Grobel, L. Pondrom, M. Sheaff, C. Wilkinson, P.T. Cox, J. Dworkin, O.E. Overseth (Michigan U.), K. Heller (Minnesota U.), T. Devlin, L. Deck, K.B. Luk, R. Rameika, P. Skubic (Rutgers U., Piscataway), G. Bunce (Brookhaven), 1982.

Phys. Rev. D25 ( 1982) 639-651.

\*\*\*\*



10.

POLARIZATION OF SIGMA+ HYPERONS PRODUCED BY 400-GEV PROTONS.

By C. Wilkinson, R. Handler, B. Lundberg, L. Pondrom, M. Sheaff (Wisconsin U., Madison), P.T. Cox, C. Dukes, J. Dworkin, O.E. Overseth (Michigan U.), A. Beretvas, L. Deck, T. Devlin, K.B. Luk, R. Rameika, R. Whitman (Rutgers U., Piscataway), K. Heller (Minnesota U.), 1981.

Phys. Rev. Lett. 46 ( 1981) 803-806.

\*\*\*\*

11.

PRECISE MEASUREMENT OF THE XI0 MAGNETIC MOMENT.

By P.T. Cox, J. Dworkin, O.E. Overseth, K. Heller (Michigan U. & Minnesota U.), R. Handler, R. Grobel, L. Pondrom, M. Sheaff, C. Wilkinson (Wisconsin U., Madison), L. Deck, T. Devlin, K.B. Luk, R. Rameika, P. Skubic (Rutgers U., Piscataway), G. Bunce (Brookhaven), 1981.

Phys. Rev. Lett. 46 ( 1981) 877-880.

\*\*\*\*

12.

PROTON POLARIZATION IN INCLUSIVE PRODUCTION AT 400-GEV/C.

By P. Yamin, G. Bunce (Brookhaven), P.T. Cox, J. Dworkin, K. Heller, O.E. Overseth (Michigan U.), T. Devlin, P. Skubic (Rutgers U., Piscataway), R. Grobel, R. Handler, R. March, L. Pondrom, M. Sheaff, C. Wilkinson (Wisconsin U., Madison), 1981.

Phys.Rev.D23 (1981) 31-32.

\*\*\*\*

13.

NEW LIMIT ON THE ELECTRIC DIPOLE MOMENT OF THE LAMBDA HYPERON.

By L. Pondrom, R. Handler, M. Sheaff (Wisconsin U., Madison), P.T. Cox, J. Dworkin, O.E. Overseth (Michigan U.), T. Devlin, L. Schachinger (Rutgers U., Piscataway), K. Heller (Minnesota U.), 1981.

Phys.Rev.D23 (1981) 814-816.

\*\*\*\*

14.

THE FIRST MEASUREMENT OF THE XI0 MAGNETIC MOMENT.

By G. Bunce (Brookhaven), O.E. Overseth, P.T. Cox, J. Dworkin, K. Heller (Michigan U.), T. Devlin, B. Edelman, R.T. Edwards, L. Schachinger, P. Skubic (Rutgers U., Piscataway), R. Handler, R. March, P. Martin, L. Pondrom, M. Sheaff (Wisconsin U., Madison), 1979.

Phys.Lett.86B (1979) 386-390.

\*\*\*\*

15.

WEAK HADRONIC DECAYS: K-->two pions AND K-->three pions.

By T. J. Devlin and J. O. Dickey. Rev. Mod. Phys. 51 (1979) 237.

\*\*\*\*\*

\*\*\*\*\*

PHOTON TOTAL CROSS SECTION #25A

\*\*\*\*

1.

MEASUREMENT OF OMEGA MESON PHOTOPRODUCTION ON PROTONS FROM 46-GeV TO 180-GeV.

By R.M. Egloff, P.J. Davis, G.J. Luste, J.F. Martin, J.D. Prentice (Toronto U.), D.O. Caldwell, J.P. Cumalat, A.M. Eisner, A. Lu, R.J. Morrison, S.J. Yellin (UC, Santa Barbara), T. Nash (Fermilab), Print-79-0728 (TORONTO), Sep 1979. 16pp.

Published in Phys.Rev.Lett.43:1545,1979.

\*\*\*\*

2.

MEASUREMENTS OF ELASTIC RHO AND PHI MESON PHOTOPRODUCTION CROSS-SECTIONS ON PROTONS FROM 30-GeV TO 180-GeV.

By R.M. Egloff, P.J. Davis, G. Luste, J.F. Martin, J.D. Prentice (Toronto U.), D.O. Caldwell, J.P. Cumalat, A.M. Eisner, A. Lu, R.J. Morrison, S.J. Yellin (UC, Santa Barbara), T. Nash (Fermilab), FERMILAB-PUB-79/34-EXP, May 1979. 13pp.

Published in Phys.Rev.Lett.43:657,1979.

\*\*\*\*\*

\*\*\*\*\*

NEUTRON DISSOCIATION #27A

\*\*\*\*

1.

A STUDY OF DIFFRACTIVE DISSOCIATION USING NUCLEAR TARGETS.

By J. Biel, T. Ferbel, W. Ford, L. Golding, W. Mollet, P. Slattery, D. Underwood (Rochester U.), B. Gobbi, L. Kenah, J. Rosen, R. Ruchti (Northwestern U.), E. Bleser (Fermilab), D. Freytag (SLAC), UR-690a, n.d. (recd May 1979) 14pp.

Published in Phys.Rev.D20:33,1979.

\*\*\*\*

2.

INCLUSIVE CHARGED PARTICLE PRODUCTION IN NEUTRON - NUCLEUS COLLISIONS.

By D. Chaney, T. Ferbel, P. Slattery, D. Underwood (Rochester U.), E. Bleser, D. Johnson (Fermilab), B. Gobbi, R. Lipton, J. Rosen, R. Richti, D. Spelbring (Northwestern U.), UR-689, n.d. (recd Mar 1979) 64pp.

Published in Phys.Rev.D19:3210,1979.

\*\*\*\*\*

\*\*\*\*\*

15-FOOT NEUTRINO/H2 #45A

\*\*\*\*

1.

INCLUSIVE PRODUCTION OF NONSTRANGE RESONANCES IN HIGH-ENERGY  
neutrino p CHARGED CURRENT INTERACTIONS.

By J.P. Berge, D.V. Bogert, R.J. Endorf, R. Hanft, J.A. Malko, F.A. Nezrick (Fermilab),  
G.R. Lynch, J.P. Marriner, M.L. Stevenson (LBL, Berkeley), R.J. Cence, F.A. Harris, M.  
Jones, M.W. Peters, V.Z. Peterson, V.J. Stenger, N. Wyatt (Hawaii U.), J. Bell, C.T. Coffin,  
R.N. Diamond, W.C. Louis, B.P. Roe, R.T. Ross, A.A. Seidl, E. Wang (Michigan U.),  
UH-511-368-79, Dec 1979. 23pp.  
Published in Phys.Rev.D22:1043,1980.

\*\*\*\*

2.

EXPERIMENTAL STUDY OF HADRONS PRODUCED IN HIGH ENERGY CHARGED-  
CURRENT NEUTRINO-PROTON INTERACTIONS.

By J. Bell, C.T. Coffin, R.N. Diamond, H.T. French, W.C. Louis, B.P. Roe, R.T. Ross, A.A.  
Seidl, J.C. Vander Velde, E. Wang (U. of Michigan), J.P. Berge, D.V. Bogert, F.A.  
DiBianca, R. Endorf, R. Hanft, C. Kochowski, J.A. Malko, G.I. Moffatt, F.A. Nezrick, W.G.  
Scott, W. Smart (Fermilab), R.J. Cence, F.A. Harris, M. Jones, M.W. Peters, V.Z. Peterson,  
V.J. Stenger (U. of Hawaii), G.R. Lynch, J.P. Marriner, M.L. Stevenson (LBL)  
Phys. Rev. D19 (1979) 1.

\*\*\*\*\*

\*\*\*\*\*

15-FOOT NEUTRINO/H2&NE #53A

15-FOOT NEUTRINO/H2@NE #380

\*\*\*\*

1.

LIMITS ON NEUTRINO OSCILLATIONS IN THE FERMILAB NARROW BAND BEAM.

By E.B. Brucker, P.F. Jacques, M. Kalelkar, E.L. Koller, R.J. Plano, P.E. Stamer (Rutgers U.),  
N.J. Baker, P.L. Connolly, S.A. Kahn, M.J. Murtagh, M. Tanaka (Brookhaven), C. Baltay,  
M. Bregman, D. Caroumbalis, L.D. Chen, M. Hibbs, P. Igo-Kemenes, J.T. Liu, J. Okamitsu,  
G. Ormazabal, A.C. Schaffer, K. Shastri, J. Spitzer (Columbia U.), BNL-38469-mc (microfiche),  
Jul 1986. 15pp.  
Phys. Rev. D34 ( 1986) 2183-2186.

\*\*\*\*

2.

STRANGE PARTICLE PRODUCTION IN NEUTRINO - NEON CHARGED CURRENT  
INTERACTIONS.

By N.J. Baker, P.L. Connolly, S.A. Kahn, M.J. Murtagh, R.B. Palmer, N.P. Samios, M. Tanaka

(Brookhaven), C. Baltay, M. Bregman, L. Chen, M. Hibbs, R. Hylton, J. Okamitsu, A.C. Schaffer (Columbia U.), M. Kalelkar (Rutgers U.), RU-86-23, Feb 1986. 62pp.

Published in Phys.Rev.D34:1251,1986.;

\*\*\*\*

3.

OPPOSITE SIGN DILEPTON PRODUCTION IN muon-neutrino INTERACTIONS.

By N.J. Baker, A.M. Cnops, P.L. Connolly, S.A. Kahn, H.G. Kirk, M.J. Murtagh, R.B. Palmer, N.P. Samios, M. Tanaka (Brookhaven), C. Baltay, M. Bregman, D. Caroumbalis, L.D. Chen, H. French, M. Hibbs, R. Hylton, M. Kalelkar, J.T. Liu, J. Okamitsu, G. Ormazabal, A.C. Schaffer, K. Shastri, J. Spitzer (Columbia U.), 1985.

Phys. Rev. D32 ( 1985) 531-540.

\*\*\*\*

4.

LIMITS ON LIKE-SIGN DILEPTON PRODUCTION IN muon-neutrino INTERACTIONS.

By C. Baltay, M. Bregman, M. Hibbs, J.T. Liu, J. Okamitsu, A.C. Schaffer, N.J. Baker, P.L. Connolly, S.A. Kahn, M.J. Murtagh, R.B. Palmer, N.P. Samios, M. Tanaka, E.B. Brucker, P.F. Jacques, M. Kalelkar, E.L. Koller, R.J. Plano, P.E. Stamer (Brookhaven, Columbia U., (Rutgers U.), BNL-36658-mc (microfiche), May 1985. 11pp.

Published in Phys.Rev.Lett.55:2543,1985.

\*\*\*\*

5.

MEASUREMENT OF THE muon-neutrino CHARGED CURRENT CROSS-SECTION.

By N.J. Baker, P.O. Connolly, S.A. Kahn, M.J. Murtagh, M. Tanaka (Brookhaven), C. Baltay, M. Bregman, D. Caroumbalis, L.D. Chen, H. French, M. Hibbs, R. Hylton, P. Igo-Kemenes, J.T. Liu, J. Okamitsu, G. Ormazabal, A.C. Schaffer, K. Shastri, J. Spitzer (Columbia U.), E.B. Brucker, P.F. Jacques, M. Kalelkar, E.L. Koller, R.J. Plano, P.E. Stamer, A. Vogel (Rutgers U.), BNL-31957-mc (microfiche), 1982. 12pp.

Phys. Rev. Lett. 51 ( 1983) 735-738.

\*\*\*\*

6.

EXPERIMENTAL LIMITS ON NEUTRINO OSCILLATIONS.

By N.J. Baker, P.L. Connolly, S.A. Kahn, H.G. Kirk, M.J. Murtagh, R.B. Palmer, N.P. Samios, M. Tanaka (Brookhaven), C. Baltay, M. Bregman, D. Caroumbalis, L.D. Chen, H. French, M. Hibbs, R. Hylton, J.T. Liu, J. Okamitsu, G. Ormazabal, R.D. Schaffer, K. Shastri, J. Spitzer (Columbia U.), 1981.

Phys. Rev. Lett. 47 ( 1981) 1576-1580 and Brookhaven Nat. Lab. Upton - BNL-30116 15p.

\*\*\*\*

7.

CONFIRMATION OF THE EXISTENCE OF THE SIGMA(c)++ AND LAMBDA(c)+ CHARMED BARYONS.

By C. Baltay, D. Caroumbalis, H. French, M. Hibbs, R. Hylton, M. Kalelkar, K. Shastri,

A. Vogel (Columbia U.), A.M. Cnops, P.L. Connolly, S.A. Kahn, H.G. Kirk, M.J. Murtagh, R.B. Palmer, N.P. Samios, M. Tanaka (Brookhaven), BNL-25958, Mar 1979. 12pp.  
Published in Phys.Rev.Lett.42:1721,1979.

(\*Title changed in journal\*)

\*\*\*\*\*

\*\*\*\*\*

POLARIZED SCATTERING #61

\*\*\*\*

1.

POLARIZATION PARAMETERS AND ANGULAR DISTRIBUTIONS IN  $\pi^+ p$  P  
ELASTIC SCATTERING AT 100-GEV/C AND IN  $p p$  ELASTIC SCATTERING AT  
100-GEV/C AND 300-GEV/C.

By R.V. Kline, M.E. Law, F.M. Pipkin (Harvard U.), I.P. Auer, D. Hill, B. Sandler,  
D. Underwood, A. Yokosawa (Argonne), A. Jonckheere, P.F.M. Koehler (Fermilab),  
W. Bruckner, O. Chamberlain, G. Shapiro, H. Steiner (LBL, Berkeley), W. Johnson (Suffolk  
U., Boston), J.H. Snyder, M.E. Zeller (Yale U.), 1980.

Phys.Rev.D22 (1980) 553-572.

\*\*\*\*\*

\*\*\*\*\*

ELASTIC SCATTERING #69A

\*\*\*\*

1.

THE REAL PART OF THE FORWARD ELASTIC NUCLEAR AMPLITUDE FOR  $p p$ , anti- $p$   
 $p$ ,  $\pi^+ p$ ,  $\pi^- p$ ,  $K^+ p$ , AND  $K^- p$  SCATTERING BETWEEN 70-GeV/c AND 200-GeV/c.

By L.A. Fajardo, R. Majka, J.N. Marx, P. Nemethy, L. Rosselet, J. Sandweiss, A. Schiz, A.J.  
Slaughter (Yale U.), C. Ankenbrandt, M. Atac, R. Brown, S. Ecklund, P.J. Gollon, J. Lach,  
J. MacLachlan, A. Roberts, G. Shen (Fermilab), FERMILAB-PUB-80/27-EXP, Mar 1980.

82pp.

Published in Phys.Rev.D24:46,1981.

\*\*\*\*

2.

A HIGH STATISTICS STUDY OF  $\pi^+ p$ ,  $\pi^- p$ , AND  $p p$  ELASTIC SCATTERING AT  
200-GeV/c.

By A. Schiz, L.A. Fajardo, R. Majka, J.N. Marx, P. Nemethy, L. Rosselet, J. Sandweiss, A.J.  
Slaughter (Yale U.), C. Ankenbrandt, M. Atac, R. Brown, S. Ecklund, P.J. Gollon, J. Lach,  
J. MacLachlan, A. Roberts, G. Shen (Fermilab), FERMILAB-PUB-79/81-EXP, Dec 1979.

64pp.

Published in Phys.Rev.D24:26,1981.

\*\*\*\*

3.  
HADRON - NUCLEUS ELASTIC SCATTERING AT 70-GeV/c, 125-GeV/c AND  
175-GeV/c.

By A. Schiz, L.A. Fajardo, R. Majka, J.N. Marx, P. Nemethy, L. Rosselet, J. Sandweiss, A.J. Slaughter (Yale U.), C. Ankenbrandt, M. Atac, R. Brown, S. Ecklund, P.J. Gollon, J. Lach, J. MacLachlan, A. Roberts, G. Shen (Fermilab), FERMILAB-PUB-79/78-EXP, Nov 1979. 46pp.

Published in Phys.Rev.D21:3010,1980.

\*\*\*\*\*

\*\*\*\*\*

PHOTOPRODUCTION #87A/#401/#458

\*\*\*\*

1.

INCLUSIVE PRODUCTION OF OMEGA- AND ANTI-OMEGA+ BY K0(L) CARBON INTERACTIONS IN THE ENERGY RANGE 80-GEV/C - 280-GEV/C.

By E.P. Hartouni, M.S. Atiya, S.D. Holmes, B.C. Knapp, W. Lee, R. Seto, W.J.: AFFILIATION = Columbia U. Wisniewski, P. Avery, J. Butler, G. Gladding, M.C. Goodman, M. Lamm, T. O'Halloran, J.J. Russell, A. Wattenberg, J. Wiss (Illinois U., Urbana), M. Binkley, J.P. Cumalat, I. Gaines, M. Gormley, R. Loveless, J. Peoples (Fermilab), 1985. Phys. Rev. Lett. 54 ( 1985) 628-630.

\*\*\*\*

2.

psi-prime PHOTOPRODUCTION AT A MEAN ENERGY OF 150-GeV.

By M. Binkley, J. Butler, J. Cumalat, I. Gaines, M. Gormley, D. Harding, R.L. Loveless, J. Peoples (Fermilab), P. Callahan, G. Gladding, C. Olszewski, A. Wattenberg (Illinois U., Urbana), FERMILAB-PUB-82/83-EXP, Nov 1982. 13pp.

Published in Phys.Rev.Lett.50:302,1983.

\*\*\*\*

3.

J / psi PHOTOPRODUCTION FROM 60-GeV/c TO 300-GeV/c.

By M. Binkley, C. Bohler, J. Butler, J. Cumalat, I. Gaines, M. Gormley, D. Harding, R.L. Loveless, J. Peoples (Fermilab), P. Callahan, G. Gladding, C. Olszewski, A. Wattenberg (Illinois U., Urbana), FERMILAB-PUB-81/77-EXP, Nov 1981. 16pp.

Published in Phys.Rev.Lett.48:73,1982.

\*\*\*\*

4.

PHOTOPRODUCTION OF CHARMED BARYONS.

By J.J. Russell, P. Avery, J. Butler, G. Gladding, M.C. Goodman, T. O'Halloran, A. Wattenberg, J. Wiss (Illinois U., Urbana), M. Binkley, J.P. Cumalat, I. Gaines, M. Gormley, R.L. Loveless, J. Peoples (Fermilab), M.S. Atiya, S.D. Holmes, B.C. Knapp, W. Lee,

W.J. Wisniewski (Columbia U.), 1981.  
Phys. Rev. Lett. 46 ( 1981) 799-802.

\*\*\*\*

5.

HIGH-ENERGY PHOTOPRODUCTION OF THE D\*+.

By P. Avery, J. Wiss, J. Butler, G. Gladding, M.C. Goodman, T. O'Halloran, J.J. Russell, A. Wattenberg (Illinois U., Urbana), M. Binkley, J. Cumalat, I. Gaines, M. Gormley, R.L. Loveless, J. Peoples (Fermilab), M.S. Atiya, S.D. Holmes, B.C. Knapp, W. Lee, W.J. Wisniewski (Columbia U.), 1980.

Phys.Rev.Lett.44 (1980) 1309-1312.

\*\*\*\*

6.

EVIDENCE FOR THE HIGH-ENERGY PHOTOPRODUCTION OF CHARMED MESONS.

By M.S. Atiya, S.D. Holmes, B.C. Knapp, W. Lee, W.J. Wisniewski (Columbia U.), P. Avery, J. Butler, G. Gladding, T. O'Halloran, J.J. Russell, A. Wattenberg, J. Wiss (Illinois U., Urbana), M. Binkley, J.P. Cumalat, I. Gaines, M. Gormley, R.L. Loveless, J. Peoples (Fermilab), 1979.

Phys.Rev.Lett.43 (1979) 414-416.

\*\*\*\*

7.

A STUDY OF THE ZWEIG-OKUBO-IIZUKA RULE IN EXCLUSIVE PHOTOPRODUCTION REACTIONS.

By M.C. Goodman, P. Avery, J. Butler, G. Gladding, T. O'Halloran, J.J. Russell, A. Wattenberg, J. Wiss (Illinois U., Urbana), M. Binkley, J. Cumalat, I. Gaines, M. Gormley, R.L. Loveless, J. Peoples (Fermilab), M.S. Atiya, S.D. Holmes, B.C. Knapp, W. Lee, W.J. Wisniewski (Columbia U.), Print-80-0287 (ILLINOIS), n.d. (recd Apr 1980) 67pp.

Published in Phys.Rev.D22:537,1980.

\*\*\*\*

8.

HIGH-ENERGY PHOTOPRODUCTION OF rho-prime (1600).

By M.S. Atiya, S.D. Holmes, B.C. Knapp, W. Lee, R. Seto, W.J. Wisniewski (Columbia U.), P. Avery, J. Butler, G. Gladding, M.C. Goodman, T. O'Halloran, J.J. Russell, A. Wattenberg, J. Wiss (Illinois U., Urbana), M. Binkley, J.P. Cumalat, I. Gaines, M. Gormley, R.L. Loveless, J. Peoples (Fermilab), Print-79-0928 (ILLINOIS), Sep 1979. 13pp.

Published in Phys.Rev.Lett.43:1691,1979.

\*\*\*\*\*

\*\*\*\*\*

PHOTON SEARCH #95A

\*\*\*\*

1.  
INCLUSIVE  $\pi^0$  PRODUCTION OVER LARGE X - transverse AND X-F RANGES IN  
200-GeV/c, 300-GeV/c AND 400-GeV/c PROTON - BERYLLIUM INTERACTIONS.  
By R.M. Baltrusaitis, M. Binkley, B. Cox, T. Kondo, C.T. Murphy, W. Yang (Fermilab),  
L. Ettliger, M.S. Goodman, J.A.J. Matthews, J. Nagy (Johns Hopkins U.), FERMILAB-  
PUB-79/37-EXP, Jun 1979. 19pp.  
Published in Phys.Rev.Lett.44:122,1980.

\*\*\*\*

2.  
A SEARCH FOR DIRECT PHOTON PRODUCTION IN 200-GeV/c AND 300-GeV/c  
PROTON - BERYLLIUM INTERACTIONS.  
By R.M. Baltrusaitis, M. Binkley, B. Cox, T. Kondo, C.T. Murphy, W. Yang (Fermilab),  
L. Ettliger, M.S. Goodman, J.A.J. Matthews, J. Nagy (Johns Hopkins U.), FERMILAB-  
PUB-79/38-EXP, Aug 1979. 22pp.  
Published in Phys.Lett.88B:372,1979.

\*\*\*\*\*

\*\*\*\*\*

MULTIPARTICLE #110A

\*\*\*\*

1.  
PRODUCTION OF THE  $K^0 K^+ \pi^-$  SYSTEM IN  $\pi^- p$  AND  $K^- p$  INTERACTIONS AT  
50-GEV/C, 100-GEV/C, AND 175-GEV/C.  
By C. Bromberg, J.O. Dickey, G. Fox, R. Gomez, W. Kropac, S.R. Stampke (Cal Tech),  
H. Haggerty, E. Malamud (Fermilab), R. Abrams, R. Delzenero, H. Goldberg, F. Lopez,  
S. Margulies, D. Mcleod, J. Solomon (Illinois U., Chicago), A. Dzierba, F. Fredericksen,  
R. Heinz, J. Krider, H. Martin, C. Peroni, D. Petersen, D. Zieminska (Indiana U.), 1985.  
Phys. Rev. D30 ( 1984) 2411-2414.

\*\*\*\*

2.  
STUDY OF  $K^{*-}$  (890) AND  $K^{*-}$  (1430) PRODUCTION IN THE REACTION  $K^- p \rightarrow$   
ANTI- $K^0 \pi^- p$  AT 100-GEV/C AND 175-GEV/C.  
By C. Bromberg, J. Dickey, G. Fox, W. Kropac, S.R. Stampke (Cal Tech), H. Haggerty,  
E. Malamud (Fermilab), R. Abrams, R. Delzenero, F. Lopez, S. Margulies, D. Mcleod,  
J. Solomon (Illinois U., Chicago), A. Dzierba, F. Fredericksen, R. Heinz, J. Krider,  
H. Martin, D.V. Petersen, D. Zieminska (Indiana U.), 1984.  
Phys. Rev. D29 ( 1984) 2469-2475.

\*\*\*\*



3.

A STUDY OF THE REACTION  $\pi^- p \rightarrow \pi^+ \pi^- n$  AT 100-GeV/c AND 175-GeV/c.

By C. Bromberg, J.O. Dickey, G.C. Fox, R. Gomez, W. Kropac, J. Pine, S.R. Stampke (Cal Tech), H. Haggerty, E. Malamud (Fermilab), R. Abrams, R. Delzenero, H. Goldberg, F. Lopez, S. Margulies, D. McLeod, J. Solomon (Illinois U., Chicago), A. Dzierba, F. Fredericksen, R. Heinz, J. Krider, H. Martin, D. Petersen (Indiana U.), CALT-68-951, n.d. (recd Nov 1983) 81pp.

Published in Nucl.Phys.B232:189,1984.

\*\*\*\*

4.

STUDY OF A2 PRODUCTION IN THE REACTION  $\pi^- p \rightarrow K^0 K^- p$  AT 50-GEV/C, 100-GEV/C, AND 175-GEV/C.

By C. Bromberg, J.O. Dickey, G. Fox, R. Gomez, W. Kropac, J. Pine, S.R. Stampke (Cal Tech), H. Haggerty, E. Malamud (Fermilab), R. Abrams, R. Delzenero, F. Lopez, S. Margulies, D. McLeod, J. Solomon (Illinois U., Chicago), A. Dzierba, F. Fredericksen, R.m. Heinz, J. Krider, H. Martin, D.v. Petersen (Indiana U.), 1983.

Phys. Rev. D27 ( 1983) 1-11.

\*\*\*\*

5.

HIGHLIGHTS OF THE REACTION  $\pi^- p \rightarrow \pi^- \pi^+ n$  AT 100-GeV/c AND 175-GeV/c.

By C. Bromberg, J.O. Dickey, G.C. Fox, R. Gomez, W. Kropac, J. Pine, S.R. Stampke (Cal Tech), H. Haggerty, E. Malamud (Fermilab), R. Abrams, R. Delzenero, H. Goldberg, F. Lopez, S. Margulies, D. McLeod, J. Solomon (Illinois U., Chicago), A. Dzierba, F. Fredericksen, R. Heinz, J. Krider, H. Martin, D. Petersen (Indiana U.), CALT-68-967, n.d. (recd Aug 1983) 16pp.

Published in Phys.Rev.D29:588,1984.

\*\*\*\*

6.

MEASUREMENT OF FORWARD JETS PRODUCED IN HIGH TRANSVERSE MOMENTUM HADRON - PROTON COLLISIONS.

By C. Bromberg, G. Fox, R. Gomez, J. Pine, J. Rohlf, S. Stampke, K. Yung (Cal Tech.), S. Erhan, E. Lorenz, M. Medinnis, P. Schlein (UCLA), V. Ashford, H. Haggerty, R. Juhala, E. Malamud, S. Mori (Fermilab), R. Abrams, R. Delzenero, H. Goldberg, S. Margulies, D. McLeod, J. Solomon, R. Stanek (Illinois U., Chicago), A. Dzierba, W. Kropac (Indiana U.), CALT-68-761, n.d. (recd Aug 1980) 11pp.

Published in Phys.Rev.Lett.45:769,1980.

\*\*\*\*

7.

OBSERVATIONS OF THE D AND E MESONS AND POSSIBLE THREE KAON ENHANCEMENTS IN  $\pi^- p \rightarrow K^0 K^+ \pi^- X$ ,  $K^0 K^+ K^- X$  AT 50-GeV/c AND 100-GeV/c.

By C. Bromberg, J. Dickey, G. Fox, R. Gomez, W. Kropac, J. Pine, S. Stampke (Cal Tech),

H. Haggerty, E. Malamud (Fermilab), R. Abrams, R. Delzenero, H. Goldberg, F. Lopez, S. Margulies, D. McLeod, J. Solomon (Illinois U., Chicago), A. Dzierba, F. Fredericksen, R. Heinz, J. Krider, H. Martin, D. Petersen (Indiana U.), CALT-68-747, n.d. (recd Jul 1980) 61pp.

Published in Phys.Rev.D22:1513,1980.

\*\*\*\*

8.

JET PRODUCTION IN HIGH-ENERGY HADRON - PROTON COLLISIONS.

By C. Bromberg, G. Fox, R. Gomez, J. Pine, J. Rohlf, S. Stampke, K. Yung (Cal Tech), S. Erhan, E. Lorenz, M. Medinnis, P. Schlein (UCLA), V. Ashford, H. Haggerty, R. Juhala, E. Malamud, S. Mori (Fermilab), R. Abrams, R. Delzenero, H. Goldberg, S. Margulies, D. McLeod, J. Solomon, R. Stanek (Illinois U., Chicago), A. Dzierba, W. Kropac (Indiana U.), CALT-68-738, n.d. (recd Jan 1980) 82pp.

Published in Nucl.Phys.B171:1,1980.

\*\*\*\*

9.

STRUCTURE OF EVENTS IN 200-GeV INTERACTIONS ON HYDROGEN AND ALUMINUM TARGETS IN BOTH SOFT AND HARD COLLISIONS.

By C. Bromberg, G. Fox, R. Gomez, J. Pine, J. Rohlf, S. Stampke, K. Yung (Cal Tech), S. Erhan, E. Lorenz, M. Medinnis, P. Schlein (UCLA), V. Ashford, H. Haggerty, R. Juhala, E. Malamud, S. Mori (Fermilab), R. Abrams, R. Delzenero, H. Goldberg, S. Margulies, D. McLeod, J. Solomon, R. Stanek (Illinois U., Chicago), A. Dzierba, W. Kropac (Indiana U.), CALT-68-725, n.d. (recd Jan 1980) 35pp.

Published in Nucl.Phys.B171:38,1980.

\*\*\*\*

10.

EXPERIMENTAL TESTS OF QUANTUM CHROMODYNAMICS IN HIGH p-transverse JET PRODUCTION IN 200-GeV/c HADRON - PROTON COLLISIONS.

By C. Bromberg, G. Fox, R. Gomez, J. Pine, J. Rohlf, S. Stampke, K. Yung (Cal Tech), S. Erhan, E. Lorenz, M. Medinnis, P. Schlein (UCLA), V. Ashford, H. Haggerty, R. Juhala, E. Malamud, S. Mori (Fermilab), R. Abrams, R. Delzenero, H. Goldberg, S. Margulies, D. McLeod, J. Solomon, R. Stanek (Illinois U., Chicago), A. Dzierba, W. Kropac (Indiana U.), CALT-68-724, May 1979. 12pp.

Published in Phys.Rev.Lett.43:565,1979.

\*\*\*\*

11.

PRODUCTION AND CORRELATIONS OF CHARGED PARTICLES WITH HIGH P-transverse IN 200-GeV  $\pi^+$ -p, K<sup>-</sup>-p AND p-p COLLISIONS.

By C. Bromberg, G. Fox, R. Gomez, J. Pine, S. Stampke, K. Yung (Cal Tech), S. Erhan, E. Lorenz, M. Medinnis, J. Rohlf, P. Schlein (UCLA), V. Ashford, H. Haggerty, R. Juhala, E. Malamud, S. Mori (Fermilab), R. Abrams, R. Delzenero, H. Goldberg, S. Margulies,

D. McLeod, J. Solomon, R. Stanek (Illinois U., Chicago), A. Dzierba, W. Kropac (Indiana U.), UCLA-1123, n.d. (recd Apr 1979) 10pp.  
Published in Phys.Rev.Lett.43:561,1979.

\*\*\*\*

12.

JETS PRODUCED IN  $\pi^-$ ,  $\pi^+$  AND PROTON INTERACTIONS AT 200-GeV ON HYDROGEN AND ALUMINUM TARGETS.

By C. Bromberg, G. Fox, R. Gomez, J. Pine, J. Rohlf, S. Stampke, K. Yung (Cal Tech), S. Erhan, E. Lorenz, M. Medinnis, P. Schlein (UCLA), V. Ashford, H. Haggerty, R. Juhala, E. Malamud, S. Mori (Fermilab), R. Abrams, R. Delzenero, H. Goldberg, S. Margulies, D. McLeod, J. Solomon, R. Stanek (Illinois U., Chicago), A. Dzierba, W. Kropac (Indiana U.), CALT-68-694, n.d. (recd Apr 1979) 12pp.  
Published in Phys.Rev.Lett.42:1202,1979.

\*\*\*\*\*

\*\*\*\*\*

INCLUSIVE SCATTERING #118A/451

\*\*\*\*

1.

EXPERIMENTAL STUDY OF THE A-DEPENDENCE OF INCLUSIVE HADRON FRAGMENTATION.

By D.S. Barton, G.W. Brandenburg, W. Busza, T. Dobrowolski, J.I. Friedman, C. Halliwell, H.W. Kendall, T. Lyons, B. Nelson, L. Rosenson, R. Verdier (MIT, LNS), M.T. Chiaradia, C. DeMarzo, C. Favuzzi, G. Germinario, L. Guerriero, P. LaVopa, G. Maggi, F. Posa, G. Selvaggi, P. Spinelli, F. Waldner (Bari U. & INFN, Bari), D. Cutts, R.S. Dulude, B.W. Hughlock, R.E. Lanou, Jr., J.T. Massimo (Brown U.), A.E. Brenner, D.C. Carey, J.E. Elias, P.H. Garbincius, V.A. Polychronakos (Fermilab), J. Nassalski, T. Siemiarczuk (Warsaw, Inst. Nucl. Studies), MIT-LNS/CSC-2, n.d. (recd Sep 1982) 36pp.  
Published in Phys.Rev.D27:2580,1983.

\*\*\*\*

2.

EXPERIMENTAL STUDY OF SINGLE PARTICLE INCLUSIVE HADRON SCATTERING AND ASSOCIATED MULTIPLICITIES.

By A.E. Brenner, D.C. Carey, J.E. Elias, P.H. Garbincius, G. Mikenberg, V.A. Polychronakos (Fermilab), W. Aitkenhead, D.S. Barton, G.W. Brandenburg, W. Busza, T. Dobrowolski, J.I. Friedman, H.W. Kendall, T. Lyons, B. Nelson, L. Rosenson, W. Toy, R. Verdier, L. Votta (MIT, LNS), M.T. Chiaradia, C. DeMarzo, C. Favuzzi, G. Germinario, L. Guerriero, P. Lavopa, G. Maggi, F. Posa, G. Selvaggi, P. Spinelli, F. Waldner (Bari U. & INFN, Bari), R. Meunier (CERN), D. Cutts, R.S. Dulude, R.E. Lanou, Jr., J.T. Massimo (Brown U.), FERMILAB-PUB-81/82-EXP, Dec 1981. 135pp.  
Published in Phys.Rev.D26:1497,1982.

\*\*\*\*

3.

A DETERMINATION OF THE PION AND KAON STRUCTURE FUNCTIONS.

By W. Aitkenhead, D.S. Barton, G.W. Brandenburg, W. Busza, T. Dobrowolski, J.I. Friedman, H.W. Kendall, T. Lyons, B. Nelson, L. Rosenson, W. Toy, R. Verdier, L. Votta (MIT, LNS), M.D. Chiaradia, C. DeMarzo, C. Favuzzi, G. Germinario, L. Guerriero, P. LaVopa, G. Maggi, F. Posa, G. Selvaggi, P. Spinelli, F. Waldner (Bari U. & INFN, Bari), A.E. Brenner, D.C. Carey, J.E. Elias, P.H. Garbincius, G. Mikenberg, V.A. Polychronakos (Fermilab), R. Meunier (CERN), D. Cutts, R.S. Dulude, R.E. Lanou, Jr., J.T. Massimo (Brown U.), FERMILAB-PUB-80/32-EXP, Apr 1980. 15pp. Published in Phys.Rev.Lett.45:157,1980.

\*\*\*\*

4.

EXPERIMENTAL STUDY OF LOW p-transverse HADRON FRAGMENTATION.

By D. Cutts, R.S. Dulude, R.E. Lanou, Jr., J.T. Massimo (Brown U.), R. Meunier (CERN), A.E. Brenner, D.C. Carey, J.E. Elias, P.H. Garbincius, G. Mikenberg, V.A. Polychronakos (Fermilab), M.D. Chiaradia, C. DeMarzo, C. Favuzzi, G. Germinario, L. Guerriero, P. LaVopa, G. Maggi, F. Posa, G. Selvaggi, P. Spinelli, F. Waldner (Bari U. & INFN, Bari), W. Aitkenhead, D.S. Barton, G.W. Brandenburg, W. Busza, T. Dobrowolski, J.I. Friedman, H.W. Kendall, T. Lyons, B. Nelson, L. Rosenson, W. Toy, R. Verdier, L. Votta (MIT, LNS), FERMILAB-PUB-79/44-EXP, Jun 1979. 14pp. Published in Phys.Rev.Lett.43:319,1979.

\*\*\*\*\*

\*\*\*\*\*

30-INCH PI- - P @ 200 #137

\*\*\*\*

1.

STUDY OF CHARGE DEPENDENT BEHAVIOR OF FINAL STATE PARTICLES IN PI- P INTERACTIONS AT 205-GEV/C.

By G.P. Yost, H.H. Bingham, D.M. Chew, B.Y. Dageras, W.B. Fretter, W.R. Graves, J.F. Grivaz, A.D. Johnson, J.A. Kadyk, L. Stutte, F.C. Winkelmann (LBL, Berkeley & UC, Berkeley), D. Bogert, R. Hanft, R. Harris, S. Kahn, C. Pascaud, W.M. Smart (Fermilab), 1982. Phys. Rev. D25 ( 1982) 1181-1203.

\*\*\*\*\*

\*\*\*\*\*

30-INCH P - P&NE @ 300 #161

\*\*\*\*

1.

MULTIPLICITY OF SECONDARY PARTICLES IN INELASTIC PROTON - NEON INTERACTIONS AT 300-GeV/c.

By S.A. Azimov, Sh.V. Inogamov, E.A. Kosonovskii, V.D. Lipin, S.L. Lutpullaev, K. Olimov, K.T. Turdaliev, T.M. Usmanov, A.A. Yuldashev, B.S. Yuldashev (Tashkent, FTI), U. Camerini, A.R. Erwin, W.F. Fry, R.J. Loveless, D. Minette, D.D. Reeder (Wisconsin U., Madison), COO-088-184, n.d. (recd Feb 1981) 35pp.

Published in Phys.Rev.D23:2512,1981.

\*\*\*\*\*

\*\*\*\*\*

MULTIPLICITIES #178

\*\*\*\*

1.

AN EXPERIMENTAL STUDY OF MULTIPARTICLE PRODUCTION IN HADRON - NUCLEUS INTERACTIONS AT HIGH-ENERGY.

By J.E. Elias (Fermilab), W. Busza, C. Halliwell, D. Luckey, W. Swartz, L. Votta, C. Young (MIT, LNS), FERMILAB-PUB-79/47-EXP, Jun 1979. 78pp.

Published in Phys.Rev.D22:13,1980.

\*\*\*\*\*

\*\*\*\*\*

15-FT ANTI-NEUTRINO/H2&NE #180

\*\*\*\*

1.

TOTAL ANTI-NEUTRINOS NUCLEON CHARGED CURRENT CROSS-SECTION IN THE ENERGY RANGE 10-GEV - 50-GEV.

By A.E. Asratian, V.I. Efremenko, A.V. Fedotov, P.A. Gorichev, G.K. Kliger, V.Z. Kolganov, S.P. Kruchinin, M.A. Kubantsev, I.V. Makhlyueva, V.I. Shekelian, V.G. Shevchenko (Moscow, ITEP), V.V. Ammosov, A.G. Denisov, G.S. Gapienko, V.A. Gapienko, V.I. Klyukhin, V.I. Koreshev, P.V. Pitukhin, V.I. Sirotenko, E.A. Slobodyuk, Z.U. Usubov, V.G. Zaets (Serpukhov, IFVE), J.P. Berge, D. Bogert, R. Hanft, J.A. Malko, F.A. Nezzrick, R. Orava (Fermilab), 1984.

Phys. Lett. 137B ( 1984) 122-124.

\*\*\*\*

2.

NEUTRAL CURRENTS IN THE ANTI-NEUTRINO EXPERIMENT AT THE 15-FOOT BUBBLE CHAMBER. (In Russian)

By P.A. Gorichev, V.I. Efremenko, G.K. Kliger, V.Z. Kolganov, S.P. Kruchinin,

M.A. Kubantsev, I.V. Makhlyueva, A.V. Fedotov, V.G. Shevchenko, V.I. Shekelian, V.V. Ammosov, V.A. Gapienko, G.S. Gapienko, A.G. Denisov, V.G. Zaets, V.I. Klyukhin, V.I. Koreshev, P.V. Pitukhin, V.I. Sirotenko, E.A. Slobodyuk, Z.U. Usubov, J.P. Berge, D. Bogert, J. Malko, F.A. Nezirck, R. Orava, R. Hanft, J. Bell, C.T. Coffin, V. Lewis, B.P. Roy, D. Sinclair (Moscow, ITEP & Serpukhov, IFVE & Fermilab & Michigan U.), ITEP-72-1983-mc (microfiche), 1983. 32pp.

Published in Sov.J.Nucl.Phys.39:396,1984.

\*\*\*\*

3.

INCLUSIVE CHARGED CURRENT ANTI-NEUTRINO - NUCLEON INTERACTIONS AT HIGH-ENERGIES.

By Fermilab-IHEP-ITEP-Michigan Collaboration (V.V. Ammosov, et al.), IFVE 81-66, Apr 1981. 37pp.

Published in Nucl.Phys.B199:399,1982.

\*\*\*\*

4.

LOOKING FOR anti-muon-neutrino ---> anti-tau-neutrino OSCILLATIONS.

By A.E. Asratian, V.I. Efremenko, A.V. Fedotov, P.A. Gorichev, V.S. Kaftanov, G.K. Kliger, S.P. Kruchinin, M.A. Kubantsev, I.V. Makhlyueva, V.I. Shekelian, V.G. Shevchenko, J.P. Berge, D. Bogert, R. Endorf, R. Hanft, J.A. Malko, F.A. Nezirck, R. Orava, V.V. Ammosov, A.G. Denisov, P.F. Ermolov, G.S. Gapienko, V.A. Gapienko, V.I. Klyukhin, V.I. Koreshev, P.V. Pitukhin, V.I. Sirotenko, E.A. Slobodyuk, Z.U. Usubov, V.G. Zaets, J. Bell, C.T. Coffin, B.P. Roe, A.A. Seidl, D. Sinclair, E. Wang (Moscow, ITEP & Fermilab & Serpukhov, IFVE & Michigan U.), ITEP-47-1981, 1981. 8pp.

Published in Phys.Lett.105B:301,1981.

\*\*\*\*

5.

OBSERVATION OF  $\mu^+ e^+$  EVENTS IN ANTI-NEUTRINO - NUCLEON INTERACTIONS.

By Fermilab-IHEP-ITEP-Michigan Collaboration (V.V. Ammosov, et al.), IFVE-81-65, Apr 1981. 11pp.

Published in Phys.Lett.106B:151,1981.

\*\*\*\*

6.

QUARK JETS FROM ANTI-NEUTRINO INTERACTIONS. 3. TRANSVERSE STRUCTURE OF THE QUARK JETS.

By J.P. Berge, D. Bogert, R. Endorf, R. Hanft, J.A. Malko, F.A. Nezirck, R. Orava (Fermilab), V.I. Efremenko, A.V. Fedotov, P.A. Gorichev, V.S. Kaftanov, G.K. Kliger, V.Z. Kolganov, S.P. Kruchinin, M.A. Kubantsev, I.V. Makhlyueva, V.I. Shekelian, V.G. Shevchenko (Moscow, ITEP), V.V. Ammosov, A.G. Denisov, G.S. Gapienko, V.A. Gapienko, V.I. Klyukhin, V.I. Koreshev, P.V. Piktukhin, V.I. Sirotenko, E.A. Slobodyuk, Z.U. Usubov,

V.G. Zaets (Serpukhov, IFVE), J. Bell, C.T. Coffin, B.P. Roe, D. Sinclair (Michigan U.),  
FERMILAB-PUB-81/30-EXP, May 1981. 28pp.  
Published in Nucl.Phys.B203:16,1982.

\*\*\*\*

7.

QUARK JETS FROM ANTI-NEUTRINO INTERACTIONS. 2. INCLUSIVE PARTICLE  
SPECTRA AND MULTIPLICITIES IN THE QUARK JETS.

By V.V. Ammosov, A.G. Denisov, G.S. Gapienko, V.A. Gapienko, V.I. Klyukhin, V.I.  
Koreshev, P.V. Pitukhin, V.I. Sirotenko, E.A. Slobodyuk, Z.U. Usubov, V.G. Zaets (Ser-  
pukhov, IFVE), J.P. Berge, D. Bogert, R. Endorf, R. Hanft, J.A. Malko, F.A. Nezrick,  
R. Orava (Fermilab), V.I. Efremenko, A.V. Fedotov, P.A. Gorichev, V.S. Kaftanov, G.K.  
Kliger, V.Z. Kolganov, S.P. Kruchinin, M.A. Kubantsev, I.V. Makhlyueva, V.I. Shekelian,  
V.G. Shevchenko (Moscow, ITEP), J. Bell, C.T. Coffin, B.P. Roe, D. Sinclair (Michigan U.),  
FERMILAB-PUB-80/96-EXP, Sep 1980. 30pp.

Published in Nucl.Phys.B203:1,1982.

(\*Berge first author in journal\*)

\*\*\*\*

8.

AVERAGE TRANSVERSE MOMENTUM BEHAVIOR OF CHARGED HADRONS IN  
CHARGED CURRENT ANTI-NEUTRINO - NUCLEON INTERACTIONS.

By Fermilab-IHEP-ITEP-Michigan Collaboration (V.V. Ammosov, et al.), IFVE-80-125,  
Aug 1980. 12pp.

Published in Phys.Lett.102B:213,1981.

\*\*\*\*

9.

QUARK JETS FROM ANTI-NEUTRINO INTERACTIONS. 1. NET CHARGE AND  
FACTORIZATION IN THE QUARK JETS.

By J.P. Berge, D. Bogert, R. Endorf, R. Hanft, J.A. Malko, G.I. Moffatt, F.A. Nezrick,  
R. Orava, J. Wolfson (Fermilab), V.V. Ammosov, A.G. Denisov, G.S. Gapienko, V.A.  
Gapienko, V.I. Klyukhin, V.I. Koreshev, P.V. Pitukhin, V.I. Sirotenko, E.A. Slobodyuk, Z.U.  
Usubov, V.G. Zaets (Serpukhov, IFVE), V.I. Efremenko, A.V. Fedotov, P.A. Gorichev, V.S.  
Kaftanov, G.K. Kliger, V.Z. Kolganov, S.P. Kruchinin, M.A. Kubantsev, I.V. Makhlyueva,  
V.I. Shekelian, V.G. Shevchenko (Moscow, ITEP), J. Bell, C.T. Coffin, B.P. Roe, A.A.  
Seidl, D. Sinclair, E. Wang (Michigan U.), FERMILAB-PUB-80/62-EXP, Jun 1980. 43pp.

Published in Nucl.Phys.B184:13,1981.

\*\*\*\*

10.

CHARGED CURRENT EVENTS WITH NEUTRAL STRANGE PARTICLES IN  
HIGH-ENERGY ANTI-NEUTRINO INTERACTIONS.

By V.V. Ammosov, A.G. Denisov, P.F. Ermolov, G.S. Gapienko, V.A. Gapienko, V.I.  
Klyukhin, V.I. Koreshev, P.V. Pitukhin, V.I. Sirotenko, E.A. Slobodyuk, Z.U. Usubov,

V.G. Zaets (Serpukhov, IFVE), J.P. Berge, D. Bogert, R. Endorf, R. Hanft, J.A. Malko, G.I. Moffatt, F.A. Nezzrick, R. Orava, J. Wolfson (Fermilab), V.I. Efremenko, A.V. Fedotov, P.A. Gorichev, V.S. Kaftanov, G.K. Kliger, V.Z. Kolganov, S.P. Kruchinin, M.A. Kubantsev, I.V. Makhlyueva, V.I. Shekelian, V.G. Shevchenko (Moscow, ITEP), J. Bell, C.T. Coffin, B.P. Roe, A.A. Seidl, D. Sinclair, E. Wang (Michigan U.), FERMILAB-PUB-80/44-EXP, May 1980. 35pp.

Published in Nucl.Phys.B177:365,1981.

\*\*\*\*

11.

MEASUREMENT OF THE SU(3) SYMMETRY VIOLATION IN THE QUARK JET.

By Fermilab-IHEP-ITEP-Michigan Collaboration (V.V. Ammosov, et al.), FERMILAB-PUB-80/31-EXP, Mar 1980. 7pp.

Published in Phys.Lett.93B:210,1980.

\*\*\*\*

12.

NUCLEAR EFFECTS IN HIGH-ENERGY ANTI-NEUTRINO INTERACTIONS.

By V.I. Efremenko, P.A. Gorichev, V.S. Kaftanov, G.K. Kliger, V.Z. Kolganov, S.P. Kruchinin, M.A. Kubantsev, I.V. Makhlyueva, M.M. Savitskii, V.G. Shevchenko (Moscow, ITEP), J.P. Berge, D. Bogert, R. Endorf, R. Hanft, J. Malko, G. Moffatt, F.A. Nezzrick, R. Orava, W. Smart, J. Wolfson (Fermilab), V.V. Ammosov, A.G. Denisov, G.S. Gapienko, V.A. Gapienko, V.I. Klyukhin, V.I. Koreshev, P.V. Pitukhin, E.A. Slobodyuk, V.I. Sirotenko, A.A. Volkov, V.G. Zaets (Serpukhov, IFVE), J. Bell, C.T. Coffin, W. Louis, B.P. Roe, R.T. Ross, A.A. Seidl, D. Sinclair, E. Wang (Michigan U.), FERMILAB-PUB-80/18-EXP, Feb 1980. 14pp.

Published in Phys.Rev.D22:2581,1980.

\*\*\*\*

13.

NET CHARGE IN DEEP INELASTIC ANTI-NEUTRINO - NUCLEON SCATTERING.

By Fermilab-IHEP-ITEP-Michigan Collaboration (J.P. Berge, et al.), FERMILAB-PUB-79/76-EXP, Nov 1979. 16pp.

Published in Phys.Lett.91B:311,1980.

\*\*\*\*

14.

PROPERTIES OF K<sub>0</sub> AND LAMBDA INCLUSIVE PRODUCTION IN CHARGED CURRENT ANTI-NEUTRINO - NUCLEON INTERACTIONS.

By V. Ammosov, A. Amrakhov, A. Denisov, P. Ermolov, V. Gapienko, V. Klyukhin, V. Koreshev, P. Pitukhin, V. Sirotenko, E. Slobodyuk, V. Zaets (Serpukhov, IFVE), J.P. Berge, D. Bogert, R. Hanft, J. Malko, G. Harigel, G. Moffatt, F. Nezzrick, J. Wolfson (Fermilab), V. Efremenko, A. Fedotov, P. Gorichev, F. Kaftanov, G. Kliger, V. Kolganov, S. Kruchinin, M. Kubantsev, I. Makhlyueva, V. Shekelian, V. Shevchenko (Moscow, ITEP), J. Bell, C.T. Coffin, W. Louis, B.P. Roe, R.T. Ross, D. Sinclair, E. Wang (Michigan U.),



FERMILAB-PUB-79/51-EXP, Jul 1979. 32pp.  
Published in Nucl.Phys.B162:205,1980.

\*\*\*\*

15.

SEARCH FOR A CHARM CHANGING NEUTRAL CURRENT IN ANTI-NEUTRINO INTERACTIONS.

By V. Efremenko, A. Fedotov, P. Gorichev, V. Kaftanov, G. Kliger, V. Kolganov, S. Krutchinin, M. Kubantsev, I. Makhlyueva, V. Shekelian, V. Shevchenko (Moscow, ITEP), J.P. Berge, D. Bogert, R. Hanft, J. Malko, G. Harigel, G. Moffatt, F. Nezirck, J. Wolfson (Fermilab), V. Ammosov, A. Denisov, P. Ermolov, G. Gapienko, V. Gapienko, V. Klyukhin, V. Koreshev, P. Pitukhin, V. Sirotenko, E. Slobodyuk, V. Zaets (Serpukhov, IFVE), J. Bell, C.T. Coffin, W. Louis, B.P. Roe, R.T. Ross, A.A. Seidl, D. Sinclair, E. Wang (Michigan U.), FERMILAB-PUB-79/49-EXP, Jul 1979. 10pp.

Published in Phys.Lett.88B:181,1979.

\*\*\*\*

16.

A SEARCH AT HIGH-ENERGIES FOR ANTI-NEUTRINO - ELECTRON ELASTIC SCATTERING.

By J.P. Berge, D. Bogert, R. Hanft, D. Hamilton, G. Harigel, J.A. Malko, G.I. Moffatt, F.A. Nezirck, J. Wolfson (Fermilab), V.V. Ammosov, A.G. Denisov, P.F. Ermolov, G.S. Gapienko, V.A. Gapienko, V.I. Klyukhin, V.I. Koreshev, P.V. Pitukhin, V.I. Sirotenko, E.A. Slobodyuk, V.G. Zaets (Serpukhov, IFVE), V.I. Efremenko, A.V. Fedotov, P.A. Gorichev, V.S. Kaftanov, G.K. Kliger, V.Z. Kolganov, S.P. Kruchinin, M.A. Kubantsev, I.V. Makhlyueva, V.I. Shekelian, V.G. Shevchenko (Moscow, ITEP), J. Bell, C.T. Coffin, W. Louis, B.P. Roe, R.T. Ross, A.A. Seidl, D. Sinclair, E. Wang (Michigan U.), FERMILAB-Pub-79/27-EXP, Mar 1979. 7pp.

Published in Phys.Lett.84B:357,1979.

\*\*\*\*\*

\*\*\*\*\*

30-INCH P-D @ 100 GeV #194

30-INCH P-D @ 400 GeV #196

\*\*\*\*

1.

SLOW PROTON PRODUCTION FROM NEUTRON TARGETS AT 100-GeV/c AND 400-GeV/c.

By J. Hanlon, A. Brody, T. Kafka, S. Sommars (SUNY, Stony Brook), J.E.A. Lys, C.T. Murphy (Fermilab), S.J. Barish, S. Dado, A. Engler, R.W. Kraemer (Carnegie Mellon U.), SUSB-BCG-79-02, n.d. (recd May 1979) 13pp.

Published in Phys.Rev.D20:2135,1979.

\*\*\*\*

2.

CHARGED PARTICLE MULTIPLICITY DISTRIBUTIONS IN  $p d$  AND  $p n$   
INTERACTIONS AT 400-GeV/c.

By S. Dado, S.J. Barish, A. Engler, R.W. Kraemer (Carnegie Mellon U.), J.E.A. Lys, C.T. Murphy (Fermilab), A. Brody, J. Hanlon, T. Kafka, F. Lo Pinto, S. Sommars (SUNY, Stony Brook), FERMILAB-PUB-79/21-EXP, Feb 1979. 30pp.  
Published in Phys.Rev.D20:1589,1979.

\*\*\*\*\*

\*\*\*\*\*

FORM FACTOR #216

\*\*\*\*

1.

MEASUREMENT OF THE  $\pi$ - FORM-FACTOR.

By E.B. Dally, D.J. Drickey, J.M. Hauptman, C.F. May, D.H. Stork (UCLA), J.A. Poirier, C.A. Rey, R.J. Wojslaw (Notre Dame U.), P.F. Shepard (Pittsburgh U.), A.J. Lennox, J.C. Tompkins, T.E. Toohig, A.A. Wehmann (Fermilab), I.X. Ioan, T.S. Nigmanov, E.N. Tsyganov, A.S. Vodopyanov (Dubna, JINR), 1981.  
Phys. Rev. D24 ( 1981) 1718-1735.

\*\*\*\*\*

\*\*\*\*\*

15-FOOT ENGINEERING RUN #234

\*\*\*\*

1.

250-GeV/c  $\pi$ -  $p$  MULTIPLICITY DISTRIBUTIONS AND THE TWO COMPONENT  
MODEL.

By P.J. Hays, R.N. Diamond, R.K. Clark, S. Hagopian, J.E. Lannutti (Florida State U.), J.P. Berge, D. Bogert, R. Hanft, R. Harris, F.R. Huson, S. Kahn, W. Smart (Fermilab), FSU-HEP-791812, Dec 1979. 30pp.  
Published in Phys.Rev.D23:20,1981.

\*\*\*\*\*

\*\*\*\*\*

HADRON JETS #236A

\*\*\*\*

1.

A MEASUREMENT OF HIGH  $p$ -transverse CORRELATIONS IN 340-GeV/c  $p p$  AND  
280-GeV/c  $\pi$ -  $p$  REACTIONS.

By W.P. Oliver (Tufts U.), P. Limon, P. Mantsch, J.R. Orr, S. Pruss (Fermilab), V. Cook, G. Hicks, P.M. Mockett, J.E. Rothberg, R.W. Williams, K.K. Young (Washington U.,

Seattle), FERMILAB-PUB-83/30-EXP, Mar 1983. 54pp.

Published in Nucl.Phys.B228:439,1983.

\*\*\*\*

2.

A MEASUREMENT OF THE ENERGY DEPENDENCE OF THE INCLUSIVE YIELD OF HIGH p-transverse EVENTS TRIGGERED BY A LARGE SOLID ANGLE CALORIMETER.

By V. Cook, G. Hicks, P.M. Mockett, J.E. Rothberg, R.W. Williams, K.K. Young (Washington U., Seattle), P. Limon, P. Mantsch, J.R. Orr, S. Pruss (Fermilab), W.P. Oliver (Tufts U.), FERMILAB-PUB-80/91-EXP, Nov 1980. 28pp.

Published in Nucl.Phys.B186:219,1981.

\*\*\*\*\*

\*\*\*\*\*

EMULSION/PROTONS AT 300 #237

EMULSION/PI- AT 200 #387

EMULSION/PI- AT 300 #525

\*\*\*\*

1.

A THREE COMPONENT MODEL OF HADRON-NUCLEUS MULTIPARTICLE PRODUCTION.

By R.E. Gibbs (Eastern Washington U.), J.J. Lord, R.L. Rosenblatt, R.J. Wilkes (U. of Washington), rec. 1981, rev. 1982

Phys. Rev. D25 (1982) 2435.

\*\*\*\*

2.

SCALING OF ANGULAR DISTRIBUTIONS IN MULTIPARTICLE PRODUCTION.

By R.E. Gibbs (Eastern Washington U.), J.J. Lord, R.J. Wilkes (U. of Washington)

Phys. Rev. D24 (1981) 1112.

\*\*\*\*

3.

INTERACTIONS OF 200-GeV PIONS IN NUCLEI.

By M.Y. Lee, J.J. Lord, R.J. Wilkes (Washington U., Seattle), VTL-PUB-56, Aug 1978. 42pp.

Published in Phys.Rev.D19:55,1979.

\*\*\*\*\*

\*\*\*\*\*

NEUTRON ELASTIC SCATTERING #248

\*\*\*\*

1.

NEUTRON-PROTON DIFFERENTIAL CROSS SECTIONS IN THE RANGE 70 TO 400 GeV/c.

By C.E. DeHaven, Jr., C.A. Ayre, H.R. Gustafson, L.W. Jones, M.J. Longo, P.V. Ramana

Murthy, T.J. Roberts, M.R. Whalley

Nucl. Phys. B148 (1979) 1.

\*\*\*\*\*

\*\*\*\*\*

NEUTRINO #253

\*\*\*\*

1.

MEASUREMENT OF THE CROSS-SECTION FOR muon-neutrino  $e^- \rightarrow \mu^- \nu_e \bar{\nu}_e$ .

By R.H. Heisterberg, L.W. Mo, T.A. Nunamaker (Virginia Tech.), K.A. Lefler, A. Skuja (Maryland U.), A. Abashian (NSF, Wash., D. C.), N.E. Booth (Oxford U., NPL), C.C. Chang, C. Li, C.H. Wang (Beijing, Inst. High Energy Phys. & Fermilab), Print-79-0685 (VIRGINIA TECH), Aug 1979. 26pp. Submitted to 9th Int. Symp. on Lepton and Photon Interaction at High Energy, Batavia, Ill., Aug 23-29, 1979.

Published in Phys.Rev.Lett.44:635,1980.

\*\*\*\*

2.

AN ELECTROMAGNETIC SHOWER DETECTOR USING PROPORTIONAL WIRE CHAMBERS WITH CATHODE PLANE DELAY LINE READOUT.

By Thomas A. Nunamaker, Richard H. Heisterberg, Luke W. Mo (Virginia Tech.), VPI-HEP-80/03, Feb 1980. 13pp.

Published in Nucl.Instr.Meth.175:331,1980.

\*\*\*\*\*

\*\*\*\*\*

NEUTRINO #254

\*\*\*\*

1.

EXPERIMENTAL COMPARISON OF NEUTRINO, ANTI-NEUTRINO, AND MUON VELOCITIES.

By George R. Kalbfleisch (Fermilab), Neil Baggett, Earle C. Fowler (Purdue U.), Joshua Alspector (Brookhaven), BNL-26055, n.d. (recd May 1979) 14pp.

Published in Phys.Rev.Lett.43:1361,1979.

\*\*\*\*\*

\*\*\*\*\*

PION INCLUSIVE #258

\*\*\*\*

1.

THE INCLUSIVE PRODUCTION OF HADRONS AT HIGH p-transverse IN 200-GeV AND 300-GeV pi- p AND pi- N COLLISIONS.

By H.J. Frisch, N.D. Giokaris, J.M. Green, C. Grosso-Pilcher, M.D. Mestayer,

L. Schachinger, M.J. Shochet, M.L. Swartz (Chicago U., EFI & Chicago U.), P.A. Piroue, B.G. Pope, R.L. Sumner (Princeton U.), EFI-82-32-CHICAGO, n.d. (recd Aug 1982) 93pp. Published in Phys.Rev.D27:1001,1983.

\*\*\*\*

2.

A COMPARISON OF THE PRODUCTION OF CHARGED HADRONS AT LARGE TRANSVERSE MOMENTUM IN pi- p AND p p COLLISIONS.

By N.D. Giokaris, J.M. Green, H.J. Frisch, C. Grosso-Pilcher, M.D. Mestayer, L. Schachinger, M.J. Shochet, M.L. Swartz (Chicago U., EFI & Chicago U.), P.A. Piroue, B.G. Pope, R.L. Sumner (Princeton U.), EFI-81-46-CHICAGO, n.d. (recd Nov 1981) 15pp. Published in Phys.Rev.Lett.47:1690,1981.

\*\*\*\*

3.

THE RELATIVE PRODUCTION OF pi+-, K+-, p AND anti-p AT LARGE TRANSVERSE MOMENTUM IN 200-GeV AND 300-GeV pi- p COLLISIONS.

By H.J. Frisch, N.D. Giokaris, J.M. Green, C. Grosso-Pilcher, M.D. Mestayer, L. Schachinger, M.J. Shochet, M.L. Swartz (Chicago U., EFI & Chicago U.), A.M. Halling, P.A. Piroue, B.G. Pope, R.L. Sumner (Princeton U.), EFI-79-60-CHICAGO, n.d. (recd Feb 1980) 12pp. Published in Phys.Rev.Lett.44:511,1980.

\*\*\*\*\*

\*\*\*\*\*

INCLUSIVE PHOTON #268  
INCLUSIVE NEUTRAL MESON #350

\*\*\*\*

1.

OBSERVATION OF INCLUSIVE omega PRODUCTION AT LARGE TRANSVERSE MOMENTUM.

By G.J. Donaldson, H.A. Gordon, K.W. Lai (Brookhaven), A.V. Barnes, D.J. Mellema, A.V. Tollestrup, R.L. Walker (Cal Tech), O.I. Dahl, R.A. Johnson, A. Ogawa, M. Pripstein, S.R. Shannon (LBL, Berkeley), BNL-26316, Oct 1979. 9pp. Published in Phys.Rev.D21:828,1980.

\*\*\*\*\*

\*\*\*\*\*

HADRON DISSOCIATION #272  
DIRECT PHOTON #629  
DIRECT PHOTON #706

\*\*\*\*

1.

MEASUREMENT OF THE RESONANCE PARAMETERS AND RADIATIVE WIDTH OF THE rho+.

By J. Huston, D. Berg, C. Chandlee, S. Cihangir, B. Collick, T. Ferbel, S. Heppelmann,

T. Jensen, A. Jonckheere, F. Lobkowicz, Y. Makdisi, M. Marshak, M. McLaughlin, C. Nelson, T. Ohshima, E. Peterson, K. Ruddick, P. Slattery, P. Thompson, M. Zielinski (Fermilab & Minnesota U. & Rochester U.), UR-944, n.d. (recd Jun 1986) 13pp.  
Published in Phys.Rev.D33:3199,1986.

\*\*\*\*

2.

A LARGE LIQUID ARGON PHOTON / HADRON CALORIMETER FOR FNAL.

By F. Lobkowicz, G. Balocchi, G. Chandlee, W. Desoi, G. Fanourakis, T. Ferbel, P. Gutierrez, J. Huston, A. Lanaro, J. Mansour, N. Mathur, D. Skow, P. Slattery (Rochester U.), C. Gupt, A.N. Mitra, R.K. Shivpuri (Delhi U.), W. Baker, D. Berg, D. Carey, T. Droege, D. Earty, H. Johnstad, A. Lennox, C.A. Nelson (Fermilab), C. Bromberg, D. Brown, R. Miller (Michigan State U.), K. Heller, S. Heppelmann, T. Joyce, M.L. Marshak, E. Peterson, K. Ruddick, M. Shupe (Minnesota U.), G. Alverson, W. Faessler, D. Garelick, M. Glaubman, S. Hossain, E. Pothier (Northeastern U.), G. Smith, J. Whitmore (Penn State U.), W.E. Cleland, D. Coon, E. Engels, S. Mani, P.F. Shepard, J.A. Thompson (Pittsburgh U.), 1985.

Nucl. Instrum. Methods A235 ( 1985) 332-337.

\*\*\*\*

3.

PRIMAKOFF PRODUCTION OF THE B+ (1235) MESON.

By B. Collick, S. Heppelmann, T. Joyce, Y. Makdisi, M.L. Marshak, E.A. Peterson, K. Ruddick (Minnesota U.), D. Berg, C. Chandlee, S. Cihangir, T. Ferbel, J. Huston, T. Jensen, F. Lobkowicz, T. Ohshima, P. Slattery, P. Thompson, M. Zielinski (Rochester U.), A. Jonckheere, C.A. Nelson (Fermilab), 1985.

Phys. Rev. Lett. 53 ( 1984) 2374-2377.

\*\*\*\*

4.

EVIDENCE FOR THE ELECTROMAGNETIC PRODUCTION OF THE A1.

By M. Zielinski, D. Berg, C. Chandlee, S. Cihangir, T. Ferbel, J. Huston, T. Jensen, F. Lobkowicz, T. Ohshima, P. Slattery, P. Thompson (Rochester U.), B. Collick, S. Heppelmann, M. Marshak, E. Peterson, K. Ruddick (Minnesota U.), A. Jonckheere, C.A. Nelson, Jr. (Fermilab), UR-877, n.d. (recd Apr 1984) 12pp.

Published in Phys.Rev.Lett.52:1195,1984.

\*\*\*\*

5.

NUCLEAR ENHANCEMENT OF pi0 AND eta MESONS PRODUCED AT LARGE TRANSVERSE MOMENTA.

By J. Povlis, J. Biel, C. Bromberg, B. Brown, C. Chandlee, S. Cihangir, S.R.W. Cooper, T. Ferbel, D. Garelick, G. Glass, M. Glaubman, S.R. Han, K. Heller, S. Hossain, J. Huston, A. Jonckheere, J. LeBritton, R.A. Lewis, F. Lobkowicz, M. McLaughlin, M. Marshak, C.A. Nelson, Jr., E. Peterson, E. Pothier, K. Ruddick, M. Shupe, P. Slattery, G.A. Smith (Fermilab & Michigan State U. & Minnesota U. & Northeastern U. & Rochester U.), Print-83-0769,

Aug 1983. 13pp. Contributed to Int. Symp. on Lepton and Photon Interactions at High Energies, Ithaca, N.Y., Aug 4-9, 1983.

Published in Phys.Rev.Lett.51:967,1983.

\*\*\*\*

6.

INCLUSIVE PRODUCTION OF DIRECT PHOTONS IN 200-GeV/c COLLISIONS.

By M. McLaughlin, J. Biel, C. Bromberg, B. Brown, C. Chandlee, S. Cihangir, S.R.W. Cooper, T. Ferbel, D. Garelick, G. Glass, M. Glaubman, S.R. Han, K. Heller, S. Hossain, J. Huston, A. Jonckheere, J. LeBritton, R.A. Lewis, F. Lobkowitz, M. Marshak, C.A. Nelson, Jr., E. Peterson, E. Pothier, J. Povlis, K. Ruddick, M. Shupe, P. Slattery, G.A. Smith (Fermilab & Michigan State U. & Minnesota U. & Northeastern U. & Rochester U.), Print-83-0770, Aug 1983. 13pp.

Contributed to Int. Symp. on Lepton and Photon Interactions at High Energies, Ithaca, N.Y., Aug 4-9, 1983.

Published in Phys.Rev.Lett.51:971,1983.

\*\*\*\*

7.

RADIATIVE WIDTH OF THE  $K^{*+}$  (890).

By C. Chandlee, D. Berg, S. Cihangir, B. Collick, T. Ferbel, S. Heppelmann, J. Huston, T. Jensen, A. Jonckheere, F. Lobkowitz, Y. Makdisi, M. Marshak, M. McLaughlin, C. Nelson, T. Ohshima, E. Peterson, K. Ruddick, P. Slattery, P. Thompson, M. Zielinski (Fermilab & Minnesota U. & Rochester U.), UR-847, n.d. (recd May 1983) 15pp.

Published in Phys.Rev.Lett.51:168,1983.

\*\*\*\*

8.

OPERATIONAL PERFORMANCE OF A LARGE LIQUID ARGON PHOTON CALORIMETER.

By C. Nelson, J. Biel, T. Droege, A. Jonckheere, P. Koehler (Fermilab), D. Berg, C. Chandlee, S. Cihangir, T. Ferbel, J. Huston, T. Jensen, J. LeBritton, F. Lobkowitz, M. McLaughlin, T. Ohshima, P. Slattery, P. Thompson (Rochester U.), C. Bromberg, S.R.W. Cooper (Michigan State U.), B. Collick, S. Heppelmann, Y. Makdisi, M. Marshak, E. Peterson, J. Povlis, K. Ruddick (Minnesota U.), B. Brown, D. Garelick, G. Glass, M. Glaubman, S.R. Han, E. Pothier (Northeastern U.), FERMILAB-PUB-82/41-EXP, Jun 1982. 37pp.

Published in Nucl.Instr.Meth.216:381,1983.

\*\*\*\*

9.

RADIATIVE WIDTH OF THE  $K^{*+}$  (1430).

By FERMILAB-MINNESOTA-ROCHESTER COLLABORATION (S. Cihangir, et al.), 1982. Phys. Lett. 117B ( 1982) 123-125.

\*\*\*\*

10.

RADIATIVE WIDTH OF THE A2 (1310).

By FERMLAB-MINNESOTA-ROCHESTER COLLABORATION (S. Cihangir, et al.),  
1982. Rochester Univ. - UR-824(A) (REC.OCT.82) 11p.

Phys. Lett. 117B ( 1982) 119-122.

\*\*\*\*

11.

EXPERIMENTAL CONSTRAINTS ON  $J(PC) = 1-+, I = 1$ , HYBRID MESONS.

By M. Zielinski, D. Berg, C. Chandlee, S. Cihangir, T. Ferbel, J. Huston, T. Jensen,  
F. Lobkowicz, T. Ohshima, P. Slattery, P. Thompson (Rochester U.), B. Collick, S. Heppel-  
mann, M. Marshak, E. Peterson, K. Ruddick (Minnesota U.), A. Jonckheere, C.A. Nelson, Jr.  
(Fermilab), UR-946, n.d. (recd Jun 1986) 13pp. Contributed to 23rd International Conference  
on High-Energy Physics held in Berkeley, CA, 16-23 July 1986.

Z. Phys. C31 ( 1986) 545-548.

\*\*\*\*

12.

PARTIAL WAVE ANALYSIS OF COHERENT 3 pi PRODUCTION ON NUCLEI AT  
200-GeV.

By M. Zielinski, D. Berg, C. Chandlee, S. Cihangir, T. Ferbel, J. Huston, T. Jensen,  
F. Lobkowicz, T. Ohshima, P. Slattery, P. Thompson (Rochester U.), B. Collick, S. Heppel-  
mann, M. Marshak, E. Peterson, K. Ruddick (Minnesota U.), A. Jonckheere, C.A. Nelson, Jr.  
(Fermilab), UR-881, n.d. (recd Jun 1984) 20pp.

Published in Phys.Rev.D30:1855,1984.

\*\*\*\*

13.

PRODUCTION OF LOW MASS  $K^+$  omega SYSTEMS ON NUCLEI.

By M. Zielinski, D. Berg, C. Chandlee, S. Cihangir, T. Ferbel, J. Huston, T. Jensen,  
F. Lobkowicz, T. Ohshima, P. Slattery, P. Thompson (Rochester U.), B. Collick, S. Heppel-  
mann, M. Marshak, E. Peterson, K. Ruddick (Minnesota U.), A. Jonckheere, C.A. Nelson, Jr.  
(Fermilab), UR-896, n.d. (recd Oct 1984) 10pp.

Published in Phys.Rev.D30:1107,1984.

\*\*\*\*

14.

ELASTIC PION COMPTON SCATTERING.

By R.V. Kowalewski, D. Berg, C. Chandlee, S. Cihangir, T. Ferbel, J. Huston, T. Jensen,  
R. Kornberg, F. Lobkowicz, T. Ohshima, P. Slattery, P. Thompson, M. Zielinski (Rochester  
U.), A. Jonckheere, P.F. Koehler, C.A. Nelson (Fermilab), S. Heppelmann, Y. Makdisi,  
M. Marshak, E. Peterson, K. Ruddick (Minnesota U.), 1984.

Phys. Rev. D29 ( 1984) 1000-1002.

\*\*\*\*



15.

ELASTIC  $\pi^+$  COMPTON SCATTERING.

By M. Zielinski, D. Berg, C. Chandlee, S. Cihangir, T. Ferbel, J. Huston, T. Jensen, R.V. Kowalewski, F. Lobkowicz, M. McLaughlin, T. Ohshima, P. Slattery, P. Thompson (Rochester U.), A. Jonckheere, C.A. Nelson, Jr. (Fermilab), B. Collick, S. Heppelmann, Y. Makdisi, M. Marshak, E. Peterson, K. Ruddick (Minnesota U.), UR-874, n.d. (recd Jan 1984) 8pp.

Published in Phys.Rev.D29:2633,1984.

\*\*\*\*

16.

CALIBRATION AND PERFORMANCE OF A DRIFT CHAMBER SPECTROMETER.

By C. Chandlee, D. Berg, S. Cihangir, B. Collick, T. Ferbel, S. Heppelmann, J. Huston, T. Jensen, A. Jonckheere, T. Joyce, P. Koehler, F. Lobkowicz, Y. Makdisi, M. Marshak, M. McLaughlin, C. Nelson, T. Ohshima, E. Peterson, K. Ruddick, P. Slattery, P. Thompson (Fermilab & Minnesota U. & Rochester U.), UR-848, n.d. (recd May 1983) 25pp.

Published in Nucl.Instr.Meth.215:369,1983.

\*\*\*\*

17.

THREE PION PRODUCTION ON NUCLEI AT 200-GEV.

By M. Zielinski, D. Berg, C. Chandlee, S. Cihangir, T. Ferbel, J. Huston, T. Jensen, F. Lobkowicz, T. Ohshima, P. Slattery, P. Thompson (Rochester U.), B. Collick, S. Heppelmann, M. Marshak, E. Peterson, K. Ruddick (Minnesota U.), A. Jonckheere, C.a. Nelson (Fermilab), 1983.

Z. Phys. C16 ( 1983) 197-204.

\*\*\*\*

18.

RADIATIVE WIDTH OF THE  $K^{*+}$  (890).

By C. Chandlee, D. Berg, S. Cihangir, B. Collick, T. Ferbel, S. Heppelmann, J. Huston, T. Jensen, A. Jonckheere, F. Lobkowicz, Y. Makdisi, M. Marshak, M. McLaughlin, C. Nelson, T. Ohshima, E. Peterson, K. Ruddick, P. Slattery, P. Thompson, M. Zielinski (Fermilab & Minnesota U. & Rochester U.), UR-847, n.d. (recd May 1983) 15pp.

Published in Phys.Rev.Lett.51:168,1983.

\*\*\*\*

19.

RADIATIVE DECAY WIDTH OF THE  $\rho^0$ - MESON.

By T. Jensen, D. Berg, C. Chandlee, S. Cihangir, T. Ferbel, J. Huston, F. Lobkowicz, M. McLaughlin, T. Ohshima, C.A. Nelson, P. Slattery, P. Thompson (Rochester U.), J. Biel, T. Droege, A. Jonckheere, P.F. Koehler (Fermilab), B. Collick, S. Heppelmann, T. Joyce, Y. Makdisi, M. Marshak, E. Peterson, K. Ruddick (Minnesota U.), UR-826, n.d. (recd Jul 1982) 74pp.

Published in Phys.Rev.D27:26,1983.

\*\*\*\*

20.

RADIATIVE WIDTH OF THE RHO- MESON.

By D. Berg, C. Chandlee, S. Cihangir, T. Ferbel, T. Jensen, F. Lobkowitz, C.A. Nelson, T. Ohshima, P. Slattery, P. Thompson (Rochester U.), J. Biel, T. Droege, A. Jonckheere, P.F. Koehler (Fermilab), S. Heppelmann, T. Joyce, Y. Makdisi, M. Marshak, E. Peterson, K. Ruddick, T. Walsh (Minnesota U.), 1980. Phys.Rev.Lett.44 (1980) 706-709.

\*\*\*\*

21.

ENHANCED 200-GEV/C K+ BEAM USING BERYLLIUM FILTER.

By A. Jonckheere, C. Nelson, B. Collick, S. Heppelmann, Y. Makdisi, M. Marshak, E. Peterson, K. Ruddick, D. Berg, C. Chandlee, S. Cihangir, T. Ferbel, J. Huston, T. Jensen, F. Lobkowitz, M. McLaughlin, T. Ohshima, P. Slattery, P. Thompson (Fermilab & Minnesota U. & Rochester U.), FERMILAB-TM-0983, Aug 5, 1980. 13pp. Published in Nucl.Instr.Meth.180:25,1981.

\*\*\*\*

22.

RADIATIVE DECAY OF THE K\*- (890).

By D. Berg, C. Chandlee, S. Cihangir, T. Ferbel, J. Huston, T. Jensen, F. Lobkowitz, C.A. Nelson, Jr., T. Ohshima, P. Slattery, P. Thompson (Rochester U.), J. Biel, T. Droege, A. Jonckheere, P.F. Koehler (Fermilab), S. Heppelmann, T. Joyce, Y. Makdisi, M. Marshak, E. Peterson, K. Ruddick, T. Walsh (Minnesota U.), UR-751, n.d. (recd Aug 1980) 10pp. Published in Phys.Lett.98B:119,1981.

\*\*\*\*\*

\*\*\*\*\*

- DI-LEPTON #288
- DI-HADRON #494
- PARTICLE SEARCH #596
- HIGH MASS PAIRS #605
- PARTICLE SEARCH #608

\*\*\*\*

1.

USE OF A PARALLEL PIPELINED EVENT PROCESSOR IN A MASSIVE DI-MUON EXPERIMENT.

By D.M. Kaplan et al.  
Nucl. Instr. Methods A245 (1986) 338.

\*\*\*\*

2.

A CLOCKED FAST ELECTRONICS TRIGGER FOR HIGH-ENERGY PHYSICS.

By R. Gray and G.P Rutherford.  
Nucl. Instr. Methods A244 (1986) 440.

\*\*\*\*

3.

PI / K / P IDENTIFICATION WITH A LARGE APERTURE RING IMAGING CHERENKOV COUNTER.

By M. Adams, A. Bastin, G. Coutrakon, H. Glass, D. Jaffe, J. Kirz, R. McCarthy (SUNY, Stony Brook), J.R. Hubbard, P. Mangeot, J. Mullie, A. Peisert, J. Tichit (Saclay), R. Bouclier, G. Charpak, J.C. Santiard, F. Sauli (CERN), J. Crittenden, Y. Hsiung, D. Kaplan (Columbia U.), C. Brown, S. Childress, D. Finley, A. Ito, A. Jonckheere, H. Jostlein, L.M. Lederman, R. Orava, S. Smith, K. Sugano, K. Ueno (Fermilab), A. Maki (KEK, Tsukuba), Y. Hemmi, K. Miyake, T. Nakamura, N. Sasao, Y. Sakai, K. Young (Washington U., Seattle & Kyoto U.), R. Gray, R. Plaag, J.E. Rothberg, J. Rutherford, 1984. Nucl. Instrum. Methods 217 (1983) 237-243.

\*\*\*\*

4.

PROGRESS IN CHERENKOV RING IMAGING. Part 2.

By Ph. Mangeot, G. Coutrakon, J.R. Hubbard, J. Mullie, J. Tichit, A. Zadra (CEN Saclay), R. Bouclier, G. Charpak, J. Million, A. Peisert, J.C. Santiard, F. Sauli (CERN), C.N. Brown (Fermilab), D. Finley, H. Glass, J. Kirz, R.L. McCarthy (SUNY/Stony Brook) Nucl. Instr. Meth. 216 (1983) 79.

\*\*\*\*

5.

PROGRESS IN CHERENKOV RING IMAGING. Part 1.

By R. Bouclier, G. Charpak, A. Cattai, G. Million, A. Peisert, J.C. Santiard, F. Sauli (CERN), G. Coutrakon, J.R. Hubbard, Ph. Mangeot, J. Mullie, J. Tichit (CEN Saclay), H. Glass, J. Kirz, R. McCarthy (SUNY/Stony Brook) Nucl. Instr. Meth. 205 (1983) 403.

\*\*\*\*

6.

A NEW LIMIT ON AXION PRODUCTION IN 800-GeV HADRONIC SHOWERS.

By C.N. Brown, W.E. Cooper, D.A. Finley, A.M. Jonckheere, H. Jostlein, D.M. Kaplan, L.M. Lederman, S.R. Smith (Fermilab), K.B. Luk, R. Gray, R.E. Plaag, J.P. Rutherford, P.B. Straub, K.K. Young (Washington U., Seattle), Y. Hemmi, K. Imai, K. Miyake, Y. Sakai, N. Sasao, N. Tamura, T. Yoshida (Kyoto U.), A. Maki (KEK, Tsukuba), J.A. Crittenden, Y.B. Hsiung (Nevis Labs., Columbia U.), M.R. Adams, H.D. Glass, D.E. Jaffe, R.L. McCarthy (SUNY, Stony Brook), J.R. Hubbard, P. Mangeot (Saclay), FERMILAB-PUB-86/103-E, Jul 1986. 12pp. Published in Phys.Rev.Lett.57:2101,1986.

\*\*\*\*

7.

INCLUSIVE HADRONIC PRODUCTION CROSS-SECTIONS MEASURED IN PROTON-NUCLEUS COLLISIONS AT  $S^{1/2} = 27.4$ -GeV.

By J.A. Crittenden, Y.B. Hsiung, D.M. Kaplan (Columbia U.), J.R. Hubbard, P. Mangeot, A. Peisert (Saclay), G. Charpak, F. Sauli (CERN), C.N. Brown, S. Childress, D.A. Finley,

A.S. Ito, A.M. Jonckheere, H. Jostlein, L.M. Lederman, R. Orava, S.R. Smith, K. Sugano, K. Ueno (Fermilab), A. Maki (KEK, Tsukuba), Y. Sakai, Y. Hemmi, K. Miyake, T. Nakamura (Kyoto U.), M.R. Adams, H.D. Glass, D.E. Jaffe, J. Kirz, R.L. McCarthy (SUNY, Stony Brook), R. Gray, R.E. Plaag, J.E. Rothberg, J.P. Rutherford, K.K. Young (Washington U., Seattle), FERMILAB-PUB-86/31-E, Apr 1986. 71pp.

Published in Phys.Rev.D34:2584,1986.

\*\*\*\*

8.

A-DEPENDENCE OF THE INCLUSIVE PRODUCTION OF HADRONS WITH HIGH TRANSVERSE MOMENTA.

By Y.B. Hsiung, Y. Sakai, J.A. Crittenden, M.R. Adams, C.N. Brown, G. Charpak, S. Childress, G. Coutrakon, D.A. Finley, H.D. Glass, R. Gray, Y. Hemmi, J.R. Hubbard, A.S. Ito, D.E. Jaffe, A.M. Jonckheere, H. Jostlein, D.M. Kaplan, J. Kirz, L.M. Lederman, A. Maki, P. Mangeot, R.L. McCarthy, K. Miyake, T. Nakamura, R. Orava, A. Peisert, R.E. Plaag, J.E. Rothberg, J.P. Rutherford, F. Sauli, S.R. Smith, K. Sugano, K. Ueno, K.K. Young (Saclay & CERN & Columbia U. & Fermilab & KEK, Tsukuba & Kyoto U. & SUNY, Stony Brook & Washington U., Seattle), FERMILAB-PUB-85/103-E, Jul 1985. 15pp.

Published in Phys.Rev.Lett.55:457,1985.

\*\*\*\*

9.

UPPER LIMITS ON  $\phi$  PRODUCTION IN 350-GeV/c PROTON - BERYLLIUM COLLISIONS.

By T. Yamanouchi, B.C. Brown, C.N. Brown, R.L. Dixon, A.S. Ito, H. Jostlein, L.M. Lederman, K. Ueno (Fermilab), G.B. Coutrakon, D.A. Finley, R.L. McCarthy (SUNY, Stony Brook), FERMILAB-CONF-80/57-EXP, May 1980. 11pp.

Submitted to 20th Int. Conf. on High Energy Physics, Madison, Wisc., Jul 17-23, 1980.

Published in Phys.Rev.D23:1514,1981.

\*\*\*\*

10.

INCLUSIVE PRODUCTION OF LARGE TRANSVERSE MOMENTUM HADRONS AND HADRON PAIRS.

By H. Jostlein, R.J. Engelman, R.J. Fisk, M.L. Good, A.S. Ito, D.M. Kaplan, R.D. Kephart, R.L. McCarthy, H. Wahl (SUNY, Stony Brook), S.W. Herb, D.C. Hom, L.M. Lederman, J.C. Sens, H.D. Snyder, J.K. Yoh (Columbia U.), J.A. Appel, B.C. Brown, C.N. Brown, W.R. Innes, K. Ueno (Fermilab), 1979.

Phys.Rev.D20 (1979) 53-81.

\*\*\*\*

11.

MEASUREMENT OF THE CONTINUUM OF DIMUONS PRODUCED IN HIGH-ENERGY PROTON - NUCLEUS COLLISIONS.

By A.S. Ito, R.J. Fisk, H. Jostlein, D.M. Kaplan (SUNY, Stony Brook), S.W. Herb,

D.C. Hom, L.M. Lederman, H.D. Snyder, J.K. Yoh (Columbia U.), B.C. Brown, C.N. Brown, W.R. Innes, R.D. Kephart, K. Ueno, T. Yamanouchi (Fermilab), FERMILAB-PUB-80/19-EXP, Feb 1980. 108pp.  
Published in Phys.Rev.D23:604,1981.

\*\*\*\*

12.  
RESONANT AND CONTINUUM DILEPTON PRODUCTION.  
By L.M. Lederman (Columbia U.), 1979.  
Phys.Scr.20 (1979) 227-234.

\*\*\*\*\*

\*\*\*\*\*

PROTON-HELIUM SCATTERING #289

\*\*\*\*

1.  
COHERENT PROTON DIFFRACTION DISSOCIATION ON HELIUM FROM 46-GeV TO 400-GeV.  
By A. Bujak, P. Devenski, E. Jenkins, A. Kuznetsov, E. Malamud, M. Miyajima, B. Morozov, V. Nikitin, P. Nomokonov, Yu. Pilipenko, A. Sandacz, V. Smirnov, R. Yamada (Dubna, JINR & Arizona U. & Fermilab), JINR-E1-81-288, Apr 1981. 28pp.  
Published in Phys.Rev.D23:1911,1981.

\*\*\*\*\*

\*\*\*\*\*

BACKWARD SCATTERING #290

\*\*\*\*

1.  
PION - PROTON BACKWARD ELASTIC SCATTERING BETWEEN 30-GeV/c AND 90-GeV/c.  
By W.F. Baker, D.P. Eartly, R.M. Kalbach, J.S. Klinger, A.J. Lennox, P.A. Polakos, A.E. Pifer, R. Rubinstein (Arizona U. & Fermilab), FERMILAB-PUB-82/78-EXP, Nov 1982. 72pp.  
Published in Phys.Rev.D27:1999,1983.

\*\*\*\*

2.  
MEASUREMENT OF  $\pi^{+-}$  p BACKWARD ELASTIC SCATTERING BETWEEN 30-GeV/c AND 90-GeV/c.  
By W.F. Baker, D.P. Eartly, R.M. Kalbach, J.S. Klinger, A.J. Lennox, P.A. Polakos, A.E. Pifer, R. Rubinstein (Arizona U. & Fermilab), FERMILAB-PUB-79/55-EXP, Jul 1979. 14pp.  
Published in Phys.Rev.Lett.43:1635,1979.

\*\*\*\*\*

\*\*\*\*\*

NEUTRINO #310

\*\*\*\*

1.

YIELD OF PROMPT LIKE SIGN DIMUONS FROM NEUTRINO INTERACTIONS.

By T. Trinko, A. Benvenuti, D. Cline, S.M. Heagy, D.D. Reeder, D.R. Winn (Wisconsin U., Madison), F. Bobisut, P.S. Cooper, M.G.D. Gilchriese, A.K. Mann (Penn U.), M.E. Johnson, R. Lundy, S. Mori, R. Stefanski (Fermilab), P. McIntyre, J.A. Rich (Harvard U.), T.Y. Ling (Ohio State U.), R. Imlay (Rutgers U.), Print-80-0915 (PENN), n.d. (recd Dec 1980) 17pp. Published in Phys.Rev.D23:1889,1981.

\*\*\*\*

2.

NUCLEON STRUCTURE FUNCTIONS FROM MEASUREMENTS OF INELASTIC NEUTRINO AND ANTI-NEUTRINO INTERACTIONS.

By S.M. Heagy, A. Benvenuti, F. Bobisut, D. Cline, P.S. Cooper, M.G.D. Gilchriese, R. Imlay, M.E. Johnson, T.Y. Ling, R. Lundy, A.K. Mann, P. McIntyre, S. Mori, D.D. Reeder, J.A. Rich, R. Stefanski, T. Trinko, D.R. Winn (Fermilab & Harvard U. & Ohio State U. & Penn U. & Rutgers U. & Wisconsin U., Madison), Print-80-0684 (PENN), n.d. (recd Sep 1980) 79pp. Published in Phys.Rev.D23:1045,1981.

\*\*\*\*

3.

RATES AND PROPERTIES OF TRIMUON EVENTS OBSERVED IN HIGH-ENERGY NEUTRINO INTERACTIONS.

By A. Benvenuti, F. Bobisut, D. Cline, P.S. Cooper, M.G.D. Gilchriese, S.M. Heagy, R. Imlay, T.Y. Ling, A.K. Mann, P. McIntyre, S. Mori, D.D. Reeder, J. Rich, R. Stefanski, T. Trinko, D.R. Winn (Fermilab & Harvard U. & Ohio State U. & Penn U. & Rutgers U. & Wisconsin U., Madison), UPR-0064E, Jan 1979. 11pp. Published in Phys.Rev.Lett.42:1024,1979.

\*\*\*\*

4.

MEASUREMENT OF THE STRUCTURE FUNCTIONS IN NEUTRINO AND ANTI-NEUTRINO INELASTIC INTERACTIONS.

By A. Benvenuti, F. Bobisut, D. Cline, P.S. Cooper, M.G.D. Gilchriese, S.M. Heagy, R. Imlay, M.E. Johnson, T.Y. Ling, R. Lundy, A.K. Mann, P. McIntyre, S. Mori, D.D. Reeder, J.A. Rich, R. Stefanski, T. Trinko, D.R. Winn (Fermilab & Harvard U. & Ohio State U. & Penn U. & Rutgers U. & Wisconsin U., Madison), Print-79-0137 (WISCONSIN), n.d. (recd Feb 1979) 11pp. Published in Phys.Rev.Lett.42:1317,1979.

\*\*\*\*\*

\*\*\*\*\*

MUON #319

\*\*\*\*

1.

MULTI - MUON FINAL STATES IN MUON - NUCLEON SCATTERING AT 270-GeV.  
By D. Bauer, J. Kiley, R. Ball, C. Chang, K.W. Chen, M. Ghods, S. Hansen, A. Kotlewski,  
L. Litt, P.F. Schewe (Michigan State U.), A. Van Ginneken (Fermilab), MSU-CSL-70, Jun  
1979. 12pp.

Published in Phys.Rev.Lett.43:1551,1979.

\*\*\*\*\*

\*\*\*\*\*

DI-MUON #326

\*\*\*\*

1.

THE PRODUCTION OF MASSIVE MUON PAIRS IN pi- NUCLEUS COLLISIONS.

By H.B. Greenlee, H.J. Frisch, C. Grosso-Pilcher, K.F. Johnson, M.D. Mestayer,  
L. Schachinger, M.J. Shochet, M.L. Swartz (Chicago U., EFI & Chicago U.), P.A. Piroue,  
B.G. Pope, D.P. Stickland, R.L. Sumner (Princeton U.), EFI-85-44-CHICAGO, n.d. (recd Jul  
1985) 14pp.

Published in Phys.Rev.Lett.55:1555,1985.

\*\*\*\*

2.

ATOMIC MASS DEPENDENCE OF THE TRANSVERSE MOMENTUM DISTRIBUTION  
OF MASSIVE MUON PAIRS FROM 225-GEV/C PI- NUCLEUS COLLISIONS.

By M.L. Swartz, H.J. Frisch, H.B. Greenlee, C. Grosso-Pilcher, K.F. Johnson, M.D. Mes-  
tayer, L. Schachinger, M.J. Shochet (Chicago U., EFI), P.A. Piroue, B.G. Pope, D.P. Stick-  
land, R.L. Sumner (Princeton  
U.), 1984. Phys. Rev. Lett. 53 ( 1984) 32-33.

\*\*\*\*

3.

THE ATOMIC WEIGHT DEPENDENCE OF MUON PAIR PRODUCTION IN 225-GeV/c  
pi-NUCLEUS INTERACTIONS.

By H.J. Frisch, N.D. Giokaris, J.M. Green, H.B. Greenlee, C. Grosso-Pilcher, G. Hanson,  
K.J. Johnson, M.D. Mestayer, L. Schachinger, M.J. Shochet, M.L. Swartz (Chicago U., EFI  
& Chicago U.), P.A. Piroue, B.G. Pope, R.M. Rohm, D.P. Stickland, R.L. Sumner, C. Whit-  
mer (Princeton U.), DOE/ER/03072-2, n.d. (recd Jan 1982) 11pp.

Published in Phys.Rev.D25:2000,1982.

\*\*\*\*\*

---

\*\*\*\*\*

EMULSION/ELECTRONS @ HI E #340

\*\*\*\*

1.

EXPEDIENT TREATMENT OF THREE-DIMENSIONAL ELECTRON - PHOTON  
CASCADE SHOWERS OBSERVED IN THE EMULSION CHAMBERS.

By N. Hotta, M. Sakata, Y. Yamamoto (Konan U.), M. Miyanishi (Nagoya U.), S. Dake  
(Kobe U.), K. Kasahara, T. Yuda (Tokyo U., Cosmic Ray Lab.), K. Mizutani (Saitama U.),  
I. Ohta (Utsunomiya U.), ICR-97-81-13, Nov 1981. 48pp.

Published in Nuovo Cim.70A:73,1982.

\*\*\*\*

2.

THREE-DIMENSIONAL DEVELOPMENT OF CASCADE SHOWERS INDUCED BY  
50-GEV, 100-GEV, AND 300-GEV ELECTRONS.

By N. Hotta, H. Munakata, M. Sakata, Y. Yamamoto (Konan U.), S. Dake, H. Ito,  
M. Miyanishi (Kobe U.), K. Kasahara, T. Yuda (Tokyo U., Cosmic Ray Lab), K. Mizutani  
(Saitama U.), I. Ohta (Utsunomiya U.), 1980.

Phys.Rev.D22 (1980) 1-12.

\*\*\*\*\*

\*\*\*\*\*

30-INCH PBAR-P AT 50 GeV #344

\*\*\*\*

1.

EXPERIMENTAL DETERMINATION OF ELASTIC AND TOPOLOGICAL  
CROSS-SECTIONS IN 48.9-GeV/c anti-P P INTERACTIONS.

By D.E. Zissa, V.E. Barnes, D.D. Carmony, L.J. Dauwe, J.A. Gaidos, L.J. Gutay, A.T.  
Laasanen, R.L. McIlwain, D.H. Miller, L.K. Rangan, R.M. Robertson, R.B. Willmann  
(Purdue U.), F. Turkot (Fermilab), PU-79-484, n.d. (recd Oct 1979) 17pp.

Published in Phys.Rev.D21:3059,1980.

\*\*\*\*\*

\*\*\*\*\*

For INCLUSIVE NEUTRAL MESON #350: See #268

\*\*\*\*\*



\*\*\*\*\*

NEUTRINO #356

\*\*\*\*

1.

OBSERVATION OF PROMPT LIKE SIGN DIMUON PRODUCTION IN NEUTRINO REACTIONS.

By K. Nishikawa, D. Buchholz (Northwestern U.), B.C. Barish, J.F. Bartlett, R. Blair, Y. Chu, K. Kleinknecht, J. Lee, P. Linsay, J. Ludwig, R. Messner, P. Mine, F.J. Sciulli, M. Shaevitz, E. Siskind (Cal Tech), D. Edwards, H. Edwards, H.E. Fisk, Y. Fukushima, G. Krafczyk, D. Nease (Fermilab), A. Bodek, W. Marsh (Rochester U.), O. Fackler (Rockefeller U.), NU 78-53, n.d. (recd Dec 1980) 12pp. Published in Phys.Rev.Lett.46:1555,1981.

\*\*\*\*\*

\*\*\*\*\*

For LAMBDA BETA-DECAY #361: See #008

\*\*\*\*\*

\*\*\*\*\*

PARTICLE SEARCH #369/#610

CHI MESON #673

\*\*\*\*

1.

PERFORMANCE OF A LEAD GLASS SPECTROMETER AT HIGH-ENERGIES.

By A.T. Laasanen, V.E. Barnes, C. Davis, A.F. Garfinkel, J.K. Simmons, J.R. Wilson (Purdue U.), A.A. Wehmann (Fermilab), G.O. Alverson, J.N. Bellinger, H.S. Budd, S. Cihangir, T.L. Graff, S.R. Hahn, I. Karliner, L.J. Koester, W.G. Li, P.T. Lukens, R.D. Sard, M.A. Shupe (Illinois U., Urbana), D.A. Bauer, J.W. Cooper (Penn U.), S. Hossain, R.H. Milburn, W.P. Oliver, R.K. Thornton (Tufts U.), 1985.

Nucl. Instrum. Methods A236 ( 1985) 307-315.

\*\*\*\*

2.

SEARCH FOR NARROW STATES WITH BARYON NUMBER 0 AND STRANGENESS -1 IN anti-p p ---> K+(S) X- AT 5-GeV/c.

By C.M. Jenkins, R.N. Diamond, H. Fenker, J.H. Goldman, V. Hagopian, W. Morris (Florida State U.), L. Kirsch, R. Poster (Brandeis U.), S.U. Chung, R.C. Fernow, H. Kirk, S.D. Protopoulos, D.P. Weygand (Brookhaven), B.T. Meadows (Cincinnati U.), Z. Bar-Yam, J. Dowd, W. Kern, M. Winik (Southeastern Mass. U.), Print-84-0682 (FLORIDA STATE), n.d. (recd Aug 1984) 15pp.

Published in Phys.Rev.D30:1409,1984.



\*\*\*\*

3.

CHARGE DISTRIBUTIONS OF HADRONS ASSOCIATED WITH HADRONIC J / PSI PRODUCTION.

By H.S. Budd, G.O. Alverson, T.L. Graff, S.R. Hahn, L.E. Holloway, L.J. Koester, U.E. Kruse, W.G. Li, P.T. Lukens, R.D. Sard, P. Schoessow (Illinois U., Urbana), D.A. Bauer, D.J. Judd, T.B.W. Kirk, T. Lagerlund, S.H. Pordes, R. Raja, L.D. Spires, A.A. Wehmann (Fermilab), J.W. Cooper (Penn U.), V.E. Barnes, C. Davis, R.E. Davis, A.F. Garfinkel, A.T. Laasanen (Purdue U.), S. Hossain, R.H. Milburn, R.K. Thornton (Tufts U.), 1985.  
Phys. Rev. D31 ( 1985) 1132-1135.

\*\*\*\*

4.

DIFFERENCES BETWEEN PROTON AND PI- INDUCED PRODUCTION OF THE CHARMONIUM CHI STATES.

By D.A. Bauer, T.L. Graff, P.T. Lukens, J.R. Wilson, G.O. Alverson, G. Ascoli, V.E. Barnes, J.N. Bellinger, S. Cihangir, J.W. Cooper, C. Davis, A.F. Garfinkel, L.E. Holloway, I. Karliner, T.B.W. Kirk, L.J. Koester, A.T. Laasanen, W.G. Li, W.P. Oliver, S.H. Pordes, R.D. Sard, J.K. Simmons, R.K. Thornton, A.A. Wehmann (Fermilab & Illinois U., Urbana & Penn U. & Purdue U. & Tufts U.), 1985.  
Phys. Rev. Lett. 54 ( 1985) 753-756.

\*\*\*\*

5.

STRANGE QUARK SUPPRESSION IN 225-GeV/c PI- BE INTERACTIONS.

By P. Schoessow, G.O. Alverson, H.S. Budd, T.L. Graff, S.R. Hahn, L.E. Holloway, L.J. Koester, U.E. Kruse, W.G. Li, P.T. Lukens, R.D. Sard (Illinois U., Urbana), D.A. Bauer, D.J. Judd, T.B.W. Kirk, T. Lagerlund, S.H. Pordes, R. Raja, L.D. Spires, A.A. Wehmann (Fermilab), J.W. Cooper (Penn U.), V.E. Barnes, C. Davis, A.F. Garfinkel, A.T. Laasanen (Purdue U.), S. Hossain, R.H. Milburn, W.P. Oliver, R.K. Thornton (Tufts U.), 1983.  
Phys. Rev. D28 ( 1983) 1773-1774.

\*\*\*\*

6.

PRODUCTION OF PHOTONS ASSOCIATED WITH THE PSI BY 217-GEV/C PI-MESONS.

By T.B.W. Kirk, R. Raja (Fermilab), M. Goodman, W.A. Loomis, A.L. Sessoms, C. Tao, R. Wilson (Harvard U.), G.O. Alverson, G. Ascoli, D.E. Bender, J.W. Cooper, L.E. Holloway, L.J. Koester, U.E. Kruse, W.W. Mackay, R.D. Sard, M.A. Shupe, E.B. Smith (Illinois U., Urbana), J. Davies, T.W. Quirk, W.S.C. Williams (Oxford U., NPL), R.K. Thornton, R.H. Milburn (Tufts U.), 1979.  
Phys.Rev.Lett.42 (1979) 619-622

\*\*\*\*\*

\*\*\*\*\*

For 15-FOOT NEUTRINO/H2@NE #380: See #53A

\*\*\*\*\*

\*\*\*\*\*

PARTICLE SEARCH #382

\*\*\*\*

1.

INTRA-NUCLEAR CASCADING IN DEEP INELASTIC SCATTERING OF 150 GeV MUONS IN EMULSION.

By L. Hand, D. Petersen, H. Scott, K. Gottfried (Cornell U., LNS), M. Atac, A.L. Read, L. Voyvodic (Fermilab), W. Czyz, B. Furmanska, R. Holynski, A. Jurak, S. Krzywdzinski, G. Nowak, H. Wilczynski, W. Wolter, B. Wosiek (Cracow, INP-Exp), R. Ball, J. Kiley, A. Kotlewski, L. Litt (Michigan State U.), J. Florian, J.J. Lord, R.J. Wilkes (Washington U., Seattle).

Zeit. Phys. C1 (1979) 139.

\*\*\*\*

2.

A TECHNIQUE FOR LOCATING MUON DEEP INELASTIC SCATTERING EVENTS IN A NUCLEAR EMULSION TARGET.

By L. Hand, D. Petersen, H. Scott (Cornell U., LNS), M. Atac, A.L. Read, L. Voyvodic (Fermilab), A. Dwurazny, B. Furmanska, R. Holynski, A. Jurak, S. Krzywdzinski, G. Nowak, H. Wilczynski, W. Wolter, B. Wosiek (Cracow, INP-Exp), R. Ball, J. Kiley, A. Kotlewski, L. Litt (Michigan State U.), J. Florian, J.J. Lord, R.J. Wilkes (Washington U., Seattle), CLNS-419, Mar 1979. 38pp.

Nucl.Instrum.Methods 167 (1979) 261-272 and Cornell Univ Ithaca - CLNS-419 (79,-REC.APR) 38p.

\*\*\*\*\*

\*\*\*\*\*

For EMULSION/PI @ 200 #387: See #237

\*\*\*\*\*

\*\*\*\*\*

15-FOOT ANTI-NEUTRINO/H2&NE #388

\*\*\*\*

1.

ANTI-MUON-NEUTRINO NUCLEON CHARGED CURRENT TOTAL CROSS-SECTION FOR 5-GeV to 250-GeV.

By G.N. Taylor, R.J. Cence, F.A. Harris, M.D. Jones, S.I. Parker, M.W. Peters, V.Z. Peterson, V.J. Stenger (Hawaii U.), H.C. Ballagh, H.H. Bingham, T. Lawry, J. Lys, M.L. Stevenson, G.P. Yost (UC, Berkeley & LBL, Berkeley), D. Gee, F.R. Huson, E. Schmidt, W. Smart, E. Treadwell (Fermilab), 1983.

Phys. Rev. Lett. 51 ( 1983) 739-742.

\*\*\*\*

2.

LIMITS ON THE NEUTRINO OSCILLATIONS anti-muon neutrino ---> anti-electron-neutrino AND anti-muon-neutrino ---> anti-tau-neutrino USING A NARROW BAND BEAM.

By G.N. Taylor, R.J. Cence, F.A. Harris, M.D. Jones, S.I. Parker, M.W. Peters, V.Z. Peterson, V.J. Stenger (Hawaii U.), H.C. Ballagh, H.H. Bingham, T. Lawry (UC, Berkeley & LBL, Berkeley), J. Lys (UC, Berkeley & LBL, Berkeley & Hawaii U.), M.L. Stevenson, G.P. Yost (UC, Berkeley & LBL, Berkeley), D. Gee, F.R. Huson, E. Schmidt, W. Smart, E. Treadwell (Fermilab), UH-511-474-82, Oct 1982. 20pp.

Published in Phys.Rev.D28:2705,1983.

\*\*\*\*\*

\*\*\*\*\*

MUON #391

\*\*\*\*

1.

MEASUREMENT OF THE NUCLEON STRUCTURE FUNCTION IN IRON USING 215-GeV AND 93-GeV MUONS.

By P.D. Meyers, A.R. Clark, K.J. Johnson, L.T. Kerth, S.C. Loken, T.W. Markiewicz, W.H. Smith, M. Strovink, W.A. Wenzel (UC, Berkeley & LBL, Berkeley), R.P. Johnson, C. Moore, M. Mugge, R.E. Shafer (Fermilab), G.D. Gollin, F.C. Shoemaker, P. Surko (Princeton U.), LBL-20047, Jul 1985. 145pp.

Published in Phys.Rev.D34:1265,1986.

\*\*\*\*

2.

MEASUREMENT OF THE NUCLEON STRUCTURE FUNCTION IN IRON USING 215-GeV AND 93-GeV MUONS.

By A.R. Clark, K.J. Johnson, L.T. Kerth, S.C. Loken, T.W. Markiewicz, P.D. Meyers, W.H. Smith, M. Strovink, W.A. Wenzel (UC, Berkeley & LBL, Berkeley), R.P. Johnson, C. Moore, M. Mugge, R.E. Shafer (Fermilab), G.D. Gollin, F.C. Shoemaker, P. Surko

(Princeton U.), LBL-16286, Jul 1983. 16pp.  
Contributed to 1983 Int. Symp. on Lepton and Photon Interactions at  
High Energies, Ithaca, N.Y., Aug 4-9, 1983.  
Published in Phys.Rev.Lett.51:1826,1983.

\*\*\*\*

3.

STUDY OF RARE PROCESSES INDUCED BY 209-GeV MUONS.

By W.H. Smith, A.R. Clark, K.J. Johnson, L.T. Kerth, S.C. Loken, T.W. Markiewicz, P.D. Meyers, M. Strovink, W.A. Wenzel (UC, Berkeley & LBL, Berkeley), R.P. Johnson, C. Moore, M. Mugge, R.E. Shafer (Fermilab), G.D. Gollin, F.C. Shoemaker, P. Surko (Princeton U.), LBL-13422, Oct 1981. 102pp.  
Published in Phys.Rev.D25:2762,1982.

\*\*\*\*

4.

CHARM PRODUCTION BY MUONS AND ITS ROLE IN SCALE NONINVARIANCE.

By G.D. Gollin, F.C. Shoemaker, P. Surko (Princeton U.), A.R. Clark, K.J. Johnson, L.T. Kerth, S.C. Loken, T.W. Markiewicz, P.D. Meyers, W.H. Smith, M. Strovink, W.A. Wenzel (UC, Berkeley & LBL, Berkeley), R.P. Johnson, C. Moore, M. Mugge, R.E. Shafer (Fermilab), LBL-12086, Mar 1981. 113pp.  
Published in Phys.Rev.D24:559,1981.

\*\*\*\*

5.

LIMIT ON BOTTOM HADRON PRODUCTION BY 209-GeV MUONS.

By A.R. Clark, K.J. Johnson, L.T. Kerth, S.C. Loken, T.W. Markiewicz, P.D. Meyers, W.H. Smith, M. Strovink, W.A. Wenzel (UC, Berkeley & LBL, Berkeley), R.P. Johnson, C. Moore, M. Mugge, R.E. Shafer (Fermilab), G.D. Gollin, F.C. Shoemaker, P. Surko (Princeton U.), LBL-11543, Dec 1980. 13pp.  
Submitted to Phys. Rev. Lett.

\*\*\*\*

6.

LIMIT ON UPSILON MUOPRODUCTION AT 209-GeV.

By A.R. Clark, K.J. Johnson, L.T. Kerth, S.C. Loken, T.W. Markiewicz, P.D. Meyers, W.H. Smith, M. Strovink, W.A. Wenzel (UC, Berkeley & LBL, Berkeley), R.P. Johnson, C. Moore, M. Mugge, R.E. Shafer (Fermilab), G.D. Gollin, F.C. Shoemaker, P. Surko (Princeton U.), LBL-11009, Jun 1980. 10pp.  
Published in Phys.Rev.Lett.45:686,1980.

\*\*\*\*

7.

LOWER LIMIT ON NEUTRAL HEAVY MUON MASS.

By A.R. Clark, K.J. Johnson, L.T. Kerth, S.C. Loken, T.W. Markiewicz, P.D. Meyers, W.H. Smith, M. Strovink, W.A. Wenzel (UC, Berkeley & LBL, Berkeley), R.P. Johnson,

C. Moore, M. Mugge, R.E. Shafer (Fermilab), G.D. Gollin, F.C. Shoemaker, P. Surko (Princeton U.), LBL-11663, Nov 1980. 11pp.  
Published in Phys.Rev.Lett.46:299,1981.

\*\*\*\*

8.  
POLARIZATION OF MUOPRODUCED J / psi (3100).  
By A.R. Clark, K.J. Johnson, L.T. Kerth, S.C. Loken, T.W. Markiewicz, P.D. Meyers, W.H. Smith, M. Strovink, W.A. Wenzel (UC, Berkeley & LBL, Berkeley), R.P. Johnson, C. Moore, M. Mugge, R.E. Shafer (Fermilab), G.D. Gollin, F.C. Shoemaker, P. Surko (Princeton U.), LBL-11562, Oct 1980. 12pp.  
Published in Phys.Rev.Lett.45:2092,1980.

\*\*\*\*

9.  
MEASUREMENT OF THE CHARM STRUCTURE FUNCTION AND ITS ROLE IN SCALE NONINVARIANCE.  
By A.R. Clark, K.J. Johnson, L.T. Kerth, S.C. Loken, T.W. Markiewicz, P.D. Meyers, W.H. Smith, M. Strovink, W.A. Wenzel (UC, Berkeley & LBL, Berkeley), R.P. Johnson, C. Moore, M. Mugge, R.E. Shafer (Fermilab), G.D. Gollin, F.C. Shoemaker, P. Surko (Princeton U.), LBL-10879, May 1980. 13pp.  
Published in Phys.Rev.Lett.45:1465,1980.

\*\*\*\*

10.  
OBSERVATION OF J / psi (3100) PRODUCTION BY MUONS.  
By A.R. Clark, K.J. Johnson, L.T. Kerth, S.C. Loken, T.W. Markiewicz, P.D. Meyers, W.H. Smith, M. Strovink, W.A. Wenzel (UC, Berkeley & LBL, Berkeley), R.P. Johnson, C. Moore, M. Mugge, R.E. Shafer (Fermilab), G.D. Gollin, F.C. Shoemaker, P. Surko (Princeton U.), LBL-9125, May 1979. 9pp.  
Published in Phys.Rev.Lett.43:187,1979.

(\*Title changed in journal\*)

\*\*\*\*\*

\*\*\*\*\*

HADRON JETS #395/#609

\*\*\*\*

1.  
MEASUREMENT OF THE DIJET CROSS-SECTION IN 400-GEV/C P P INTERACTIONS.  
By M.W. Arenton, H.F. Chen, M. Corcoran, L. Cornell, W.R. Ditzler, M. Dris, A.R. Erwin, T. Fields, J. Fleischman, E. Gardella, R. Gustafson, M. Harrison, M.A. Hasan, C. Hitzman, K. Johns, A. Kanofsky, W. Kononenko, C.E. Kuehn, H.E. Miettinen, C.J. Naudet, K.S. Nelson, J. Rice, J.B. Roberts, B. Robinson, W. Selove, G. Theodosiou, M.A. Thompson, B. Yost (Argonne & Fermilab & Lehigh U. & Michigan U. & Penn U. & Rice U. &

Wisconsin U., Madison), 1985.

Phys. Rev. D31 ( 1985) 984-995 and ( 84,rec.jul.) 15p.

\*\*\*\*

2.

EVIDENCE FOR HIGHER TWIST EFFECTS IN HARD  $\pi p$  COLLISIONS AT 200-GeV/c.

By E-609 Collaboration: M.W. Arenton, H.F. Chen, M. Corcoran, L. Cormell, W.R. Ditzler, M. Dris, A.R. Erwin, T. Fields, J. Fleischman, E. Gardella, R. Gustafson, M. Harrison, M.A. Hasan, C. Hitzman, K. Johns, A. Kanofsky, W. Kononenko, C.E. Kuehn, H.E. Miettinen, C.J. Naudet, K.S. Nelson, J. Rice, J.B. Roberts, B. Robinson, W. Selove, G. Theodosiou, M.A. Thompson, B. Yost (Argonne & Fermilab & Lehigh U. & Michigan U. & Penn U. & Rice U. & Wisconsin U., Madison), 1985. Print-85-0711 (RICE), n.d. (recd Sep 1985) 11pp. Published in Phys.Rev.Lett.56:808,1986.

\*\*\*\*

3.

MEASUREMENT OF THE SINGLE JET INVARIANT CROSS-SECTION AT FERMILAB.

By E609 Collaboration: M.W. Arenton, H.F. Chen, M. Corcoran, L. Cormell, W.R. Ditzler, M. Dris, A.R. Erwin, T. Fields, J. Fleischman, E. Gardella, R. Gustafson, M. Harrison, M.A. Hasan, C. Hitzman, K. Johns, A. Kanofsky, W. Kononenko, C.E. Kuehn, H.E. Miettinen, C.J. Naudet, K.S. Nelson, J. Rice, J.B. Roberts, B. Robinson, W. Selove, G. Theodosiou, M.A. Thompson, B. Yost (Argonne & Fermilab & Lehigh U. & Michigan U. & Penn U. & Rice U. & Wisconsin U., Madison), 1985. UPR-132E, Sep 1984. 14pp. Phys. Lett. 150B ( 1985) 322-326 and Pennsylvania Univ. Philadelphia - UPR-132E (84,REC.DEC.) 14 P. (500600).

\*\*\*\*

4.

MEASUREMENT OF THE DIJET CROSS-SECTION IN 400-GeV  $p p$  COLLISIONS.

By E-609 Collaboration: By M.W. Arenton, H.F. Chen, M. Corcoran, L. Cormell, W.R. Ditzler, M. Dris, A.R. Erwin, T. Fields, J. Fleischman, E. Gardella, R. Gustafson, M. Harrison, M.A. Hasan, C. Hitzman, K. Johns, A. Kanofsky, W. Kononenko, C.E. Kuehn, H.E. Miettinen, C.J. Naudet, K.S. Nelson, J. Rice, J.B. Roberts, B. Robinson, W. Selove, G. Theodosiou, M.A. Thompson, B. Yost (Argonne & Fermilab & Lehigh U. & Michigan U. & Penn U. & Rice U. & Wisconsin U., Madison), 1985. ANL-HEP-PR-84-33, n.d. (recd Jun 1984) 16pp.

Published in Phys.Rev.Lett.53:1988,1984.

\*\*\*\*

5.

EVIDENCE THAT HIGH  $p$ -transverse JET PAIRS GIVE DIRECT INFORMATION ON PARTON PARTON SCATTERING.

By M.D. Corcoran, L. Cormell, M. Dris, A.R. Erwin, P.J. Gollon, A. Kanofsky, W. Kononenko, B. Robinson, W. Selove, M. Thompson, B. Yost (Fermilab & Lehigh U. &

Penn U. & Wisconsin U., Madison), COO-088-105, Aug 1979. 16pp.  
Published in Phys.Rev.Lett.44:514,1980.

\*\*\*\*

6.

A TWO JET CALORIMETER EXPERIMENT AT FERMILAB.

By M.D. Corcoran, L. Cornell, M. Dris, A.R. Erwin, P.J. Gollon, A. Kanofsky, W. Kononenko, B. Robinson, W. Selove, M. Thompson, B. Yost (Wisconsin U., Madison & Penn U. & Fermilab & Lehigh U.), 1979. Phys.Scr.19 (1979) 95-98.

\*\*\*\*

7.

A STUDY OF PARTON TRANSVERSE MOMENTUM USING JETS FROM HADRON INTERACTIONS.

By M.D. Corcoran, A.R. Erwin, M.A. Thompson (Wisconsin U., Madison), L. Cornell, M. Dris, W. Kononenko, B. Robinson, W. Selove, B. Yost (Penn U.), A. Kanofsky (Lehigh U.), P.J. Gollon (Fermilab), Print-79-0718 (WISCONSIN), n.d. (recd Sep 1979) 40pp.  
Published in Phys.Rev.D21:641,1980.

\*\*\*\*\*

\*\*\*\*\*

HADRON DISSOCIATION #396

\*\*\*\*

1.

CHARGED MULTIPLICITIES OF HIGH MASS DIFFRACTIVE  $\pi^{+-}$ ,  $K^{+-}$ , AND  $P^{+-}$  STATES.

By R.L. Cool, K. Goulianos, S.L. Segler, H. Sticker, S.N. White (Rockefeller U.), 1982.  
Phys. Rev. Lett. 48 ( 1982) 1451-1454.

\*\*\*\*

2.

UNIVERSALITY OF CHARGED MULTIPLICITY DISTRIBUTIONS.

By K. Goulianos, H. Sticker and S.N. White (Rockefeller U.)1982.  
Phys. Rev. Lett. 48 (1982) 1954.

\*\*\*\*

3.

DIFFRACTION DISSOCIATION OF  $\pi^{+-}$ ,  $K^{+-}$ , AND  $P^{+-}$  AT 100-GEV/C AND 200-GEV/C.

By R.L. Cool, K. Goulianos, S.L. Segler, H. Sticker, S.N. White (Rockefeller U.), 1981.  
Phys. Rev. Lett. 47 ( 1981) 701-704.

\*\*\*\*

4.

ELASTIC SCATTERING OF  $p^{+-}$ ,  $\pi^{+-}$  AND  $K^{+-}$  ON PROTONS AT HIGH HIGH-ENERGIES AND SMALL MOMENTUM TRANSFER.

By R.L. Cool, K. Goulianos, S.L. Segler, H. Sticker, S.N. White (Rockefeller U.).  
Phys.Rev.D24:2821,1981.

---



\*\*\*\*\*

MUON #398

\*\*\*\*

1.

DIFFRACTIVE PRODUCTION OF VECTOR MESONS IN MUON PROTON SCATTERING AT 150-GEV AND 100-GEV.

By W.D. Shambroom, R. Wilson, B.A. Gordon, W.A. Loomis, F.M. Pipkin, S.H. Pordes, L.J. Verhey (Harvard U.), H.L. Anderson, R.M. Fine, R.H. Heisterberg, H.S. Matis, L.W. Mo, L.C. Myriantopoulos, S.C. Wright (Chicago U., EFI), W.R. Francis, R.G. Hicks, T.B.W. Kirk (Illinois U., Urbana), V.K. Bharadwaj, N.E. Booth, G.I. Kirkbride, T.W. Quirk, A. Skuja, W.S.C. Williams (Oxford U., NPL), 1982.

Phys. Rev. D26 ( 1982) 1-22.

\*\*\*\*

2.

PRODUCTION RATIOS FOR HADRONS PRODUCED IN MUON PROTON INELASTIC SCATTERING AT 219-GEV.

By J. Proudfoot, N.E. Booth, T.W. Quirk, W.S.C. Williams (Oxford U.), H.L. Anderson, W.W. Kinnison, H.S. Matis, L.C. Myriantopoulos, S.C. Wright (Chicago U., EFI), W.R. Francis (Michigan State U.), B.A. Gordon, W.A. Loomis, F.M. Pipkin, A.L. Sessoms, W.D. Shambroom, C. Tao, R. Wilson (Harvard U.), R.G. Hicks (Illinois U., Urbana), T.B.W. Kirk (Fermilab), L.W. Mo (Virginia Tech & Virginia Tech), A. Skuja (Maryland U.), 1981.

Phys. Rev. D24 ( 1981) 2012-2015.

\*\*\*\*

3.

COHERENT PRODUCTION OF RHO MESONS IN MUON CARBON SCATTERING AT 150-GEV AND 100-GEV.

By W.D. Shambroom, B.A. Gordon, W.A. Loomis, F.M. Pipkin, S.H. Pordes, L.J. Verhey, R. Wilson (Harvard U.), H.L. Anderson, R.M. Fine, R.H. Heisterberg, H.S. Matis, L.W. Mo, L.C. Myriantopoulos, S.C. Wright (Chicago U., EFI), W.R. Francis, R.G. Hicks, T.B.W. Kirk (Illinois U., Urbana), V.K. Bharadwaj, N.E. Booth, G.I. Kirkbride, T.W. Quirk, A. Skuja, W.S.C. Williams (OXFORD U, NPL), 1981.

Phys. Rev. D24 ( 1981) 775-777.

\*\*\*\*

4.

MUOPRODUCTION OF NEUTRAL STRANGE HADRONS AT 225-GEV.

By R.G. Hicks, H.L. Anderson, N.E. Booth, W.R. Francis, B.A. Gordon, W.W. Kinnison, T.B.W. Kirk, W.A. Loomis, H.S. Matis, L.W. Mo, L.C. Myriantopoulos, F.M. Pipkin, J. Proudfoot, T.W. Quirk, A.L. Sessoms, W.D. Shambroom, A. Skuja, M.A. Staton, C. Tao, W.S.C. Williams, R. Wilson, S.C. Wright (Harvard U. & Chicago U., EFI & Fermilab & Illinois U., Urbana & Maryland U. & Michigan State U. & Oxford U., NPL & Virginia Tech & Virginia Tech), 1980. Phys.Rev.Lett.45 (1980) 765-768.

\*\*\*\*

5.

TRANSVERSE MOMENTUM AND ANGULAR DISTRIBUTIONS OF HADRONS IN MUON PROTON SCATTERING AND TESTS OF QUANTUM CHROMODYNAMICS. By C. Tao, R.G. Hicks, H.L. Anderson, N.E. Booth, W.R. Francis, B.A. Gordon, W.W. Kinnison, T.B.W. Kirk, W.A. Loomis, H.S. Matis, L.W. Mo, L.C. Myrianthopoulos, F.M. Pipkin, J. Proudfoot, T.W. Quirk, A.L. Sessoms, W.D. Shambroom, A. Skuja, M.A. Staton, W.S.C. Williams, R. Wilson, S.C. Wright (Harvard U. & Chicago U., EFI & Fermilab & Illinois U., Urbana & Maryland U. & Michigan State U. & Oxford U., NPL & Virginia Tech), 1980.

Phys.Rev.Lett.44 (1980) 1726-1729.

\*\*\*\*

6.

A MEASUREMENT OF THE NUCLEON STRUCTURE FUNCTIONS.

By H.L. Anderson, R.M. Fine, R.H. Heisterberg, W.W. Kinnison, H.S. Matis, L.W. Mo, L.C. Myrianthopoulos, S.C. Wright (Chicago U., EFI & Chicago U.), B.A. Gordon, W.A. Loomis, F.M. Pipkin, S.H. Pordes, A.L. Sessoms, W.D. Shambroom, C. Tao, L.J. Verhey, Richard Wilson (Harvard U.), W.R. Francis, R.G. Hicks, T.B.W. Kirk (Illinois U., Urbana), V.K. Bharadwaj, N.W. Booth, G.I. Kirkbride, J. Proudfoot, T.W. Quirk, A. Skuja, M.A. Staton, S.C. Williams (Oxford U., NPL), FERMILAB-PUB-79/30-EXP, May 1979. 132pp.

Published in Phys.Rev.D20:2645,1979.

\*\*\*\*\*

\*\*\*\*\*

PARTICLE SEARCH #400

\*\*\*\*

1.

A HIGHLY COMPACT MULTIWIRED PROPORTIONAL CHAMBER SYSTEM WITH 80-MICROMETER RESOLUTION.

By P. Coteus, J. Cumalat (Colorado U.), M. Binkley, K. Kephart, C. Lindenmeyer, J. Peoples (Fermilab), E. Erdos (Illinois U., Urbana), 1984.

Nucl. Instrum. Methods 222 ( 1984) 474-478.

\*\*\*\*\*

\*\*\*\*\*

For PHOTOPRODUCTION #401: See #87A

\*\*\*\*\*

\*\*\*\*\*

For PARTICLE PRODUCTION #415: See #008

\*\*\*\*\*

\*\*\*\*\*

NEUTRON-NUCLEUS INELASTIC #438

\*\*\*\*

1.

NEUTRON NUCLEUS INELASTIC CROSS-SECTIONS FROM 160-GEV/C TO 375-GEV/C.

By T.J. Roberts, H.R. Gustafson, L.W. Jones, M.J. Longo, M.R. Whalley (Michigan U.), 1979. Nucl.Phys.B159 (1979) 56-66.

\*\*\*\*

2.

CHARGED-PARTICLE PRODUCTION FROM NEUTRON-NUCLEUS COLLISIONS AT 200 GeV/c.

By D.L. Burke, H.R. Gustafson, L.W. Jones, M.J. Longo, R.E. Stockwell (U. of Michigan) Phys. Rev. D19 (1979) 1616.

\*\*\*\*\*

\*\*\*\*\*

MULTI-MUON #439

\*\*\*\*

1.

PRODUCTION DYNAMICS OF THE UPSILON IN PROTON NUCLEON INTERACTIONS.

By S. Childress, P.M. Mockett, J.P. Rutherford, S.R. Smith (Washington U., Seattle), H.R. Gustafson, L.W. Jones, M.J. Longo, T.J. Roberts, M.R. Whalley (Michigan U.), D.A. Garelick, P.S. Gauthier, M.L. Mallery, M.J. Glaubman, H. Johnstad (Northeastern U.), 1985. Phys. Rev. Lett. 55 ( 1985) 1962-1964.

\*\*\*\*

2.

EXPERIMENTAL TEST OF THE DRELL-YAN MODEL IN  $p W \rightarrow \mu^+ \mu^- X$ .

By S.R. Smith, S. Childress, P.M. Mockett, J.P. Rutherford, R.W. Williams (Washington U., Seattle), H.R. Gustafson, L.W. Jones, M.J. Longo, T.J. Roberts, M.R. Whalley (Michigan U.), D.A. Garelick, P.S. Gauthier, M.J. Glaubman, H. Johnstad, M.L. Mallery, J. Moromisato, E. Pothier, E. von Goeler (Northeastern U.), W.P. Oliver (Tufts U.), Print-81-0121 (WASH.U.,SEATTLE), Feb 1981. 12pp. Published in Phys.Rev.Lett.46:1607,1981.

\*\*\*\*\*

\*\*\*\*\*

For LAMBDA MAGNETIC MOMENT #440: See #008

\*\*\*\*\*

\*\*\*\*\*

NUCLEAR FRAGMENTS #442  
PARTICLE SEARCH #591

\*\*\*\*

1.  
ACCELERATOR INTERNAL TARGET EXPERIMENTS USING A SUPERSONIC GAS JET.  
By B.C. Stringfellow, A.T. Bujak, D.D. Carmony, Y.H. Chung, J.E. Finn, L.J. Gutay, A.S. Hirsch, M. Mahi, G.L. Paderewski, N.T. Porile, T.C. Sangster, R.P. Scharenberg (Purdue U.), F. Turkot (Fermilab), 1986.  
Nucl. Instrum. Methods A251 ( 1986) 242-253.

\*\*\*\*

2.  
MASS YIELD DISTRIBUTION FOR THE INTERACTION OF SILVER WITH 300-GEV PROTONS.  
By A. Bujak, J.E. Finn, L.J. Gutay, A.S. Hirsch, R.W. Minich, G. Paderewski, N.T. Porile, R.P. Scharenberg, B.C. Stringfellow (Purdue U.), F. Turkot (Fermilab), 1985.  
Phys. Rev. C32 ( 1985) 620-622.

\*\*\*\*

3.  
NUCLEAR CHARGE DISPERSION IN THE FRAGMENTATION MASS REGION AND THE THERMAL LIQUID DROP MODEL.  
By N.T. Porile, A. Bujak, J.E. Finn, A.S. Hirsch, R.W. Minich, G. Paderewski, R.P. Scharenberg, B.C. Stringfellow (Purdue U.), F. Turkot (Fermilab), 1985.  
Phys.Lett.156B:177, 1985.

\*\*\*\*

4.  
THE DESCRIPTION OF FRAGMENTATION AS A CRITICAL PHENOMENON IN HIGH-ENERGY P NUCLEUS COLLISIONS.  
By A.S. Hirsch, A. Bujak, J.E. Finn, L.J. Gutay, R.W. Minich, N.T. Porile, R.P. Scharenberg, B.C. Stringfellow (Purdue U.), F. Turkot (Fermilab), 1985.  
Nucl. Phys. A418 ( 1984) 267C-287C.

\*\*\*\*

5.

EXPERIMENTAL RESULTS FROM HIGH-ENERGY PROTON NUCLEUS INTERACTIONS, CRITICAL PHENOMENA, AND THE THERMAL LIQUID DROP MODEL OF FRAGMENT PRODUCTION.

By A.S. Hirsch, A. Bujak, J.E. Finn, L.J. Gutay, R.W. Minich, N.T. Porile, R.P. Scharenberg, B.C. Stringfellow (Purdue U.), F. Turkot (Fermilab), 1984.

Phys. Rev. C29 ( 1984) 508-525.

\*\*\*\*

6.

NUCLEAR FRAGMENT MASS YIELDS FROM HIGH-ENERGY PROTON - NUCLEUS INTERACTIONS.

By J.E. Finn, S. Agarwal, A. Bujak, J. Chuang, L.J. Gutay, A.S. Hirsch, R.W. Minich, N.T. Porile, R.P. Scharenberg, B.C. Stringfellow (Purdue U.), F. Turkot (Fermilab), Print-82-0685 (PURDUE), n.d. (recd Sep 1982) 12pp.

Published in Phys.Rev.Lett.49:1321,1982.

\*\*\*\*

7.

CRITICAL PHENOMENA IN HADRONIC MATTER AND EXPERIMENTAL ISOTOPIC YIELDS IN HIGH-ENERGY PROTON - NUCLEUS COLLISIONS.

By R.W. Minich, S. Agarwal, A. Bujak, J. Chuang, J.E. Finn, L.J. Gutay, A.S. Hirsch, N.T. Porile, R.P. Scharenberg, B.C. Stringfellow (Purdue U.), F. Turkot (Fermilab), Print-82-0686 (PURDUE), n.d. (recd Sep 1982) 11pp.

Published in Phys.Lett.118B:458,1982.

\*\*\*\*

8.

NUCLEAR FRAGMENT EMISSION IN HIGH-ENERGY P XE AND P KR COLLISIONS AND A DESCRIPTION OF THEIR PRODUCTION MECHANISM.

By J.A. Gaidos, L.J. Gutay, A.S. Hirsch, R. Mitchell, T.V. Ragland, R.P. Scharenberg, F. Turkot, R.B. Willmann, C.L. Wilson (Purdue U. & Fermilab), D79-00948, Apr 1979.

Published in PHYS. REV. LETT. 42 (1979) 82-85..

\*\*\*\*\*

\*\*\*\*\*

DI-MUON #444

FORWARD SEARCH #615

\*\*\*\*

1.

LONGITUDINAL PHOTON POLARIZATION IN MUON PAIR PRODUCTION AT HIGH X(F).

By J.P. Alexander, C.E. Adolphsen, K.J. Anderson, J.S. Conway, J.G. Heinrich, K.W. Merritt, J.E. Pilcher (Chicago U., EFI), E.I. Rosenberg, D.T. Simpson (Iowa State U.), C. Biino, J.F. Greenhalgh, W.C. Louis, K.T. McDonald, S. Palestini, F.C. Shoemaker, A.J.S. Smith (Princeton U.), 1986.

Phys. Rev. D34 ( 1986) 315-317.

\*\*\*\*

2.

UPPER LIMITS ON THE DECAY  $D_0 \rightarrow \mu^+ \mu^-$  AND ON  $D_0$  ANTI- $D_0$  MIXING.

By C. Biino, J.F. Greenhalgh, W.C. Louis, K.T. McDonald, S. Palestini, F.C. Shoemaker, A.J.S. Smith (Princeton U.), C.E. Adolphsen, J.P. Alexander, K.J. Anderson, J.S. Conway, J.G. Heinrich, K.W. Merritt, J.E. Pilcher (Chicago U., EFI), E.I. Rosenberg, D.T. Simpson (Iowa State U.), 1985. Princeton Univ. - DOE-ER-3072-027 (85,REC.NOV.) 4p.

Phys. Rev. Lett. 56 ( 1986) 1027-1030.

\*\*\*\*

3.

AN APPARATUS TO MEASURE THE STRUCTURE OF THE PION.

By C. Biino, J.F. Greenhalgh, W.C. Louis, K.T. McDonald, S. Palestini, F.C. Shoemaker, A.J.S. Smith (Princeton U.), C.E. Adolphsen, J.P. Alexander, K.J. Anderson, J.S. Conway, J.G. Heinrich, K.W. Merritt, J.E. Pilcher (Chicago U., EFI & Chicago U.), E.I. Rosenberg, D.T. Simpson (Ames Lab. & Iowa State U.), DOE/ER/03072-22, Sep 1985. 56pp.

Published in Nucl.Instr.Meth.A243:323,1986.

\*\*\*\*

4.

PION STRUCTURE AS OBSERVED IN THE REACTION  $\pi^- N \rightarrow \mu^+ \mu^- X$  AT 80 GeV/c.

By S. Palestini (Princeton U. & INFN, Turin), C. Biino, J.F. Greenhalgh, C.W. Louis, K.T. McDonald, F.C. Shoemaker, A.J.S. Smith (Princeton U.), C.E. Adolphsen, J.P. Alexander, K.J. Anderson, J.S. Conway, J.G. Heinrich, K.W. Merritt, J.E. Pilcher (Chicago U., EFI & Chicago U.), E.I. Rosenberg, D.T. Simpson (Ames Lab. & Iowa State U.), DOE/ER/03072-23, Jun 1985. 12pp.

Published in Phys.Rev.Lett.55:2649,1985.

\*\*\*\*

5.

LIMIT ON BOTTOM MESON PAIR PRODUCTION IN  $\pi^-$  NUCLEUS INTERACTIONS AT 225 GeV/c.

By R.N. Coleman, K.J. Anderson, K.P. Karhi, C.B. Newman, J.E. Pilcher, E.I. Rosenberg

(Chicago U., EFI), J.J. Thaler (Illinois U., Urbana), G.E. Hogan, K.T. McDonald, G.H. Sanders, A.J.S. Smith (Princeton U.), 1980.  
Phys.Rev.Lett.44 (1980) 1313-1315.

\*\*\*\*

6.

SEARCH FOR ADDITIONAL MUONS IN HADRONIC PRODUCTION OF J/PSI PARTICLES.

By K.J. Anderson, R.N. Coleman, K.P. Karhi, C.B. Newman, J.E. Pilcher, E.I. Rosenberg (Chicago U., EFI), J.J. Thaler (Illinois U., Urbana), G.E. Hogan, K.T. McDonald, G.H. Sanders, A.J.S. Smith (Princeton U.), 1980.  
Phys.Rev.D21 (1980) 3075-3079.

\*\*\*\*

7.

EVIDENCE FOR LONGITUDINAL PHOTON POLARIZATION IN MUON-PAIR PRODUCTION BY PIONS.

By K.J. Anderson, R.N. Coleman, K.P. Karhi, C.B. Newman, J.E. Pilcher, E.I. Rosenberg (Chicago U., EFI), J.J. Thaler (Illinois U., Urbana), G.E. Hogan, K.T. McDonald, G.H. Sanders, A.J.S. Smith (Princeton U.), EFI-79-34-CHICAGO, n.d. (recd Jun 1979) 12pp.  
Published in Phys.Rev.Lett.43:1219,1979.

\*\*\*\*

8.

DESIGN OF A FAST MASS DEPENDENT TRIGGER.

By G.E. Hogan.  
Nucl. Instr. Meth.165 (1979) 7.

\*\*\*\*\*

\*\*\*\*\*

MUON #448

\*\*\*\*

1.

OBSERVATION OF SHADOWING IN THE VIRTUAL PHOTON TOTAL HADRONIC CROSS-SECTION ON NUCLEI.

By M.S. Goodman, M. Hall, W.A. Loomis, F.M. Pipkin, R. Wilson (Harvard U.), R.K. Thornton (Tufts U.), R. Hicks, T. Kirk (Fermilab), J. Macallister, T. Quirk (Oxford U., NPL), S.C. Wright (Chicago U.), G. Brandenburg, C. Young (MIT, LNS), W.R. Francis, I. Kostoulas (Michigan State U.), FERMLAB-PUB-81/42-EXP, May 1981. 13pp.  
Published in Phys.Rev.Lett.47:293,1981.

\*\*\*\*\*

For INCLUSIVE SCATTERING #451: See #118A

\*\*\*\*\*

\*\*\*\*\*

For PHOTOPRODUCTION #458: See #87A

\*\*\*\*\*

\*\*\*\*\*

NUCLEAR FRAGMENTS #466

\*\*\*\*

1.

NUCLEAR REACTIONS OF SILVER WITH 0.8-TEV PROTONS.

By C.F. Wang, N.T. Porile (Purdue U.), 1986.

Phys. Rev. C33 ( 1986) 2183-2184.

\*\*\*\*

2.

SYSTEMATICS OF FRAGMENT ANGULAR DISTRIBUTIONS IN HIGH-ENERGY  
PROTON REACTIONS.

By C.F. Wang and N.T. Porile.

Phys. Rev. C34 (1986) 1911.

\*\*\*\*

3.

ANGULAR DISTRIBUTIONS AND RANGES OF PRODUCTS FROM THE  
INTERACTION OF SILVER WITH 400-GEV PROTONS.

By C.F. Wang, G.D. Cole, N.T. Porile (Purdue U.), 1984.

Phys. Rev. C29 ( 1984) 569-573.

\*\*\*\*

4.

TARGET A-DEPENDENCE OF THE ANGULAR DISTRIBUTION OF SC FRAGMENTS  
EMITTED IN 400-GEV PROTON INTERACTIONS.

By J.S. Stewart, N.T. Porile (Purdue U.), 1982.

Phys. Rev. C25 ( 1982) 478.

\*\*\*\*

5.

RECOIL PROPERTIES OF FRAGMENTS EMITTED IN THE INTERACTION OF  
COMPLEX NUCLEI WITH RELATIVISTIC C(12) IONS AND PROTONS.

By N.T. Porile and G.D. Cole.

Phys. Rev. C25 (1982) 244.

\*\*\*\*



6.

ANGULAR DISTRIBUTIONS AND DIFFERENTIAL RANGES OF BA PRODUCTS FROM THE INTERACTIONS OF U-238 WITH 0.8-GEV - 400-GEV PROTONS.

By S. Pandian, N.T. Porile (Purdue U.), 1981.

Phys.Rev.C23 (1981) 427-438.

\*\*\*\*

7.

TEST OF THE APPLICABILITY OF THE TWO STEP MODEL TO THE EMISSION OF SC FRAGMENTS IN THE INTERACTION OF U-238 WITH 400-GEV PROTONS.

By D.R. Fortney, N.T. Porile (Purdue U.), 1980.

Phys.Rev.C22 (1980) 670-577.

\*\*\*\*

8.

ANGULAR DISTRIBUTIONS OF SC FRAGMENTS FROM THE INTERACTION OF U-238 WITH 0.8-GEV - 400-GEV PROTONS.

By D.R. Fortney, N.T. Porile (Purdue U.), 1980.

Phys.Rev.D21 (1980) 2511-2518.

\*\*\*\*

9.

DIFFERENTIAL RANGES OF SC FRAGMENTS FROM THE INTERACTION OF U-238 WITH 0.8-GEV - 400-GEV PROTONS.

By D.R. Fortney, N.T. Porile (Purdue U.), 1980.

Phys.Rev.D21 (1980) 664-674.

\*\*\*\*

10.

UNUSUAL BACKWARD ENHANCEMENT IN THE ANGULAR DISTRIBUTION OF PRODUCTS FROM THE INTERACTION OF U-238 WITH 400-GEV PROTONS.

By N.T. Porile, D.R. Fortney, S. Pandian (Purdue U.), R.A. Johns, T. Kaiser, K. Wielgoz, T.S.K. Chang, N. Sugarman (Chicago U., EFI), J.A. Urbon, D.J. Henderson, S.B. Kaufman, E.P. Steinberg (Argonne), 1979.

Phys.Rev.Lett.43 (1979) 918-921.

\*\*\*\*

11.

NUCLEAR REACTIONS OF SILVER WITH 25.2-GEV C-12 IONS AND 300-GEV PROTONS.

By N.T. Porile, G.D. Cole, C.R. Rudy (Purdue U.), 1979.

Phys.Rev.C19 (1979) 2288-2304.

\*\*\*\*\*

\*\*\*\*\*

k ZERO CROSS SECTION #486

PI-MU ATOMS #533

\*\*\*\*

1.

MEASUREMENT OF THE RATE OF FORMATION OF PI - MU ATOMS IN K0(L) DECAY.

By S.H. Aronson, R.H. Bernstein, G.J. Bock, R.D. Cousins, J.F. Greenhalgh, D. Hedin, M. Schwartz, T.K. Shea, G.B. Thomson, B. Winstein (Brookhaven & Chicago U., EFI & Stanford U., Phys. Dept. & Wisconsin U., Madison), 1986.  
Phys. Rev. D33 ( 1986) 3180-3198.

\*\*\*\*

2.

MEASUREMENT OF THE RATE OF FORMATION OF PI MU ATOMS IN K0(L) DECAY.

By S.H. Aronson, R.H. Bernstein, G.J. Bock, R.D. Cousins, J.F. Greenhalgh, D. Hedin, M. Schwartz, T.K. Shea, G.B. Thomson, B. Winstein (Brookhaven & Chicago U., EFI & Stanford U., Phys. Dept. & Wisconsin U., Madison), 1982.  
Phys. Rev. Lett. 48 ( 1982) 1078-1081.

\*\*\*\*\*

\*\*\*\*\*

PARTICLE SEARCH #490

CHARM PARTICLE #630

\*\*\*\*

1.

CHARM PRODUCTION IN NEUTRON NUCLEON INTERACTIONS.

By L. Tzeng, P.L. McBride, P.S. Cooper, Y. Li, R.D. Majka, J. Sandweiss, A.J. Slaughter, H.D. Taft, L.G. Teig (Yale U.), M.E. Johnson (Fermilab), P. Nemethy (LBL, Berkeley), 1985.  
Phys. Rev. Lett. 55 ( 1985) 1172-1175.

\*\*\*\*

2.

DESIGN AND PERFORMANCE OF A HIGH RESOLUTION STREAMER CHAMBER.

By R. Majka, T. Cardello, S. Dhawan, A. Disco, R. Kellogg, T. Ludlam, P. Nemethy, J. Sandweiss, A.J. Slaughter, L. Tzeng, I. Winters (Yale U.), 1982.  
Nucl. Instrum. Methods 192 ( 1982) 241-252.

\*\*\*\*

3.

OBSERVATION OF HADRONIC CHARM PRODUCTION IN A HIGH RESOLUTION STREAMER CHAMBER EXPERIMENT.

By J. Sandweiss, T. Cardello, P. Cooper, S. Dhawan, R. Kellogg, D. Ljung, T. Ludlam,

R. Majka, P. McBride, P. Nemethy, L. Rosselet, A.J. Slaughter, H.D. Taft, L. Teig, L. Tzeng  
(Yale U.), S. Ecklund, M. Johnson (Fermilab), FERMILAB-PUB-80/16-EXP, Jan 1980. 15pp.  
Published in Phys.Rev.Lett.44:1104,1980.

(\*Title changed in journal\*)

also in DPF Conf.1979:247 (QCD161:A6:1979)

\*\*\*\*\*

\*\*\*\*\*

For DI-HADRON #494: See #288

\*\*\*\*\*

\*\*\*\*\*

For XI-ZERO #495: See #008

\*\*\*\*\*

\*\*\*\*\*

CHARGED HYPERON #497

SIGMA BETA DECAY #715

\*\*\*\*

1.

A MEASUREMENT OF THE SIGMA- MAGNETIC MOMENT USING THE SIGMA- ---> n  
e- anti-neutrino AND SIGMA- ---> n pi- DECAY MODES.

By G. Zapalac, S.Y. Hsueh, D. Muller, J. Tang, R. Winston (Chicago U., EFI), E.C. Swallow  
(Elmhurst Coll. & Chicago U., EFI), J.P. Berge, A.E. Brenner, P. Grafstrom, E. Jastrzembski,  
J. Lach, J. Marriner, R. Raja, V.J. Smith (Fermilab), E. McCliment, C. Newsom (Iowa U.),  
E.W. Anderson (Iowa State U.), A.S. Denisov, V.T. Grachev, V.A. Shchegelskii, D.M.  
Seliverstov, N.N. Smirnov, N.K. Terentev, I.I. Tkach, A.A. Vorobev (Leningrad, INP), P.S.  
Cooper, P. Razis, L.J. Teig (Yale U.), FERMILAB-PUB-86/96-E, Jun 1986. 13pp.  
Published in Phys.Rev.Lett.57:1526,1986.

\*\*\*\*

2.

MEASUREMENT OF SIGMA- PRODUCTION POLARIZATION AND MAGNETIC  
MOMENT.

By Y.W. Wah, T.R. Cardello, P.S. Cooper, L.J. Teig, J.L. Thron (Yale U.), C. Ankenbrandt,

J.P. Berge, A.E. Brenner, J. Butler, K. Doroba, J. Lach, P. Laurikainen, J. Marriner (Fermilab), E. McCliment (Iowa U.), E.W. Anderson, A. Breakstone (Iowa State U.), FERMILAB-PUB-85/128-E, Sep 1985. 16pp.  
Published in Phys.Rev.Lett.55:2551,1985.

\*\*\*\*

3.

CHARGED HYPERON PRODUCTION BY 400-GeV PROTONS.

By T.R. Cardello, P.S. Cooper, L.J. Teig, J.L. Thron, Y. Wah (Yale U.), C. Ankenbrandt, J.P. Berge, A.E. Brenner, J. Butler, K. Doroba, J.E. Elias, J. Lach, P. Laurikainen, J. MacLachlan, J. Marriner (Fermilab), E.W. Anderson, A. Breakstone, E.I. Rosenberg (Iowa State U.), E. McCliment (Iowa U.), FERMILAB-PUB-84/122-E, Nov 1984. 47pp.  
Published in Phys.Rev.D32:1,1985.

\*\*\*\*

4.

SEARCH FOR HEAVY CHARGED PARTICLES AND LIGHT NUCLEI AND ANTI-NUCLEI PRODUCED BY 400-GeV PROTONS.

By J.L. Thron, T.R. Cardello, P.S. Cooper, L.J. Teig, Y.W. Wah (Yale U.), C. Ankenbrandt, J.P. Berge, A.E. Brenner, J. Butler, K. Doroba, J. Elias, J. Lach, P. Laurikainen, J. MacLachlan, J.P. Marriner (Fermilab), E.W. Anderson, A. Breakstone (Iowa State U.), E. McCliment (Iowa U.), FERMILAB-PUB-84/53-E, Jun 1984. 55pp.  
Published in Phys.Rev.D31:451,1985.

\*\*\*\*

5.

MEASUREMENT OF THE ELECTRON ASYMMETRY IN THE BETA DECAY OF POLARIZED SIGMA- HYPERONS.

By S.Y. Hsueh, D. Muller, J. Tang, R. Winston, G. Zapalac (Chicago U., EFI), E.C. Swallow (Elmhurst Coll. & Chicago U., EFI), J.P. Berge, A.E. Brenner, P. Grafstrom, E. Jastrzembski, J. Lach, J. Marriner, R. Raja, V.J. Smith (Fermilab), E. McCliment, C. Newsom (Iowa U.), E.W. Anderson (Iowa State U.), A.S. Denisov, V.T. Grachev, A.V. Kulikov, V.A. Shchegelskii, D.M. Seliverstov, N.N. Smirnov, N.K. Terentev, I.I. Tkach, A. Vorobyov (Leningrad, INP), P.S. Cooper, P. Razis, L.J. Teig (Yale U.), FERMILAB-PUB-85/21-E, Jan 1985. 14pp.  
Published in Phys.Rev.Lett.54:2399,1985.

\*\*\*\*

6.

PRECISE MEASUREMENT OF THE SIGMA+ MAGNETIC MOMENT.

By C. Ankenbrandt, J.P. Berge, A.E. Brenner, J. Butler, K. Doroba, J.C. Elias, J. Lach, P. Laurikainen, J. MacLachlan, (Fermilab), E. McCliment (U of Iowa), E.W. Anderson, A. Breakstone (Iowa State U.), T. Cardello, P.S. Cooper, L.J. Teig, J.L. Thron, Y.W. Wah (Yale U.).  
Phys. Rev. Lett. 51 (1983) 863.

\*\*\*\*\*

\*\*\*\*\*

MONOPOLE #502

\*\*\*\*

1.

SEARCH FOR COSMIC RAY RELATED MAGNETIC MONOPOLES AT GROUND LEVEL.

By D.F. Bartlett, D. Soo, R.L. Fleischer, H.R. Hart, Jr., A. Mogro-Campero (Colorado U. & General Electric, Schenectady), Print-81-0626 (GE, SCHENECTADY), Apr 1981. 12pp. Published in Phys.Rev.D24:612,1981.

\*\*\*\*\*

\*\*\*\*\*

EMULSION/PI- @ 300 #503

\*\*\*\*

1.

A-DEPENDENCE IN PROTON NUCLEUS INTERACTIONS AT 400-GEV.

By F. Fumuro (Kansai Gakuin U.), R. Ihara (Osaka U.), T. Ogata (Tokyo U., INS), 1979. Nucl.Phys.B152 (1979) 376-389.

\*\*\*\*\*

\*\*\*\*\*

For PROTON POLARIZATION #505: See #008

\*\*\*\*\*

\*\*\*\*\*

HIGH ENERGY CHANNELING #507

\*\*\*\*

1.

ANGULAR DISTRIBUTIONS OF CHANNELED PIONS AND PROTONS UP TO 250-GEV/C.

By C.R. Sun, W.M. Gibson, I.J. Kim, G.O. Williams (SUNY, Albany), M.A. Hasan, A.S. Kanofsky, R. Allen (Lehigh U.), R.A. Carrigan, B.L. Chrisman, T.E. Toohig (Fermilab), Z. Guzik, T.S. Nigmanov, E.N. Tsyganov, A.S. Vodopyanov (Dubna, JINR), A.B. Watson, J. Kubic, D.H. Stork (UCLA), 1982. Nucl. Phys. B203 ( 1982) 40-57.

\*\*\*\*



2.

DIGITAL SCATTERING ANGLE PREPROCESSORS.

By Z. Guzik (Swierk, Inst. Nucl. Studies), E.N. Tsyganov (Dubna, JINR), M. Atac, R.A. Carrigan, B.L. Chrisman (Fermilab), 1979. Nucl.Instrum.Methods 166 (1979) 351-359.

\*\*\*\*\*

\*\*\*\*\*

PARTICLE SEARCH #515

\*\*\*\*

1.

PRODUCTION OF LEPTONS IN COINCIDENCE WITH PROMPT MUONS.

By R.M. Edelstein, G. Ginther, R. Lipton, J.M. Mcquade, J. Russ, L. Spiegel (Carnegie Mellon U.), D.E. Johnson (Fermilab), D. Buchholz, L.M. Cremaldi, S. Delchamps, H.S. Mao, J.L. Rosen, W.K. Sakumoto, R.A. Schluter, S.B. Sontz, C. Winter (Northwestern U.), J. Bishop, N. Biswas, N. Cason, L. Dauwe, V. Kenney, A. Kreymer, P. Mooney, R. Pemper, R. Ruchti, W. Shephard (Notre Dame U.), 1984. Phys. Rev. Lett. 53 ( 1984) 1411-1414.

\*\*\*\*\*

\*\*\*\*\*

PHOTOPRODUCTION #516

\*\*\*\*

1.

A LARGE AREA LIQUID SCINTILLATION MULTIPHOTON DETECTOR.

By V.K. Bharadwaj, M.P. Cain, D.O. Caldwell, B.H. Denby, A.M. Eisner, U.P. Joshi, R.G. Kennett, A. Lu, R.J. Morrison, D.R. Pfof, H.R. Stuber, D.J. Summers, S.J. Yellin (UC, Santa Barbara), J.A. Appel (Fermilab), 1985. Nucl. Instrum. Methods 228 ( 1985) 283-289.

\*\*\*\*

2.

A STUDY OF THE INCLUSIVE K0(S), LAMBDA, anti-LAMBDA PRODUCTION IN DIFFRACTIVE gamma P INTERACTIONS.

By S. Bhadra, J.A. Appel, D.F. Bartlett, B.H. Denby, J. Biel, D. Bintinger, V.K. Bharadwaj, D.E. Blodgett, S.B. Bracker, J. Bronstein, C. Daum, A.L. Duncan, A.M. Eisner, J.R. Elliott, P. Estabrooks, G.F. Hartner, G.R. Kalbfleisch, R.G. Kennett, B.R. Kumar, M.J. Losty, A. Lu, G.J. Luste, P.M. Mantsch, J.F. Martin, R.J. Morrison, T. Nash, U. Nauenberg, J. Pinfeld, M. Robertson, W. Schmidke, K.K. Shahbazian, R.A. Sheperd, K. Sliwa, M.D. Sokoloff, W.J. Spalding, J. Stacey, K.C. Stanfield, M. Streetman, D.J. Summers, S.E. Willis, M.S. Witherell, S.J. Yellin, C.J. Zorn (Colorado U. & UC, Santa Barbara & Carleton U. & Fermilab & National Research Council, Ottawa & Oklahoma U. & Toronto U.), COLO-

HEP-104, Sep 1985. 11pp.  
Published in Phys.Rev.Lett.55:2749,1985.  
\*\*\*\*

3.

INELASTIC AND ELASTIC PHOTOPRODUCTION OF  $J/\psi$  (3097).

By B.H. Denby, V.K. Bharadwaj, D.J. Summers, A.M. Eisner, R.G. Kennett, A. Lu, R.J. Morrison, M.S. Witherell, S.J. Yellin (UC, Santa Barbara), P. Estabrooks, J. Pinfold (Carleton U.), D.F. Bartlett, S. Bhadra, A.L. Duncan, J.R. Elliott, U. Nauenberg (Colorado U.), J.A. Appel, J. Biel, D. Bintinger, J. Bronstein, C. Daum, P.M. Mantsch, T. Nash, W. Schmidke, K. Sliwa, M.D. Sokoloff, K.C. Stanfield, M. Streetman, S.E. Willis (Fermilab), M.J. Losty (National Research Council, Ottawa), G.R. Kalbfleisch, M. Robertson (Oklahoma U.), D.E. Blodgett, S.B. Bracker, G.F. Hartner, B.R. Kumar, G.J. Luste, J.F. Martin, K.K. Shahbazian, R.A. Sheperd, W.J. Spalding, C.J. Zorn (Toronto U.), FERMILAB-PUB-83/98-EXP, Nov 1983. 13pp.  
Published in Phys.Rev.Lett.52:795,1984.  
\*\*\*\*

4.

A STUDY OF  $D^*$  PRODUCTION IN HIGH-ENERGY  $\gamma p$  INTERACTIONS.

By K. Sliwa, J.A. Appel, J. Biel, D. Bintinger, J. Bronstein, C. Daum, P.M. Mantsch, T. Nash, W. Schmidke, M.D. Sokoloff, W.J. Spalding, K.C. Stanfield, M. Streetman, S.E. Willis (Fermilab), V.K. Bharadwaj, B.H. Denby, A.M. Eisner, R.G. Kennett, A. Lu, R.J. Morrison, D.J. Summers, M.S. Witherell, S.J. Yellin (UC, Santa Barbara), P. Estabrooks, J. Pinfold (Carleton U.), D.F. Bartlett, S. Bhadra, A.L. Duncan, J.R. Elliott, U. Nauenberg (Colorado U.), M.J. Losty (National Research Council, Ottawa), G.R. Kalbfleisch, M. Robertson (Oklahoma U.), D.E. Blodgett, S.B. Bracker, G.F. Hartner, B.R. Kumar, G.J. Luste, J.F. Martin, K.K. Shahbazian, R.A. Sheperd, C.J. Zorn (Toronto U.), FERMILAB-PUB-83/96-EXP, Nov 1983. 22pp.  
Published in Phys.Rev.D32:1053,1985.  
\*\*\*\*

5.

A STUDY OF THE DECAY  $D_0 \rightarrow K^- \pi^+ \pi^0$  IN HIGH-ENERGY PHOTOPRODUCTION.

By D.J. Summers, V.K. Bharadwaj, B.H. Denby, A.M. Eisner, R.G. Kennett, A. Lu, R.J. Morrison, M.S. Witherell, S.J. Yellin (UC, Santa Barbara), P. Estabrooks, J. Pinfold (Carleton U.), D.F. Bartlett, S. Bhadra, A.L. Duncan, J.R. Elliott, U. Nauenberg (Colorado U.), J.A. Appel, J. Biel, D. Bintinger, J. Bronstein, C. Daum, P.M. Mantsch, T. Nash, W. Schmidke, K. Sliwa, M.D. Sokoloff, K.C. Stanfield, M. Streetman, S.E. Willis (Fermilab), M.J. Losty (National Research Council, Ottawa), G.R. Kalbfleisch, M. Robertson (Oklahoma U.), D.E. Blodgett, S.B. Bracker, G.F. Hartner, B.R. Kumar, G.J. Luste, J.F. Martin, K.K. Shahbazian, R.A. Sheperd, W.J. Spalding, C.J. Zorn (Toronto U.), FERMILAB-PUB-83/84-EXP, Oct 1983. 12pp.  
Published in Phys.Rev.Lett.52:410,1984.

\*\*\*\*

6.

A RECOIL PROTON DETECTOR USING CYLINDRICAL PROPORTIONAL CHAMBERS AND SCINTILLATOR COUNTERS.

By G.F. Hartner, D.E. Blodgett, S.B. Bracker, B.R. Kumar, G.J. Luste, J.F. Martin, W.J. Spalding, K.K. Shahbazian, R.A. Sheperd, A.J. Stacey, C.J. Zorn (Toronto U.).  
Nucl. Instrum. Methods 216 (1983) 113-119.

\*\*\*\*\*

\*\*\*\*\*

PROTON POLARIZATION #522

\*\*\*\*

1.

PROTON POLARIZATION IN p p ELASTIC AND INCLUSIVE PROCESSES AT BEAM MOMENTA FROM 20-GeV/c TO 400-GeV/c.

By M. Corcoran, S.C. Ems, S.W. Gray, R.M. Lepore, H.A. Neal, H.O. Ogren, R.O. Polvado, D.R. Rust, J.R. Sauer, G.A. Walters (Indiana U.), IUHEE-31, n.d. (recd Sep 1980) 69pp.  
Published in Phys.Rev.D22:2624,1980.

\*\*\*\*

2.

MAGNETIC FIELD TESTS OF TUBULAR DRIFT CHAMBERS.

By G. Baranko, J.P. Guillaud, H. Ogren, D. Rust, S. Ems, S. Gray, B. Martin, P. Smith (Indiana U.), IUHEE-27, May 1979. 33pp.  
Published in Nucl.Instr.Meth.169:413,1980.

(\*Title changed in journal\*)

\*\*\*\*

3.

PROTON POLARIZATION IN INCLUSIVE PROCESSES AT FERMILAB ENERGIES.

By R.O. Polvado, S.C. Ems, S.W. Gray, R.M. Lepore, H.A. Neal, H.O. Ogren, D.R. Rust, G.A. Walters (Indiana U.), IUHEE-26, Feb 1979. 11pp.  
Published in Phys.Rev.Lett.42:1325,1979.

(\*Title changed in journal\*)

\*\*\*\*\*

\*\*\*\*\*

For EMULSION/PI @ 300 #525: See #237

\*\*\*\*\*



\*\*\*\*\*

NEUTRINO #531

\*\*\*\*

1.

LIMITS TO MUON-NEUTRINO, ELECTRON-NEUTRINO ---> TAU-NEUTRINO  
OSCILLATIONS AND MUON-NEUTRINO, ELECTRON-NEUTRINO ---> TAU- DIRECT  
COUPLING. FERMILAB E531 COLLABORATION.

By N. Ushida (Aichi U. of Education), T. Kondo (Fermilab), S. Tasaka (Gifu U.), I.G. Park,  
J.S. Song (Gyeongsang National U.), T. Hara, Y. Homma, Y. Tsuzuki, G. Fujioka,  
H. Fukushima, Y. Takahashi, S. Tatsumi, C. Yokoyama, K. Fujiwara, K. Taruma (Kobe U.),  
S.Y. Bahk, C.O. Kim, J.N. Park (Seoul National U.), D.C. Bailey, S. Conetti, P. Mercure,  
J. Trischuk, M. Turcotte (McGill U.), S. Aoki, K. Chiba, H. Fuchi, K. Hoshino, K. Kodama,  
R. Matsui, M. Miyanishi, M. Nakamura, K. Nakazawa, K. Niu, K. Niwa, M. Ohashi,  
H. Sasaki, Y. Tomita, N. Torii, O. Yamakawa, Y. Yanagisawa (Nagoya U.), G.J. Aubrecht,  
J. Dunlea, S. Errede, A. Gauthier, M.J. Gutzwiller, S. Kuramata, G. Oleynik, N.W. Reay,  
K. Reibel, R.A. Sidwell, N.R. Stanton (Ohio State U.), K. Moriyama, H. Shibata (Okayama  
U.), O. Kusumoto, Y. Noguchi, T. Okusawa, M. Teranaka, J. Yamato (Osaka City U.),  
H. Okabe, J. Yokota (Osaka Prefecture U., Sci. Educ. Inst.), S.G. Frederiksen, C.J.D. Hebert,  
F. Hebert, B. Mcleod (Ottawa U.), M. Kazuno, H. Shibuya (Chiba U.), I.A. Lovatt, J.F.  
Martin, D. Pitman, J.D. Prentice, B.J. Stacey, T.S. Yoon (Toronto U.), Y. Maeda (Yokohama  
National U.), 1986.

Phys. Rev. Lett. 57 ( 1986) 2897-2900.

\*\*\*\*

2.

LIFETIME OF D0 CHARMED MESON PRODUCED IN NEUTRINO INTERACTIONS.

By N. Ushida (Aichi U. of Education), T. Kondo (Fermilab), S. Tasaka (Gifu U.), I.G. Park,  
J.S. Song (Gyeongsang National U.), T. Hara, Y. Homma, Y. Tsuzuki, G. Fujioka, H.  
Fukushima, Y. Takahashi, S. Tatsumi, C. Yokoyama, K. Fujiwara, K. Taruma (Kobe U.),  
S.Y. Bahk, C.O. Kim, J.N. Park (Seoul National U.), D.C. Bailey, S. Conetti, P. Mercure,  
J. Trischuk, M. Turcotte (McGill U.), S. Aoki, K. Chiba, H. Fuchi, K. Hoshino, K. Kodama,  
R. Matsui, M. Miyanishi, M. Nakamura, K. Nakazawa, K. Niu, K. Niwa, M. Ohashi,  
H. Sasaki, Y. Tomita, N. Torii, O. Yamakawa, Y. Yanagisawa (Nagoya U.), G.J. Aubrecht,  
J. Dunlea, S. Errede, A. Gauthier, M.J. Gutzwiller, S. Kuramata, G. Oleynik, N.W. Reay,  
K. Reibel, R.A. Sidwell, N.R. Stanton (Ohio State U.), K. Moriyama, H. Shibata (Okayama  
U.), O. Kusumoto, Y. Noguchi, T. Okusawa, M. Teranaka, J. Yamato (Osaka City U.),  
H. Okabe, J. Yokota (Osaka Prefecture U., Sci. Educ. Inst.), S.G. Frederiksen, C.J.D. Hebert,  
J. Hebert, B. Mcleod (Ottawa U.), M. Kazuno, H. Shibuya (Toho U.), I.A. Lovatt, J.F.  
Martin, D. Pitman, J.D. Prentice, B.J. Stacey, T.S. Yoon (Toronto U.), Y. Maeda (Yokohama  
National U.), 1986.

Phys. Rev. Lett. 56 ( 1986) 1771-1774.

\*\*\*\*

3.

LIFETIMES OF THE CHARMED PARTICLES  $D^{+-}$ ,  $F^{+-}$ , AND  $LAMBDA(C)^+$  PRODUCED BY NEUTRINOS.

By N. Ushida (Aichi U. of Education), T. Kondo (Fermilab), S. Tasaka (Gifu U.), I.G. Park, J.S. Song (Gyeongsang National U.), T. Hara, Y. Homma, Y. Tsuzuki, G. Fujioka, H. Fukushima, Y. Takahashi, S. Tatsumi, C. Yokoyama, K. Fujiwara, K. Taruma (Kobe U.), S.Y. Bahk, C.O. Kim, J.N. Park (Seoul National U.), D.C. Bailey, S. Conetti, P. Mercure, J. Trischuk, M. Turcotte (McGill U.), S. Aoki, K. Chiba, H. Fuchi, K. Hoshino, K. Kodama, R. Matsui, M. Miyanishi, M. Nakamura, K. Nakazawa, K. Niu, K. Niwa, M. Ohashi, H. Sasaki, Y. Tomita, N. Torii, O. Yamakawa, Y. Yanagisawa (Nagoya U.), G.J. Aubrecht, J. Dunlea, S. Errede, A. Gauthier, M.J. Gutzwiller, S. Kuramata, G. Oleynik, N.W. Reay, K. Reibel, R.A. Sidwell, N.R. Stanton (Ohio State U.), K. Moriyama, H. Shibata (Okayama U.), O. Kusumoto, Y. Noguchi, T. Okusawa, M. Teranaka, J. Yamato (Osaka City U.), H. Okabe, J. Yokota (Osaka Prefecture U., Sci. Educ. Inst.), S.G. Frederiksen, C.J.D. Hebert, J. Hebert, B. Mcleod (Ottawa U.), M. Kazuno, H. Shibuya (Toho U.), I.A. Lovatt, J.F. Martin, D. Pitman, J.D. Prentice, B.J. Stacey, T.S. Yoon (Toronto U.), Y. Maeda (Yokohama National U.), 1986.

Phys. Rev. Lett. 56 ( 1986) 1767-1770.

\*\*\*\*

4.

EXPERIMENTAL DETAILS ON LIFETIME MEASUREMENTS OF NEUTRINO PRODUCED CHARMED PARTICLES IN A TAGGED EMULSION SPECTROMETER.

By N. Ushida (Aichi U. of Education), T. Kondo (Fermilab), G. Fujioka, H. Fukushima, Y. Takahashi, S. Tatsumi, C. Yokoyama, Y. Homma, Y. Tsuzuki (Kobe U.), S.Y. Bahk, C.O. Kim, J.N. Park, J.S. Song (Seoul National U.), D.C. Bailey, S. Conetti, J. Fisher, J. Trischuk (McGill U.), H. Fuchi, K. Hoshino, M. Miyanishi, K. Niu, K. Niwa, H. Shibuya, Y. Yanagisawa (Nagoya U.), S.M. Errede, M.J. Gutzwiller, S. Kuramata, N.W. Reay, K. Reibel, T.A. Romanowski, R.A. Sidwell, N.R. Stanton (Ohio State U.), K. Moriyama, H. Shibata (Okayama U.), H. Okabe, J. Yokota (Osaka Prefecture U., Sci. Educ. Inst.), J.Y. Harnois, D. Pitman, J.D. Prentice, P. Sinervo, T.S. Yoon (Toronto U. & Ottawa U.), S. Tasaka (Tokyo U., Cosmic Ray Lab), P.J. Davis, J.F. Martin, T. Hara, O. Kusumoto, Y. Noguchi, M. Teranaka (Osaka City U., RIAE), H. Kimura, Y. Maeda (Yokohama National U.), C.J.D. Hebert, J. Hebert, S. Lokanathan, B.M. Mcleod, 1984.

Nucl. Instrum. Methods 224 ( 1984) 50-64.

\*\*\*\*

5.

NEW RESULTS FOR THE LIFETIME OF THE  $D^{+-}$ ,  $F^{+-}$ , AND  $LAMBDA(c)^+$  PARTICLES.

By N. Ushida, T. Kondo, G. Fujioka, H. Fukushima, Y. Takahashi, S. Tatsumi, C. Yokoyama, Y. Homma, Y. Tsuzuki, S.Y. Bahk, C.O. Kim, J.N. Park, J.S. Song, D. Bailey, S. Conetti, J. Fischer, J. Trischuk, H. Fuchi, K. Hoshino, M. Miyanishi, K. Niu, K. Niwa,

H. Shibuya, Y. Yanagisawa, S. Errede, M. Gutzwiller, S. Kuramata, N.W. Reay, K. Reibel, T.A. Romanowski, R. Sidwell, N.R. Stanton, K. Moriyama, H. Shibata, T. Hara, O. Kusumoto, Y. Noguchi, M. Teranaka, H. Okabe, J. Yokota, J. Harnois, C. Hebert, J. Hebert, S. Lokanathan, B. Mcleod (Fermilab & Kobe U. & Seoul National U.), P. Sinervo, T.S. Yoon, H. Kimura, Y. Maeda (Aichi Medical U. & Okayama U. & Osaka City U., RIAE & Osaka Prefecture U., Sci. Educ. Inst. & Ottawa U. & Tokyo U., Cosmic Ray Lab & Toronto U. & Yokohama National U.), S. Tasaka, P.J. Davis, J.F. Martin, D. Pitman, J.D. Prentice (McGill U. & Nagoya U. & Ohio State U.), 1984.  
Phys. Rev. Lett. 51 ( 1983) 2362-2365.

\*\*\*\*

6.

#### CHARMED HADRON PRODUCTION BY NEUTRINOS.

By Canada-Japan-Korea-USA Hybrid Emulsion Spectrometer Collaboration (N. Ushida, et al.), Print-82-0813 (McGILL), Oct 1982. 17pp.  
Published in Phys.Lett.121B:292,1983.

\*\*\*\*

7.

#### CROSS-SECTIONS FOR CHARM PRODUCTION BY NEUTRINOS.

By Canada-Japan-Korea-USA Hybrid Emulsion Spectrometer Collaboration (N. Ushida, et al.), Print-82-0812 (McGILL), Oct 1982. 15pp.  
Published in Phys.Lett.121B:287,1983.

\*\*\*\*

8.

#### NEW RESULT FOR THE LIFETIME OF THE D0 MESON.

By N. Ushida, T. Kondo, G. Fujioka, H. Fukushima, Y. Takahashi, S. Tatsumi, C. Yokoyama, Y. Homma, Y. Tsuzuki, S. Bahk, C. Kim, J. Park, J. Song, D. Bailey, S. Conetti, J. Fischer, J. Trischuk, H. Fuchi, K. Hoshino, M. Miyanishi, K. Niu, K. Niwa, H. Shibuya, Y. Yanagisawa, S. Errede, M. Gutzwiller, S. Kuramata, N.W. Reay, K. Reibel, T.A. Romanowski, R. Sidwell, N.R. Stanton, K. Moriyama, H. Shibata, T. Hara, O. Kusumoto, Y. Noguchi, M. Teranaka, H. Okabe, J. Yokota, J. Harnois, C. Hebert, J. Hebert, S. Lokanathan, B. Mcleod, S. Tasaka, P. Davis (Yokohama National U. & Osaka Prefecture U., Sci. Educ. Inst. & Ottawa U. & Tokyo U., LICEPP & Toronto U. & Ohio State U. & Okayama U. & Osaka City U.), J. Martin, D. Pitman, J.D. Prentice, P. Sinervo, T.S. Yoon, H. Kimura, Y. Maeda (Aichi U. of Education & Fermilab & Kobe U. & Seoul National U. & McGill U. & Nagoya U.), 1982.  
Phys. Rev. Lett. 48 ( 1982) 844-847.

\*\*\*\*

9.

#### UPPER LIMIT TO muon-neutrino - tau-neutrino OSCILLATION AND muon-neutrino - tau COUPLING.

By N. Ushida, T. Kondo, G. Fujioka, H. Fukushima, Y. Takahashi, S. Tatsumi,

C. Yokoyama, Y. Homma, Y. Tsuzuki, S. Bahk, C. Kim, J. Park, J. Song, D. Bailey, S. Conetti, J. Fischer, J. Trischuk, H. Fuchi, K. Hoshino, M. Miyanishi, K. Niu, K. Niwa, H. Shibuya, Y. Yanagisawa, S. Errede, M. Gutzwiller, S. Kuramata, N.W. Reay, K. Reibel, T.A. Romanowski, R. Sidwell, N.R. Stanton, K. Moriyama, H. Shibata, T. Hara, O. Kusumoto, Y. Noguchi, M. Teranaka, H. Okabe, J. Yokota, J. Harnois, C. Hebert, J. Hebert, S. Lokanathan, B. Mcleod, S. Tasaka, P. Davis, J. Martin, D. Pitman, J.D. Prentice, P. Sinervo, T.S. Yoon (Osaka Prefecture U., Sci. Educ. Inst. & Ottawa U. & Tokyo U., INS & Toronto U. & Kobe U. & Seoul National U. & McGill U. & Nagoya U. & Ohio State U. & Okayama U. & Osaka City U. & Yokohama National U.), H. Kimura, Y. Maeda (Aichi U. of Education & Fermilab), 1981.

Phys. Rev. Lett. 47 ( 1981) 1694-1697.

\*\*\*\*

10.

MEASUREMENT OF THE D+, F+, AND LAMBDA(c)+ CHARMED PARTICLE LIFETIMES.

By N. Ushida (Aichi U. of Education), T. Kondo (Fermilab), G. Fujioka, H. Fukushima, Y. Takahashi, S. Tatsumi, C. Yokoyama, Y. Homma, Y. Tsuzuki (Kobe U.), S. Bahk, C. Kim, J. Park, J. Song (Seoul National U.), D. Bailey, S. Conetti, J. Fischer, J. Trischuk (McGill U.), H. Fuchi, K. Hoshino, M. Miyanishi, K. Niu, K. Niwa, H. Shibuya, Y. Yanagisawa (Nagoya U.), S. Errede, M. Gutzwiller, S. Kuramata, N. Reay, K. Reibel, T. Romanowski, R. Sidwell, N. Stanton (Ohio State U.), K. Moriyama, H. Shibata (Okayama U.), T. Hara, O. Kusumoto, Y. Noguchi, M. Teranaka (Osaka City U.), H. Okabe, J. Yokota (Osaka Prefecture U.), J. Harnois, C. Hebert, J. Hebert, S. Lokanathan, B. McLeod (Ottawa U.), S. Tasaka (Tokyo U., Cosmic Ray Lab.), P. Davis, J. Martin, D. Pitman, J. Prentice, P. Sinervo, T. Yoon (Toronto U.), H. Kimura, Y. Maeda (Yokohama National U.), DOE/ER/01545-278, n.d. (recd Jun 1980) 15pp. Published in Phys.Rev.Lett.45:1053,1980.

\*\*\*\*

11.

MEASUREMENT OF THE D0 LIFETIME.

By N. Ushida (Aichi U. of Education), T. Kondo (Fermilab), G. Fujioka, H. Fukushima, Y. Takahashi, S. Tatsumi, C. Yokoyama, Y. Homma, Y. Tsuzuki (Kobe U.), S. Bahk, C. Kim, J. Park, J. Song (Seoul National U.), D. Bailey, S. Conetti, J. Fischer, J. Trischuk (McGill U.), H. Fuchi, K. Hoshino, M. Miyanishi, K. Niu, K. Niwa, H. Shibuya, Y. Yanagisawa (Nagoya U.), S. Errede, M. Gutzwiller, S. Kuramata, N. Reay, K. Reibel, T. Romanowski, R. Sidwell, N. Stanton (Ohio State U.), K. Moriyama, H. Shibata (Okayama U.), T. Hara, O. Kusumoto, Y. Noguchi, M. Teranaka (Osaka City U.), H. Okabe, J. Yokota (Osaka Prefecture U.), J. Harnois, C. Hebert, J. Hebert, S. Lokanathan, B. McLeod (Ottawa U.), S. Tasaka (Tokyo U., Cosmic Ray Lab.), P. Davis, J. Martin, D. Pitman, J. Prentice, P. Sinervo, T. Yoon (Toronto U.), H. Kimura, Y. Maeda (Yokohama National U.), DOE/ER/01545-277, n.d. (recd Jun 1980) 18pp. Published in Phys.Rev.Lett.45:1049,1980.

\*\*\*\*\*

\*\*\*\*\*

For PI-MU ATOMS #533: See #486

\*\*\*\*\*

\*\*\*\*\*

EMULSION/NEUTRINO #536

EMULSION/PI- @ 300 #573

\*\*\*\*

1.

DIRECT OBSERVATION OF CHARMED PARTICLE PAIRS PRODUCED IN 340-GeV/c  
NEGATIVE PION INTERACTIONS IN AN EMULSION CHAMBER.

By H. Fuchi, K. Hoshino, M. Miyanishi, K. Niu, K. Niwa, H. Shibuya, Y. Yanagisawa  
(Nagoya U.), N. Ushida (Aichi U. of Education), S. Tasaka (Tokyo U., Cosmic Ray Lab.),  
Y. Maeda, H. Kimura (Yokohama National U.), DPNU-42-80, Dec 1980. 16pp.

Published in Nuovo Cim.Lett.31:199,1981.

\*\*\*\*

2.

X PARTICLES AND THEIR BACKGROUNDS IN 400-GEV/C PROTON INTERACTIONS.

By H. Fuchi, K. Hoshino, S. Kuramata, K. Niu, K. Niwa, S. Tasaka, Y. Yanagisawa (Nagoya  
U.), N. Ushida (Aichi U. of Education), Y. Maeda, H. Kimura (Yokohama National U.),  
1979.

Nuovo Cim.51A (1979) 18-32.

\*\*\*\*

3.

DIRECT OBSERVATION OF A PAIR DECAY OF NEUTRAL CHARMED PARTICLES  
PRODUCED IN A 400-GeV/c PROTON INTERACTION.

By H. Fuchi, K. Hoshino, S. Kuramata, K. Niu, K. Niwa, H. Shibuya, S. Tasaka,  
Y. Yanagisawa (Nagoya U.), N. Ushida (Aichi U. of Education), Y. Maeda, H. Kimura  
(Yokohama National U.), DPNU-8-79, Mar 1979. 15pp.

Published in Phys.Lett.85B:135,1979.

\*\*\*\*\*

\*\*\*\*\*

DI-MUON #537

\*\*\*\*

1.

CONTINUUM DIMUON PRODUCTION IN anti-p W COLLISIONS AT 125-GeV/c.

By E. Anassontzis, S. Katsanevas, P. Kostarakis, C. Kourkoumelis, A. Markou,

L.K. Resvanis, G. Voulgaris (Athens U., Nucl. Phys. Lab), M. Binkley, B. Cox, J. Enagonio, C. Hojvat, D. Judd, R.D. Kephart, P.K. Malhotra, P.O. Mazur, C.T. Murphy, F. Turkot, R.L. Wagner, D. Wagoner, W. Yang (Fermilab), H. Areti, S. Conetti, P. Lebrun, D.G. Ryan, T. Ryan, W. Schappert, D.G. Stairs (McGill U.), C. Akerlof, X. Cui, P. Kraushaar, D. Nitz, R. Thun, L. Wang (Michigan U.), He Mao, Zhang Nai-jian (Shandong U.), FERMILAB-PUB-85/34-E, Feb 1985. 11pp.

Published in Phys.Rev.Lett.54:2572,1985.

\*\*\*\*

2.

COMPARISON OF ENERGY DEPENDENCE OF TRANSVERSE MOMENTUM OF DIMUONS PRODUCED IN p N AND pi- N INTERACTIONS WITH QCD PREDICTIONS.

By B. Cox, P.K. Malhotra (Fermilab), FERMILAB-PUB-82/99-EXP, Dec 1982. 13pp.

Published in Phys.Rev.D29:63,1984.

\*\*\*\*

3.

A FAST PROCESSOR FOR DILEPTON TRIGGERS.

By H. Areti, R. Baltrusaitis, E. Barsotti, S. Conetti, B. Cox, J. Enagonio, M. Haldeman, R. Hance, W. Haynes, S. Katsanevas, C. Kerns, P. Kostarakis, P. Lebrun, H. Smith, T. Soszynski, J. Stoffel, K. Treptow, F. Turkot, R. Wagner (U. of Athens, Fermilab, IPP-Canada & McGill U.).

Nucl. Instrum. Methods 212 (1983) 135-144.

\*\*\*\*\*

\*\*\*\*\*

15-FOOT NEUTRINO/D2 #545

\*\*\*\*

1.

A COMPARISON OF CROSS-SECTIONS FROM DEEP INELASTIC NEUTRINO SCATTERING ON NEON AND DEUTERIUM.

By J. Hanlon, R.A. Burstein, H.A. Rubin (Illinois Tech), M. Kalelkar, E.B. Brucker, P.F. Jacques, E.L. Koller, R.J. Plano, P.E. Stamer (Rutgers U.), C.Y. Chang, S. Kunori, G.A. Snow, D. Son, P.H. Steinberg, D. Zieminska (Maryland U.), T. Kafka, W.A. Mann, A. Napier, J. Schneps (Tufts U.), T. Kitagaki, S. Tanaka, H. Yuta, K. Abe, K. Hasegawa, A. Yamaguchi, K. Tamai, Y. Otani, H. Hayano, H. Sagawa, Y. Yanokura (Tohoku U.), FERMILAB-PUB-85/101-E, n.d. (recd Sep 1985) 13pp. FERMILAB-PUB-85-101-E (85,REC.SEP.) 13p. Phys. Rev. D32 ( 1985) 2441-2444.

\*\*\*\*

2.

HIGH-ENERGY QUASIELASTIC muon-neutrino N ---> MU- P SCATTERING IN DEUTERIUM.

By T. Kitagaki, S. Tanaka, H. Yuta, K. Abe, K. Hasegawa, A. Yamaguchi, K. Tamai,

T. Hayashino, Y. Otani, H. Hayano, H. Sagawa (Tohoku U.), R.A. Burnstein, J. Hanlon, H.A. Rubin (Illinois Tech), C.Y. Chang, S. Kunori, G.A. Snow, D. Son, P.H. Steinberg, D. Zieminska (Maryland U.), R. Engelmann, T. Kafka, S. Sommars (SUNY, Stony Brook), C.C. Chang, W.A. Mann, A. Napier, J. Schneps (Tufts U.), 1983.  
Phys. Rev. D28 ( 1983) 436-442.

\*\*\*\*

3.

CHARGED PARTICLE MULTIPLICITY DISTRIBUTIONS IN neutrino N AND neutrino P CHARGED CURRENT INTERACTIONS.

By D. Zieminska, S. Kunori, C.y. Chang, G.a. Snow, D. Son, P.h. Steinberg (Maryland U.), R.a. Burnstein, J. Hanlon, H.a. Rubin (Illinois Tech), R. Engelmann, T. Kafka, S. Sommars (SUNY, Stony Brook), T. Kitagaki, S. Tanaka, H. Yuta, K. Abe, K. Hasegawa, A. Yamaguchi, K. Tamai, T. Hayashino, Y. Otani, H. Hayano (Tohoku U.), C.c. Chang, W.a. Mann, A. Napier, J. Schneps (Tufts U.), 1983.

Phys. Rev. D27 ( 1983) 47-57.

\*\*\*\*

4.

QUASIELASTIC CHARMED BARYON PRODUCTION AND EXCLUSIVE STRANGE PARTICLE PRODUCTION BY HIGH-ENERGY NEUTRINOS.

By D. Son, G.A. Snow, S. Chang, S. Kunori, P.H. Steinberg, D. Zieminska (Maryland U.), R.A. Burnstein, J. Hanlon, H.A. Rubin (Illinois Tech.), R. Engelmann, T. Kafka, S. Sommars (SUNY, Stony Brook), T. Kitagaki, S. Tanaka, H. Yuta, K. Abe, K. Hasegawa, A. Yamaguchi, K. Tamai, T. Hayashino, Y. Otani, H. Hayano, H. Sagawa (Tohoku U.), C.C. Chang, W.A. Mann, A. Napier, J. Schneps (Tufts U.), MdDP-PP-83-147, n.d. (recd Apr 1983) 20pp. Contributed paper at Lepton-Photon Conference, Ithaca, N.Y., Aug. 4-9, 1983.

Published in Phys.Rev.D28:2129,1983.

\*\*\*\*

5.

A STUDY OF DIQUARK FRAGMENTATION INTO LAMBDA AND  $Y^{*+}$  IN neutrino N AND neutrino P INTERACTIONS.

By C.C. Chang, W.A. Mann, A. Napier, J. Schneps (Tufts U.), R.A. Burnstein, J. Hanlon, H.A. Rubin (Illinois Tech.), C.Y. Chang, G.A. Snow, D. Son, P.H. Steinberg, D. Zieminska (Maryland U.), R. Engelmann, T. Kafka, S. Sommars (SUNY, Stony Brook), T. Kitagaki, S. Tanaka, H. Yuta, K. Abe, K. Hasegawa, A. Yamaguchi, K. Tamai, T. Hayashino, S. Kunori, Y. Ohtani, H. Hayano (Tohoku U.), TUFTSPUB-82-4501, n.d. (recd Mar 1983) 11pp. Contributed paper at Lepton-Photon Conference, Ithaca, N.Y., Aug. 4-9, 1983.

Published in Phys.Rev.D27:2776,1983.

\*\*\*\*

6.

NEUTRAL CURRENT muon - neutrino AND muon - neutrino p CROSS-SECTIONS FROM HIGH-ENERGY NEUTRINO INTERACTIONS IN DEUTERIUM.

By T. Kafka, W.A. Mann, S. Sommars, R. Engelmann (SUNY, Stony Brook),

R.A. Burnstein, J. Hanlon, H.A. Rubin (Illinois Tech.), C.Y. Chang, G.A. Snow, D. Son, P.H. Steinberg, D. Zieminska (Maryland U.), T. Kitagaki, S. Tanaka, H. Yuta, K. Abe, K. Hasegawa, A. Yamaguchi, K. Tamai, T. Hayashino, S. Kunori, Y. Otani, H. Hayano (Tohoku U.), C.C. Chang, A. Napier, J. Schneps (Tufts U.), n.d. (recd Dec 1981) 5pp. Published in Phys.Rev.Lett.48:910,1982.

\*\*\*\*

7.

NEUTRINO FLUX AND TOTAL CHARGED CURRENT CROSS-SECTIONS IN HIGH-ENERGY NEUTRINO DEUTERIUM INTERACTIONS.

By T. Kitagaki, S. Tanaka, H. Yuta, K. Abe, K. Hasegawa, A. Yamaguchi, K. Tamai, T. Hayashino, Y. Ohtani, H. Hayano (Tohoku U.), R.A. Burnstein, J. Hanlon, H.A. Rubin (Illinois Tech), C.Y. Chang, S. Kunori, G.A. Snow, D. Son, P.H. Steinberg, D. Zieminska (Maryland U.), R. Engelmann, T. Kafka, S. Sommars (SUNY, Stony Brook), C.C. Chang, W.A. Mann, A. Napier, J. Schneps (Tufts U.), 1982.

Phys. Rev. Lett. 49 ( 1982) 98-101.

\*\*\*\*

8.

CHARMED BARYON PRODUCTION IN neutrino D  $\rightarrow$  mu- LAMBDA chi REACTIONS.

By D. Son, G.A. Snow, C.Y. Chang, S. Kunori, P.H. Steinberg, D. Zieminska (Maryland U.), R.A. Burnstein, J. Hanlon, H.A. Rubin (Illinois Tech.), R. Engelmann, T. Kafka, S. Sommars (SUNY, Stony Brook), T. Kitagaki, S. Tanaka, H. Yuta, K. Abe, K. Hasegawa, A. Yamaguchi, K. Tamai, T. Hayashino, Y. Otani, H. Hayano, H. Sagawa (Tohoku U.), C.C. Chang, W.A. Mann, A. Napier, J. Schneps (Tufts U.), Print-82-0574 (MARYLAND), n.d. (recd Jul 1982) 10pp.

Published in Phys.Rev.Lett.49:1128,1982.

\*\*\*\*

9.

NEW DECAY MODE OF THE CHARMED BARYON, LAMBDA(C)<sup>+</sup>  $\rightarrow$  SIGMA<sup>0</sup> PI<sup>+</sup>.

By T. Kitagaki, S. Tanaka, H. Yuta, K. Abe, K. Hasegawa, A. Yamaguchi, K. Tamai, T. Hayashino, S. Kunori, Y. Ohtani, H. Hayano (Tohoku U.), R.A. Burnstein, J. Hanlon, H.A. Rubin (Illinois Tech), C.Y. Chang, G.A. Snow, D. Son, P.H. Steinberg, D. Zieminska (Maryland U.), R. Engelmann, T. Kafka, S. Sommars (SUNY, Stony Brook), C.C. Chang, W.A. Mann, A. Napier, J. Schneps (Tufts U.), 1982.

Phys. Rev. Lett. 48 ( 1982) 299-301.

\*\*\*\*

10.

CURRENT AND TARGET JETS PRODUCED IN HIGH-ENERGY NEUTRINO DEUTERIUM INTERACTIONS.

By T. Kitagaki, S. Tanaka, H. Yuta, K. Abe, K. Hasegawa, A. Yamaguchi, K. Tamai, T. Hayashino, S. Kunori, Y. Ohtani, H. Hayano (Tohoku U.), R.A. Burnstein, J. Hanlon,



H.A. Rubin (Illinois Tech), C.Y. Chang, T. Dombeck, G.A. Snow, D. Son, P.H. Steinberg (Maryland U.), R. Engelmann, T. Kafka, S. Sommars (SUNY, Stony Brook), C.C. Chang, W.A. Mann, J. Schneps (Tufts U.), 1980.  
Phys.Lett.97B (1980) 325-328.

\*\*\*\*

11.

CHARMED BARYON PRODUCTION IN HIGH-ENERGY NEUTRINO DEUTERIUM INTERACTIONS.

By T. Kitagaki, S. Tanaka, H. Yuta, K. Abe, K. Hasegawa, A. Yamaguchi, K. Tamai, T. Hayashino, S. Kunori, Y. Ohtani, H. Hayano (Tohoku U.), R.A. Burnstein, J. Hanlon, H.A. Rubin (Illinois Tech), C.Y. Chang, T. Dombeck, G.A. Snow, D. Son, P.H. Steinberg (Maryland U.), R. Engelmann, T. Kafka, S. Sommars (SUNY, Stony Brook), J. Callas, C.C. Chang, W.A. Mann, J. Schneps (Tufts U.), 1980.  
Phys.Rev.Lett.45 (1980) 955-958.

\*\*\*\*

12.

COMPARISON OF neutrino n AND neutrino p CHARGED CURRENT CROSS-SECTIONS FROM HIGH-ENERGY NEUTRINO INTERACTIONS IN DEUTERIUM.

By J. Hanlon, R.A. Burnstein, H.A. Rubin (Illinois Tech.), C.Y. Chang, T. Dombeck, G.A. Snow, D. Son, P.H. Steinberg (Maryland U.), R. Engelmann, T. Kafka, S. Sommars (SUNY, Stony Brook), T. Kitagaki, S. Tanaka, H. Yuta, K. Abe, K. Hasegawa, A. Yamaguchi, K. Tamai, T. Hayashino, S. Kunori, Y. Ohtani, H. Hayano (Tohoku U.), C.C. Chang, W.A. Mann, J. Schneps (Tufts U.), IIT HEP 80-11, n.d. (recd Dec 1980) 11pp.  
Published in Phys.Rev.Lett.45:1817,1980.

\*\*\*\*\*

\*\*\*\*\*

15-FOOT NEUTRINO/H2&NE #546

\*\*\*\*

1.

SEARCH FOR HIGH-ENERGY TAU-NEUTRINO INTERACTIONS.

By H.C. Ballagh, H.H. Bingham, T.J. Lawry, G.R. Lynch, J. Lys, M.L. Stevenson (LBL, Berkeley & UC, Berkeley), F.R. Huson, E. Schmidt, W. Smart, E. Treadwell (Fermilab), R.J. Cence, F.A. Harris, M.D. Jones, A. Koide, S.I. Parker, M.W. Peters, V.Z. Peterson (Hawaii U.), H.J. Lubatti, K. Moriyasu, E. Wolin (Washington U., Seattle), D. Gee (Wisconsin U., Madison), 1985.  
Phys. Rev. D30 ( 1984) 2271-2278.

\*\*\*\*

2.

HADRON UP - DOWN ASYMMETRY IN NEUTRINO NEON CHARGED CURRENT INTERACTIONS.

By H.C. Ballagh, H.H. Bingham, T.J. Lawry, G.R. Lynch, J. Lys, M.L. Stevenson (UC, Berkeley

& LBL, Berkeley), F.R. Huson, E. Schmidt, W. Smart, M.D. Sokoloff, E. Treadwell (Fermilab), R.J. Cence, F.A. Harris, M.D. Jones, A. Koide, S.I. Parker, M.W. Peters, V.Z. Peterson (Hawaii U.), H.J. Lubatti, K. Moriyasu, E. Wolin (Washington U., Seattle), U. Camerini, W. Fry, D. Gee, M. Gee, R.J. Loveless, D.D. Reeder (Wisconsin U., Madison), 1984.  
Phys. Rev. D30 ( 1984) 1130-1133.

\*\*\*\*

3.

SEARCH FOR NARROW  $\mu^- \rightarrow \pi^+$  MASS ENHANCEMENTS IN A NEUTRINO BUBBLE CHAMBER EXPERIMENT.

By H.C. Ballagh, H.H. Bingham, T.J. Lawry, G.R. Lynch, J. Lys, M.L. Stevenson (LBL, Berkeley & UC, Berkeley), F.R. Huson, E. Schmidt, W. Smart, M.D. Sokoloff, E. Treadwell (Fermilab), R.J. Cence, F.A. Harris, M.D. Jones, A. Koide, S.I. Parker, M.W. Peters, V.Z. Peterson (Hawaii U.), H.J. Lubatti, K. Moriyasu, E. Wolin (Washington U., Seattle), U. Camerini, W. Fry, D. Gee, M. Gee, R.J. Loveless, D.D. Reeder (Wisconsin U., Madison), 1984.

Phys. Rev. D29 ( 1984) 1300-1303.

\*\*\*\*

4.

OBSERVATION OF MUON INNER BREMSSTRAHLUNG IN DEEP INELASTIC NEUTRINO SCATTERING.

By H.c. Ballagh, H.h. Bingham, T.j. Lawry, G.r. Lynch, J. Lys, M.l. Stevenson, G.p. Yost (UC, Berkeley & LBL, Berkeley), F.r. Huson, E. Schmidt, W. Smart, M.d. Sokoloff, E. Treadwell (Fermilab), R.j. Cence, F.a. Harris, M.d. Jones, A. Koide, S.i. Parker, M.w. Peters, V.z. Peterson, V.j. Stenger, G.n. Taylor (Hawaii U.), H.j. Lubatti, K. Moriyasu, E. Wolin (Washington U., Seattle), U. Camerini, W. Fry, D. Gee, M. Gee, R.j. Loveless, D.d. Reeder (Wisconsin U., Madison), 1983.

Phys. Rev. Lett. 50 ( 1983) 1963-1966.

\*\*\*\*

5.

DILEPTON PRODUCTION BY NEUTRINOS IN THE FERMILAB 15-FOOT BUBBLE CHAMBER.

By H.C. Ballagh, H.H. Bingham, T. Lawry, G.R. Lynch, J. Lys, J. Ortel, M.D. Sokoloff, M.L. Stevenson, G.P. Yost (UC, Berkeley & LBL, Berkeley), D. Gee, G. Harigel, F.R. Huson, E. Schmidt, W. Smart, E. Treadwell (Fermilab), R.J. Cence, F.A. Harris, M.D. Jones, S.I. Parker, M.W. Peters, V.Z. Peterson, V.J. Stenger (Hawaii U.), T.H. Burnett, L. Fluri, H.J. Lubatti, K. Moriyasu, D. Rees, G.M. Swider, B.S. Yuldashev, E. Wolin (Washington U., Seattle), U. Camerini, W. Fry, R.J. Loveless, P. McCabe, M. Ngai, D.D. Reeder (Wisconsin U., Madison), UH-511-429-81, Feb 1981. 64pp.

Published in Phys.Rev.D24:7,1981.

\*\*\*\*

6.  
EVIDENCE FOR HARD GLUON BREMSSTRAHLUNG IN A DEEP INELASTIC  
NEUTRINO SCATTERING EXPERIMENT.

By H.C. Ballagh et al.  
Phys. Rev. Lett. 47 (1981) 556.  
\*\*\*\*

7.  
DIMUON PRODUCTION BY NEUTRINOS IN THE FERMILAB 15-FOOT BUBBLE  
CHAMBER.

By H.C. Ballagh, H.H. Bingham, W.B. Fretter, T. Lawry, G.R. Lynch, J. Lys, J.P. Marriner,  
J. Orthel, M.D. Sokoloff, M.L. Stevenson, G.P. Yost (UC, Berkeley & LBL, Berkeley),  
B. Chrisman, D. Gee, A. Greene, G. Harigel, F.R. Huson, T. Murphy, E. Schmidt, W. Smart,  
E. Treadwell, J. Wolfson (Fermilab), R.J. Cence, F.A. Harris, M.D. Jones, S.I. Parker, M.W.  
Peters, V.Z. Peterson (Hawaii U.), T.H. Burnett, L. Fluri, D. Holmgren, H.J. Lubatti,  
K. Moriyasu, D. Rees, H. Rudnicka, G.M. Swider, E. Wolin (Washington U., Seattle),  
R. Benada, U. Camerini, M. Duffy, W. Fry, R.J. Loveless, P. McCabe, D.D. Reeder  
(Wisconsin U., Madison), FERMILAB-PUB-79/59-EXP, Jul 1979. 44pp.  
Published in Phys.Rev.D21:569,1980.  
\*\*\*\*

8.  
OBSERVATION OF SHORTLIVED PARTICLES PRODUCED IN HIGH-ENERGY  
NEUTRINO INTERACTIONS.

By H.C. Ballagh, H.H. Bingham, W.B. Fretter, T. Lawry, G.R. Lynch, J. Lys, J. Orthel, M.D.  
Sokoloff, M.L. Stevenson, G.P. Yost (UC, Berkeley & LBL, Berkeley), B. Chrisman,  
D. Gee, G. Harigel, F.R. Huson, E. Schmidt, W. Smart, E. Treadwell, J. Wolfson (Fermilab),  
R.J. Cence, F.A. Harris, M.D. Jones, S.I. Parker, M.W. Peters, V.Z. Peterson, V.J. Stenger  
(Hawaii U.), T.H. Burnett, L. Fluri, D. Holmgren, H.J. Lubatti, K. Moriyasu, D. Rees,  
H. Rudnicka, G.M. Swider, E. Wolin (Washington U., Seattle), R. Benada, U. Camerini,  
M. Duffy, W. Fry, R.J. Loveless, P. McCabe, M. Ngai, D.D. Reeder (Wisconsin U.,  
Madison), UH-511-351-79, Jul 1979. 17pp.  
Published in Phys.Lett.89B:423,1980.

\*\*\*\*\*

\*\*\*\*\*

For NEUTRAL HYPERON #555: See #008

\*\*\*\*\*

\*\*\*\*\*

HADRON JETS #557

HADRON JETS #672

\*\*\*\*

1.

A MEASUREMENT OF THE NUCLEAR ENHANCEMENT IN HIGH E-transverse AND JET EVENT PRODUCTION.

By Fermilab-E557/E672 Collaboration: R. Gomez (Calif. Inst. of Tech.), L. Dauwe, H. Haggerty, E. Malamud, M. Nikloc (Fermilab), S. Hagopian, A. Pfifer (Florida State u.), A. Abrams, J. Ares, H. Goldberg, C. Halliwell, S. Margulies, D. McLeod (UIC), S. Blessing, R. Crittenden, P. Draper, A. Dzierba, R. Heinz, J. Krider, T. Marshall, J. Martin, A. Sambamurti, P. Smith, A. Snyder, C. Stewart, T. Sulanke, A. Zieminski (Indiana U.), R. Ellsworth (George Mason U.), R. Glasser, J. Goodman, S. Gupta, G. Yodh (U. of Maryland), T. Watts (Rutgers U.), V. Abramov, Yu. Antipov, B. Baldin, S. Denisov, V. Glebov, Y. Gorin, V. Kryshkin, S. Petrukhin, S. Polovnikov, R. Sulyaev (IHEP, Serpukhov) FERMILAB-PUB-86/160-E, Nov 1986. 29pp.  
Published in Phys.Rev.D35:2736,1987.

\*\*\*\*

2.

VALENCE QUARK EFFECTS IN BEAM REMNANTS IN HIGH  $E_t$  PROTON-PROTON COLLISIONS AT  $\sqrt{s}=27.4$  GeV.

By S. Ahn, T.L. Watts (Rutgers U.), B.C. Brown, P. Devenski, H. Haggerty, E. Malamud (Femilab), R. Abrams, H. Goldberg, C. Halliwell, F. Lopez, S. Margulies, D. McLeod (Illinois U.), A. Dzierba, J. Florian, J. Krider, T. Marshall, H. Martin, A. Snyder (Indiana U.), R. Holmes and P. Rapp (U. of Maryland).  
Phys. Lett. B177 (1986) 233.

\*\*\*\*

3.

STUDY OF JETLIKE STRUCTURE IN HIGH-TRANSVERSE-ENERGY EVENTS PRODUCED IN pp COLLISIONS AT 400 GeV/c.

By B.C. Brown, P. Devenski, H. Haggerty, E. Malamud (Fermilab), R. Abrams, H. Goldberg, C. Halliwell, F. Lopez, D. McLeod, J. Solomon (U. of Illinois), A. Dzierba, J. Florian, R. Heinz, J. Krider, H. Martin, P. Smith, S. Teige, A. Zieminski (Indiana U.), R. Ellsworth, R. Glasser, R. Holmes, P. Rapp, G. Yodh (U. of Maryland), S. Ahn and T. Watts (Rutgers U.).  
Phys. Rev. D29 (1984) 1895.

\*\*\*\*

4.

PRODUCTION OF HIGH TRANSVERSE ENERGY EVENTS IN P P COLLISIONS AT 400-GEV/C.

By B.C. Brown, P. Devenski, S. Gronemeyer, H. Haggerty, E. Malamud, P. Rapp (Fermilab), R. Abrams, H. Goldberg, C. Halliwell, F. Lopez, S. Margulies, D. McLeod, J. Solomon

(Illinois U., Chicago), A. Dzierba, J. Florian, R. Heinz, J. Krider, J. Martin, D. Petersen, P. Smith, S. Teige (Indiana U.), R. Ellsworth, R. Glasser, R. Holmes, L. Myriantopoulos, H. Strobele, G. Yodh, A. Zieminski (Maryland U.), S. Ahn, T. Watts (Rutgers U.), 1982. Phys. Rev. Lett. 49 ( 1982) 711-715.

\*\*\*\*

5.

PRODUCTION OF HIGH TRANSVERSE ENERGY EVENTS IN p - NUCLEUS COLLISIONS AT 400-GeV/c.

By B. Brown, P. Devenski, S. Gronemeyer, H. Haggerty, E. Malamud, P. Rapp (Fermilab), R. Abrams, H. Goldberg, C. Halliwell, F. Lopez, S. Margulies, D. McLeod, J. Solomon (Illinois U., Chicago), A. Dzierba, J. Florian, R. Heinz, J. Krider, J. Martin, D. Petersen, P. Smith, S. Teige (Indiana U.), R. Ellsworth, R. Glasser, R. Holmes, L. Myriantopoulos, H. Strobele, G. Yodh, A. Zieminski (Maryland U.), S. Ahn, T. Watts (Rutgers U.), FERMILAB-PUB-82/74-EXP, Oct 1982. 14pp.

Published in Phys.Rev.Lett.50:11,1983.

\*\*\*\*

6.

A SEGMENTED CALORIMETER FOR HIGH p-transverse JET EXPERIMENTS.

By P. Rapp, P. Devenski, B.C. Brown, H. Haggerty (Fermilab), R. Abrams, F. Lopez, D. McLeod (Illinois U., Chicago), H. Strobele (Maryland U.), FERMILAB-PUB-81/31-EXP, Mar 1981. 26pp.

Published in Nucl.Instr.Meth.188:285,1981.

\*\*\*\*\*

\*\*\*\*\*

15-FOOT & EMULSION/NEUTRINO #564

\*\*\*\*

1.

OBSERVATION OF CHARMED SIGMA(c)O BARYON DECAY INTO SIGMA+ pi- pi+ IN NUCLEAR EMULSION.

By R. Ammar, V.V. Ammosov, A. Bakich, V.I. Baranov, T. Barket, Yu.A. Batusov, S.A. Bunyatov, A.O. Weisenberg, R. Wilks, B. Wilczinska, G. Wilczinski, L. Voyvodic, W. Wolter, B. Woyzek, V.A. Gapienko, P.A. Gorichev, J. Grass, M.I. Daion, R. Davis, O.K. Egorov, M. Ivanova, N. Kwak, V.I. Klyukhin, E.D. Kolganova, D. Coppage, V.I. Koreshev, S. Krzywdzinski, O.M. Kuznetsov, J. Lord, V.V. Lyukov, I.V. Makhlyueva, A. Olszewski, L. Peak, P.V. Pitukhin, E.A. Pozharova, R. Reimer, R. Rosenblatt, G. Rubin, V.I. Sirotenko, E.A. Slobodyuk, W. Smart, V.A. Smiritskii, R. Stamp, V.I. Tretyak, Kh. Chernev, V.V. Shamanov, V.G. Shevchenko, A. Jurak, V.A. Yarba, DESY-L-TRANS-310, Aug 1986. 4pp. Translated from the Russian Journal Pisma Zh. Eksp. Teor. Fiz., Vol.43,p401, 1986(translation).

\*\*\*\*

2.

OBSERVATION IN NUCLEAR EMULSION OF A CHARGED SIGMA(c)0 BARYON  
DECAY TO LAMBDA0+ pi- WITH A SUBSEQUENT LAMBDA(c)+ DECAY TO  
SIGMA+ pi- pi+. (In Russian)

By L. Voyvodic, V. Smart (Fermilab), A.O. Vaisenberg, P.A. Gorichev, O.K. Egorov, E.D. Kolganova, I.V. Makhlyueva, E.A. Pozharova, V.A. Smirnitskii, V.V. Shamanov, V.G. Shevchenko (Moscow, ITEP), V.V. Ammosov, V.I. Baranov, V.A. Gapienko, V.I. Klyukhin, V.I. Koreshev, P.V. Pitukhin, V.I. Sirotenko, E.A. Slobodyuk, V.A. Yarba (Serpukhov, IFVE), Yu.A. Batusov, S.A. Bunyatov, O.M. Kuznetsov, V.V. Lyukov, V.I. Tretyak (Dubna, JINR), G. Rubin (Chicago U., EFI), B. Vilchinska, G. Vilchinski, V. Volter, B. Voisek, A. Olszewski, A. Yurak (Cracow, INP-Exp), Kh. Chernev (Sofiya, Inst. Nucl. Res.), M. Ivanova (Plovdiv U.), R. Ammar, J. Gress, R. Davis, N. Kwak, D. Coppage, R. Raimer, R. Stamp (Kansas U.), A. Bakich, L. Pik (Sydney U.), T. Barnet, R. Wilkes, S. Krzywdzhinskii, J.J. Lord, R. Rosenblatt (Washington U., Seattle), M.I. Daion, V.M. Rappoport (Moscow Phys. Eng. Inst.), ITEP-51-1986, 1986. 9pp.

Published in JETP Lett.43:515,1986.

(\*Ammar first author in journal\*)

\*\*\*\*

3.

NEUTRINO INTERACTIONS IN EMULSION STACKS INSIDE THE FERMILAB 15-  
FOOT BUBBLE CHAMBER.

By Fermilab E-564 Collaboration (W. Smart, et al.), VTL-PUB-106, Mar 1985. 57pp.

Published in Acta Phys.Polon.B17:41,1986.

\*\*\*\*

4.

PRODUCTION AND DECAY OF F+ (2030) OBSERVED IN muon-neutrino  
INTERACTIONS IN EMULSION.

By R. Ammar, D. Coppage, R. Davis, N. Kwak, R. Riemer, R. Stump (Kansas U.), H. Kautzky, W. Smart, S. Velen, L. Voyvodic (Fermilab), V. Ammosov, V. Baranov, A. Belkov, V. Gapienko, V. Klyukhin, V. Koreshev, P. Pitukhin, V. Sirotenko, V. Yarba (Serpukhov, IFVE), V. Efremenko, O. Egorov, P. Gorichev, V. Kaftanov, N. Kolganova, M. Kubantsev, I. Makhlyueva, E. Pozharova, V. Shevchenko, V. Smirnitskii, A. Weissberg (Moscow, ITEP), J. Babecki, B. Furmanska, R. Holyński, A. Jurak, S. Krzywdzinski, G. Nowak, H. Wilczynski, W. Wolter, B. Wosiek (Cracow, INP-Exp), S. Bunyatov, M. Ivanova, O. Kuznetsov, V. Lyukov, V. Sidorov, Kh. Chernev, K. Bogomolov (Dubna, JINR), T. Burnett, J. Lord, R. Rosenblatt, R.J. Wilkes (Washington U., Seattle), Print-80-0338 (KANSAS), n.d. (recd May 1980) 13pp.

Published in Phys.Lett.94B:118,1980.

\*\*\*\*\*

\*\*\*\*\*

30-INCH HYBRID #565

30-INCH HYBRID #570

\*\*\*\*

1.

SCALING IN SOFT HADROPRODUCTION BY POSITIVE PROJECTILES IN THE RANGE OF 32-GEV/C - 147-GEV/C.

By D.H. Brick, A.M. Shapiro, M. Widgoff (Brown U.), E.D. Alyea (Indiana U.), T. Fuess, E.S. Hafen, P. Haridas, R.I. Hulsizer, C. Milstene, I.A. Pless, R.K. Yamamoto (MIT, LNS), F. Grard (Mons U.), R. Dolfini, S. Ratti (Pavia U.), R. Dimarco, M. Kalelkar, R.J. Plano, P.E. Stamer (Rutgers U.), S. Dado, J.J. Goldberg (Technion), R. Heifetz, A. Levy (Tel Aviv U.), W.M. Bugg, T. Handler, E.L. Hart (Tennessee U.), Y. Eisenberg, U. Karshon (Weizmann Inst.), 1986. Z. Phys. C31 ( 1986) 59-63.

\*\*\*\*

2.

PLANAR EVENTS PRODUCED IN HADRON PROTON COLLISIONS AT 147-GeV/c AND THEIR JET LIKE STRUCTURES.

By D.H. Brick, H. Rudnicka, A.M. Shapiro, M. Widgoff (Brown U.), R.E. Ansorge, W.W. Neale, D.R. Ward, B.M. Whyman (Cambridge U., Cavendish Lab), R.A. Burnstein, H.A. Rubin (Illinois Tech), E.D. Alyea (Indiana U.), L. Bachman, C.Y. Chien, P. Lucas, A. Pevsner (Johns Hopkins U.), J.T. Bober, T.A.J. Frank, E.S. Hafen, P. Haridas, D. Huang, R.I. Hulsizer, V. Kistiakowsky, P. Lutz, S.H. Oh, I.A. Pless, T.B. Stoughton, V. Suchorebrow, S. Tether, P.C. Trepagnier, Y. Wu, R.K. Yamamoto, J.M. Lesceux, P. Pilette, R. Windmolders (Mons U.), F. Crijns, H. De Bock, W. Kittel, W. Metzger, C. Pols (MIT, LNS), F. Grard, J. Hanton, V. Henri, P. Herquet, S. Toaff (Technion), G. Alexander, O. Benary (Stevens Tech), L. Berny, S. Dado, J. Goldberg, M. Schouten, R. Van De Walle (Nijmegen U. & NIKHEF, Amsterdam), R.J. Plano, P.E. Stamer, T.L. Watts (Rutgers U. & Pavia U.), R. Dimarco, P.F. Jacques, M. Kalelkar, H.O. Cohn (Oak Ridge), F. Carminati, R. Dolfini, S. Ratti, E.B. Brucker, E.L. Koller, S. Taylor, J. Grunhaus, R. Heifetz, A. Levy (Tel Aviv U.), J.E. Brau, T. Ludlam, R. Steiner, H. Taft (Yale U.), Y. Eisenberg, U. Karshon, A. Shapira (Weizmann Inst. & Tennessee U.), W.M. Bugg, G.T. Condo, T. Handler, E.L. Hart, A.H. Rogers, 1984.

Z. Phys. C24 ( 1984) 19-29.

\*\*\*\*

3.

SEARCH FOR LONGLIVED CHARGE +2 HADRONS.

By D. Brick, H. Rudnicka, A.M. Shapiro, M. Widgoff (Brown U.), R.E. Ansorge, W.W. Neale, D.R. Ward, B.M. Whyman (Cambridge U., Cavendish Lab), R.A. Burnstein, H.A. Rubin (Illinois Tech.), E.D. Alyea, Jr. (Indiana U.), L. Bachman, C.Y. Chien, P. Lucas, A. Pevsner (Johns Hopkins U.), J.T. Bober, T. Frank, E.S. Hafen, P. Haridas, D. Huang, R.I. Hulsizer, V. Kistiakowsky, P. Lutz, S.H. Oh, I.A. Pless, T.B. Stoughton, V. Suchorebrow,

S. Tether, P.C. Trepagnier, M. von Randow, Y. Wu, R.K. Yamamoto (MIT, LNS), F. Gard, J. Hanton, V. Henri, P. Herquet, J.M. Lesceux, R. Windmolders (Mons U.), H. DeBock, F. Crijns, W. Kittel, W. Metzger, C. Pols, M. Schouten, R. Van de Walle (Nijmegen U.), H.O. Cohn (Oak Ridge), F. Carminati, R. Dolfini, S. Ratti (Pavia U. & INFN, Pavia), R. DiMarco, P.F. Jacques, M. Kalelkar, R.J. Plano, P. Stamer, T.L. Watts (Rutgers U.), E.B. Brucker, E.L. Koller, S. Taylor (Stevens Tech.), S. Dado, J. Goldberg (Technion), G. Alexander, O. Benary, J. Grunhaus, R. Heifetz, A. Levy (Tel Aviv U.), J.E. Brau, W.M. Bugg, G.T. Condo, T. Handler, E.L. Hart, A.H. Rogers (Tennessee U.), Y. Eisenberg, U. Karshon, A. Shapira (Weizmann Inst.), T. Ludlam, R. Steiner, H. Taft (Yale U.), RU-84-28, Jul 1984. 9pp.

Published in Phys.Rev.D30:1134,1984.

\*\*\*\*

4.

THE REACTIONS  $P P \rightarrow P P \pi^+ \pi^-$ ,  $K^+ P \rightarrow K^+ P \pi^+ \pi^-$ ,  $\pi^+ P \rightarrow \pi^+ P \pi^+ \pi^-$  AND  $\pi^- P \rightarrow \pi^- P \pi^+ \pi^-$  AT 147-GeV/c.

By D.h. Brick, H. Rudnicka, A.m. Shapiro, M. Wighoff (Brown U.), R.e. Ansorge, W.w. Neale, D.r. Ward, B.m. Whyman (Cambridge U., Cavendish Lab), R.a. Burnstein, H.a. Rubin (Illinois Tech), E.d. Alyea (Indiana U.), L. Bachman, C.y. Chien, P. Lucas, A. Pevsner (Johns Hopkins U.), J.t. Bober, R. Dolfini, T.a.j. Frank, E.s. Hafen, P. Haridas, D. Huang, R.i. Hulsizer, V. Kistiakowsky, P. Lutz, S. Noguchi, S.h. Oh, I.a. Pless, T.b. Stoughton, V. Suchorebrow, S. Tether, P.c. Trepagnier, C. Pols, M. Schouten, R.t. Van De Walle (NIK-HEF, Amsterdam), S. Ratti (Pavia U.), R. Dimarco, P.f. Jacques, C. Castoldi, H.o. Cohn (Oak Ridge), G. Bressi, E. Calligarich (Mons U.), H. De Bock, F. Crijns, W. Kittel, W. Metzger, Y. Eisenberg, D. Hochman, U. Karshon, E.e. Ronat, A. Shapira, T. Handler, E.l. Hart, A.h. Rogers (Tennessee U.), Y. Wu, R.k. Yamamoto (MIT, LNS), F. Gard, J. Hanton, R.v. Steiner, H.d. Taft (Yale U.), R. Yaari, G. Yekutieli (Weizmann Inst.), T.w. Ludlam, M. Kalelkar, R.j. Plano, P.e. Stamer, T.l. Watts, J. Grunhaus, S. Toaff (Technion), G. Alexander, O. Benary (Stevens Tech), L. Berny, S. Dado, J. Goldberg (Rutgers U.), E.b. Brucker, E.l. Koller, S. Taylor, V. Henri, P. Herquet, J.m. Lesceux, P. Pilette, R. Windmolders, R. Heifetz, A. Levy (Tel Aviv U.), W.m. Bugg, G.t. Condo, 1983. Z. Phys. C19 (1983) 1-9.

\*\*\*\*

5.

MEASUREMENTS OF THE MULTIPLICITIES IN THE COLLISION OF HADRONS WITH HEAVY NUCLEI AT 200-GEV/C.

By D.H. Brick, H. Rudnicka, A.M. Shapiro, W. Smith, M. Wighoff (Brown U.), P. Beilliere, P. Lutz, J.L. Narjoux (College de France), N. Gelfand (Fermilab), E.D. Alyea (Indiana U.), J.T. Bober, W. Busza, R. Dolfini, T.A.J. Frank, E.S. Hafen, P. Haridas, D.Q. Huang, R.I. Hulsizer, V. Kistiakowsky, S. Noguchi, S.H. Oh, I.A. Pless, T.B. Stoughton, V. Suchorebrow, S. Tether, P.C. Trepagnier, B.F. Wadsworth, Y. Wu, R.K. Yamamoto (MIT, LNS), H. Debock, F. Crijns, M. Schouten, R. Van De Walle, R.J. Plano, P.E. Stamer,



A. Vogel (Rutgers U.), A. Rafatian, A.H. Rogers (Tennessee U.), T. Kitagaki, S. Tanaka, H. Yuta, K. Abe, K. Hasegawa, A. Yamaguchi, K. Tamai, E.B. Brucker, E.L. Koller (Stevens Tech), W.M. Bugg, G.T. Condo, T. Handler, H.J. Hargis, E.L. Hart, G. Alexander, J. Grunhaus, A. Levy, C. Milstene (Tel Aviv U. & Tohoku Gakuin U.), T.W. Ludlam, R. Steiner, H.D. Taft, Y. Hayashino, Y. Otani (Tohoku U.), M. Higuchi, M. Sato (Nijmegen U.), R. Dimarco, P.F. Jacques, M. Kalelkar (Yale U.), 1982.  
Nucl. Phys. B201 ( 1982) 189-196.

\*\*\*\*

6.

COMPARISON OF 147-GeV/c  $\pi^-$ -P LOW TRANSVERSE MOMENTUM HADRON PRODUCTION WITH DEEP INELASTIC LEPTOPRODUCTION.

By D. Brick, H. Rudnicka, A.M. Shapiro, M. Widgoff (Brown U.), E.D. Alyea (Indiana U.), E.S. Hafen, R.I. Hulsizer, V. Kistiakowsky, A. Levy, P. Lutz, S.H. Oh, I.A. Pless, J.P. Silverman, T.B. Stoughton, P.C. Trepagnier, R.K. Yamamoto (MIT, LNS), H.O. Cohn (Oak Ridge), M. Kalelkar, R.J. Plano, P.E. Stamer, T.L. Watts (Rutgers U.), E.B. Brucker, E.L. Koller (Stevens Tech), W.M. Bugg (Tennessee U.), T. Ludlam, H.D. Taft (Yale U.), 1981.  
Z. Phys. C11 ( 1981) 335-341.

\*\*\*\*

7.

INCLUSIVE AND SEMIINCLUSIVE  $\rho^0$  PRODUCTION IN  $\pi^+$  /  $\pi^-$  /  $K^+$  /  $P$  INTERACTIONS AT 147-GeV/c.

By M. Schouten, H. De Bock, Z. Dziembowski, W. Kittel, W. Metzger, C. Pols, R.T. Van De Walle (Nijmegen U. & NIKHEF, Amsterdam), D. Brick, H. Rudnicka, A.M. Shapiro, M. Widgoff (Brown U.), R.E. Ansorge, W.W. Neale, D.R. Ward, B.M. Whyman (Cambridge U., Cavendish Lab), R.A. Burnstein, H.A. Rubin (Illinois Tech), E.D. Alyea (Indiana U.), L. Bachman, C.Y. Chien, P. Lucas, A. Pevsner (Johns Hopkins U.), J.T. Bober, E.B. Brucker, T.A.J. Frank, E.S. Hafen, P. Haridas, D. Huang, P. Stamer, T.L. Watts (Rutgers U.), R. Dimarco, P.F. Jacques, M. Kalelkar, R.J. Plano, E. Calligarich, C. Castoldi, R. Dolfini, S. Ratti (Pavia U.), G. Alexander, O. Benary, J. Grunhaus, R. Heifetz, A. Levy, A.H. Rogers (Tennessee U.), Y. Eisenberg (Tel Aviv U.), W.M. Bugg, G.T. Condo, T. Handler, E.L. Hart, U. Karshon, E.E. Ronat, A. Shapira, R. Yaari, G. Yekutieli, R.I. Hulsizer, V. Kistiakowsky, P. Lutz, S.H. Oh, I.A. Pless, T.B. Stoughton, V. Suchorebrow, S. Tether, P.C. Trepagnier, V. Henri, P. Herquet, J.M. Lesceux, P. Pilette, R. Windmolder, Y. Wu, R.K. Yamamoto (MIT, LNS), F. Grard, J. Hanton (Yale U. & Weizmann Inst.), T.W. Ludlam, R. Steiner, H.D. Taft (Mons U.), H.O. Cohn (Oak Ridge), G. Bressi, S. Dado, J. Goldberg, S. Toaff (Technion), E.L. Koller, S. Taylor (Stevens Tech), L. Berny, 1981.  
Z. Phys. C9 ( 1981) 93-104.

\*\*\*\*

8.

THE EFFECTIVE ENERGY DEPENDENCE OF THE CHARGED PARTICLE'S MULTIPLICITY IN  $P$  /  $\pi^+$  /  $K^+$  INTERACTIONS ON PROTONS AT 147-GEV/C.

By D. Brick, H. Rudnicka, A.M. Shapiro, M. Widgoff (Brown U.), R.E. Ansorge,

W.W. Neale, D.R. Ward, B.M. Whyman (Cambridge U., Cavendish Lab), R.A. Burnstein, H.A. Rubin (Illinois Tech), E.D. Alyea (Indiana U.), L. Bachman, C.Y. Chien, P. Lucas, A. Pevsner (Johns Hopkins U.), J.T. Bober, M. Elahy, T. Frank, E.S. Hafen, P. Haridas, D. Huang, R.I. Hulsizer, V. Kistiakowsky, P. Lutz, S.H. Oh, I.A. Pless, T.B. Stoughton, V. Suchorebrow, S. Tether, P.C. Trepagnier, Y. Wu, R.K. Yamamoto (MIT, LNS), F. Grard, J. Hanton, V. Henri, E.E. Ronat, A. Shapira, R. Yaari, G. Yekutieli (Weizmann Inst.), T. Ludlam, R. Steiner, H. Taft, E.L. Koller, S. Taylor (Stevens Tech), L. Berny, S. Dado, J. Goldberg, S. Toaff (Technion), G. Alexander, O. Benary, J. Grunhaus, R. Heifetz, A. Levy (Tel Aviv U.), W.M. Bugg, G.T. Condo, T. Handler, E.L. Hart, A.H. Rogers (Tennessee U.), Y. Eisenberg, D. Hochman, U. Karshon (Yale U. & Mons U.), H. Debock, F. Crijns, W. Kittel, W. Metzger, C. Pols, M. Schouten, R. Van De Walle (Nijmegen U.), H.O. Cohn (Oak Ridge), G. Bressi, E. Calligarich, C. Castoldi, R. Dolfini, S. Ratti (Pavia U.), P. Herquet, J.M. Lesceux, P. Pilette, R. Windmolders, R. Dimarco, P.F. Jacques, M. Kalelkar, R.J. Plano, P. Stamer, T.L. Watts (Rutgers U.), E.B. Brucker, 1981.

Phys. Lett. 103B ( 1981) 241-246.

\*\*\*\*

9.

TOPOLOGICAL, TOTAL AND ELASTIC CROSS-SECTIONS FOR  $K^+ p$ ,  $\pi^+ p$  AND  $p p$  INTERACTIONS AT 147-GeV/c.

By D. Brick, H. Rudnicka, A.M. Shapiro, M. Widgoff (Brown U.), R.E. Ansorge, W.W. Neale, D.R. Ward, B.M. Whyman (Cambridge U., Cavendish Lab.), R.A. Burnstein, H.A. Rubin (Illinois Tech.), E.D. Alyea, Jr. (Indiana U.), L. Bachman, C.Y. Chien, P. Lucas, A. Pevsner (Johns Hopkins U.), J.T. Bober, R. Dolfini, T. Frank, E.S. Hafen, P. Haridas, D. Huang, R.I. Hulsizer, V. Kistiakowsky, P. Lutz, S. Noguchi, S.H. Oh, I.A. Pless, T.B. Stoughton, V. Suchorebrow, S. Tether, P.C. Trepagnier, Y. Wu, R.K. Yamamoto (MIT, LNS), F. Grard, J. Hanton, V. Henri, P. Herquet, J.M. Lesceux, P. Pilette, R. Windmolders (Mons U.), H. DeBock, F. Crijns, W. Kittel, W. Metzger, C. Pols, M. Schouten, R. Van de Walle (Nijmegen U.), H.O. Cohn (Oak Ridge), G. Bressi, E. Calligarich, C. Castoldi, S. Ratti (Pavia U. & INFN, Pavia), R. DiMarco, P.F. Jacques, M. Kalelkar, R.J. Plano, P. Stamer, T.L. Watts (Rutgers U.), E.B. Brucker, E.L. Koller, S. Taylor (Stevens Tech.), L. Berny, S. Dado, J. Goldberg, S. Toaff (Technion), G. Alexander, O. Benary, J. Grunhaus, R. Heifetz, A. Levy (Tel Aviv U.), W.M. Bugg, G.T. Condo, T. Handler, E.L. Hart, A.H. Rogers (Tennessee U.), Y. Eisenberg, D. Hochman, U. Karshon, E.E. Ronat, A. Shapira, R. Yaari, G. Yekutieli (Weizmann Inst.), T. Ludlam, R. Steiner, H. Taft (Yale U.), ST/66/331/1, n.d. (recd Apr 1982) 41pp. Published in Phys.Rev.D25:2794,1982.

\*\*\*\*

10.

INCLUSIVE STRANGE RESONANCE PRODUCTION IN  $p p$ ,  $\pi^+ p$  AND  $K^+ p$  INTERACTIONS AT 147-GeV/c.

By D. Brick, H. Rudnicka, A.M. Shapiro, M. Widgoff (Brown U.), R.E. Ansorge, J.R. Carter, W.W. Neale, J.G. Rushbrooke, D.R. Ward, B.M. Whyman (Cambridge U., Cavendish Lab.),

R.A. Burnstein, H.A. Rubin (Illinois Tech), J.W. Cooper, R.L. Plumer, R.D. Sard, J.O. Tortora (Illinois U., Urbana), E.D. Alyea (Indiana U.), L. Bachman, C.Y. Chien, A. Pevsner (Johns Hopkins U.), J.E. Brau, E.S. Hafen, D. Hochman, R.I. Hulsizer, V. Kistiakowsky, P. Lutz, A. Napier, I.A. Pless, J.P. Silverman, P.C. Trepagnier, R.K. Yamamoto (MIT, LNS), F. Grard, J. Hanton, V. Henri, P. Herquet, J.M. Lesceux, R. Windmolders (Mons U.), F. Crijns, H. deBock, W. Kittel, W. Metzger, C. Pols, M. Schouten, R. Van de Walle (Nijmegen U.), H.O. Cohn (Oak Ridge), G. Bressi, E. Calligarich, F. Carminati, C. Castoldi, R. Dolfini, S. Ratti (Pavia U. & INFN, Pavia), R. DiMarco, P.F. Jacques, M. Kalelkar, R.J. Plano, P. Stamer, T.L. Watts (Rutgers U.), E.B. Brucker, E.L. Koller, S. Taylor (Stevens Tech.), L. Berny, S. Dado, J. Goldberg, S. Toaff (Technion), G. Alexander, O. Benary, J. Grunhaus, A. Levy (Tel Aviv U.), W.M. Bugg, G.T. Condo, T. Handler, E.L. Hart (Tennessee U.), Y. Eisenberg, U. Karshon, E.E. Ronat, A. Shapira, R. Yaari, G. Yekutieli (Weizmann Inst.), D.A. Ljung, T.W. Ludlam, H.D. Taft (Yale U.), RU-81-29, Feb 1982. 41pp.

Published in Phys.Rev.D25:2248,1982.

also in Notre Dame Multi.Dyn.1981:161 (QCD161:C49:1981)

(\*Presented by Kalelkar in proceedings\*)

\*\*\*\*

11.

APPROACH TO SCALING IN INCLUSIVE  $\pi^+$  /  $\pi^-$  RATIOS AT 147-GeV/c.

By D. Brick, H. Rudnicka, A.M. Shapiro, M. Widgoff (Brown U.), R.E. Ansorge, W.W. Neale, D.R. Ward, B.M. Whyman (Cambridge U., Cavendish Lab.), R.A. Burnstein, H.A. Rubin (Illinois Tech.), E.D. Alyea, Jr. (Indiana U.), L. Bachman, C.Y. Chien, P. Lucas, A. Pevsner (Johns Hopkins U.), J.T. Bober, T.A.J. Frank, E.S. Hafen, P. Haridas, D. Huang, R.I. Hulsizer, V. Kistiakowsky, P. Lutz, S.H. Oh, I.A. Pless, T.B. Stoughton, V. Suchorebrow, S. Tether, P.C. Trepagnier, Y. Wu, R.K. Yamamoto (MIT, LNS), F. Grard, J. Hanton, V. Henri, P. Herquet, J.M. Lesceux, P. Pilette, R. Windmolders (Mons U.), H. de Bock, F. Crijns, W. Kittel, W. Metzger, C. Pols, M. Schouten, R. Van de Walle (Nijmegen U.), H.O. Cohn (Oak Ridge), G. Bressi, E. Calligarich, C. Castoldi, R. Dolfini, S. Ratti (Pavia U. & INFN, Pavia), R. DiMarco, P.F. Jacques, M. Kalelkar, R.J. Plano, P. Stamer, T.L. Watts (Rutgers U.), E.B. Brucker, E.L. Koller, S. Taylor (Stevens Tech.), L. Berny, S. Dado, J. Goldberg, S. Toaff (Technion), G. Alexander, O. Benary, J. Grunhaus, R. Heifetz, A. Levy (Tel Aviv U.), W.M. Bugg, G.T. Condo, T. Handler, E.L. Hart, A.H. Rogers (Tennessee U.), Y. Eisenberg, D. Hochman, U. Karshon, E.E. Ronat, A. Shapira, R. Yaari, G. Yekutieli (Weizmann Inst.), T.W. Ludlam, R. Steiner, H.D. Taft (Yale U.), HEN 188/2, Nov 1981. 22pp.

Published in Zeit.Phys.C13:11,1982.

\*\*\*\*

12.

MULTIPLE CORRELATIONS AND HIGH TRANSVERSE MOMENTUM JETS IN 147-GeV/c  $\pi^-$  p INTERACTIONS.

By D. Brick, A.M. Shapiro, M. Widgoff (Brown U.), E.D. Alyea, Jr. (Indiana U.),

E.S. Hafen, R.I. Hulsizer, V. Kistiakowsky, A. Levy, P. Lutz, S.H. Oh, I.A. Pless, J.P. Silverman, T.B. Stoughton, P.C. Trepagnier, R.K. Yamamoto (MIT, LNS), H.O. Cohn (Oak Ridge), R.J. Plano, P. Stamer, T.L. Watts (Rutgers U.), E.B. Brucker, E.L. Koller (Stevens Tech.), W.M. Bugg (Tennessee U.), T. Ludlam, H.D. Taft (Yale U.), Print-81-0628, Sep 1979. 34pp. Submitted to 10th Int. Symp. on Multiparticle Dynamics, Goa, India, Sep 25-29, 1979.  
Published in Phys.Rev.D24:590,1981.

\*\*\*\*

13.

HADRON PRODUCTION IN  $\pi^+ p$ ,  $K^+ p$  AND  $p p$  COLLISIONS AT 147-GeV/c AND PROPERTIES OF JET LIKE MULTIPARTICLE SYSTEMS.

By International Hybrid Spectrometer Consortium (D.H. Brick, et al.), IFNUP/AE 01/81, n.d. (recd Jun 1981) 29pp.

Published in Z.Phys.C15:1,1982.

\*\*\*\*

14.

INCLUSIVE PRODUCTION OF NEUTRAL STRANGE PARTICLES BY 147-GeV/c  $\pi^+ K^+ p$  INTERACTIONS IN HYDROGEN.

By D. Brick, A.M. Shapiro, M. Widgoff (Brown U.), R.E. Ansorge, J.R. Carter, W.W. Neale, J.G. Rushbrooke, D.R. Ward, B.M. Whyman (Cambridge U., Cavendish Lab), R.A. Burnstein, H.A. Rubin (Illinois Tech), J.W. Cooper, R.L. Plumer, R.D. Sard, J.O. Tortora (Illinois U., Urbana), E.D. Alyea (Indiana U.), L. Bachman, C.Y. Chien, A. Pevsner (Johns Hopkins U.), J.E. Brau, E.S. Hafen, D. Hochman, R.I. Hulsizer, V. Kistiakowsky, A. Levy, P. Lutz, A. Napier, I.A. Pless, J.P. Silverman, P. Trepagnier, R.K. Yamamoto (MIT, LNS), F. Gard, J. Hanton, V. Henri, P. Herquet, J.M. Lesceux, R. Windmolders (Mons U.), H. De Bock, F. Crijns, W. Metzger, C. Pols, M. Schouten, R. Van De Walle (Nijmegen U.), H.O. Cohn (Oak Ridge), G. Bressi, E. Calligarich, C. Castoldi, G. Cecchet, R. Dolfini, G. Liguori, S. Ratti (Pavia U.), P.F. Jacques, M. Kalelkar, R.J. Plano, P. Stamer, T.L. Watts (Rutgers U.), E.B. Brucker, E.L. Koller, S. Taylor (Stevens Tech), L. Berny, S. Dado, J. Goldberg, S. Toaff (Technion), G. Alexander, O. Benary, J. Grunhaus (Tel Aviv U.), W.M. Bugg, G.T. Condo, T. Handler, E.L. Hart (Tennessee U.), Y. Eisenberg, U. Karshon, E.E. Ronat, A. Shapira, R. Yaari, G. Yekutieli (Weizmann Inst.), D. Ljung, T. Ludlam, H. Taft (Yale U.), 1980.

Nucl.Phys.B164 (1980) 1-24.

\*\*\*\*

15.

NEUTRAL PARTICLE PRODUCTION IN  $\pi^+ p$  INTERACTIONS AT 147-GeV/c AND COMPARISON TO CHARGED PARTICLE PRODUCTION.

By D. Brick, D. Fong, M. Heller, A.M. Shapiro, M. Widgoff (Brown U.), F. Bruyant (CERN), D. Bogert, M. Johnson (Fermilab), R. Burnstein, C. Fu, D. Petersen, M. Robertson, H. Rubin (Illinois Tech), R. Sard, A. Snyder, J. Tortora (Illinois U., Urbana), E.D. Alyea (Indiana U.), C.Y. Chien, P. Lucas, A. Pevsner, R. Zdanis (Johns Hopkins U.), F. Barreiro,

O. Benary, J.E. Brau, J. Grunhaus, E.S. Hafen, R.I. Hulsizer, U. Karshon, V. Kistiakowsky, A. Levy, A. Napier, I.A. Pless, J.P. Silverman, P.C. Trepagnier, J. Wolfson, R.K. Yamamoto (MIT, LNS), H. Cohn (Oak Ridge), P.F. Jacques, T.C. Ou, R.J. Plano, T.L. Watts (Rutgers U.), E.B. Brucker, E.L. Koller, P. Stamer, S. Taylor (Stevens Tech), W. Bugg, G. Condo, T. Handler, E. Hart (Tennessee U.), H. Kraybill, D. Ljung, T.W. Ludlam, H.D. Taft (Yale U.), 1979.

Phys.Rev.D20 (1979) 2123-2134.

\*\*\*\*

16.

LEADING PARTICLES AND DIFFRACTION DISSOCIATION IN 150-GEV/C PI- P INTERACTIONS.

By D. Brick, D. Fong, M. Heller, A.M. Shapiro, M. Widgoff (Brown U.), P. Bruyant (CERN), F. Lucas (Duke U.), D. Bogert, M. Johnson (Fermilab), R. Burnstein, C. Fu, D. Petersen, M. Robertson, H. Rubin (Illinois Tech), R. Sard, A. Snyder, J. Tortora (Illinois U., Urbana), E.D. Alyea (Indiana U.), C.Y. Chien, A. Pevsner, R. Zdanis (Johns Hopkins U.), F. Barreiro, O. Benary, J.F. Brau, J. Grunhaus, E.S. Hafen, R.I. Hulsizer, U. Karshon, V. Kistiakowsky, A. Levy, A. Napier, I.A. Pless, J.P. Silvermann, P.C. Trepagnier, J. Wolfson, R.K. Yamamoto (MIT, LNS), H. Cohn (Oak Ridge), P.F. Jacques, T.C. Ou, R.J. Plano, T.L. Watts (Rutgers U.), E. Brucker, E. Koller, P. Stamer, S. Taylor (Stevens Tech), W. Bugg, G. Condo, T. Handler, E. Hart (Tennessee U.), H. Kraybill, D. Ljung, T. Ludlam, H.D. Taft (Yale U.), 1980.

Phys.Rev.D21 (1980) 1726-1743.

\*\*\*\*

17.

INCLUSIVE AND SEMIINCLUSIVE CHARGE STRUCTURE IN PI- P MULTIPARTICLE PRODUCTION AT 147-GeV/c.

By D. Brick, A.M. Shapiro, M. Widgoff (Brown U.), F. Barreiro, O. Benary, J.E. Brau, E.S. Hafen, R.I. Hulsizer, V. Kistiakowsky, A. Napier, S.H. Oh, I.A. Pless, J.P. Silverman, P.C. Trepagnier, R.K. Yamamoto (MIT, LNS), W. Kittel, M. Schouten (Nijmegen U.), H.O. Cohn (Oak Ridge), P. Jacques, P. Stamer, T.L. Watts (Rutgers U.), E.B. Brucker, E.L. Koller (Stevens Tech), W.M. Bugg, T. Handler (Tennessee U.), 1979.

Nucl.Phys.B152 (1979) 45-60.

\*\*\*\*

18.

TRIPLE REGGE ANALYSIS OF THE REACTIONS PI- P ---> P (SLOW) X AND PI- P ---> PI- (FAST) X AT 147-GeV/c.

By D. Brick, D.G. Fong, M. Heller, A.M. Shapiro, M. Widgoff (Brown U.), F. Bruyant (CERN), D. Bogert, M. Johnson (Fermilab), R.A. Burnstein, C. Fu, D.V. Petersen, M. Robertson, H.A. Rubin (Illinois Tech), A.E. Snyder, J.O. Tortora (Illinois U., Urbana), E.D. Alyea (Indiana U.), C.Y. Chien, P. Lucas, A. Pevsner, R.A. Zdanis (Johns Hopkins U.), F. Barreiro, O. Benary, J.E. Brau, J. Grunhaus, E.S. Hafen, R.I. Hulsizer, U. Karshon,

V. Kistiakowsky, A. Levy, A. Napier, I.A. Pless, J.P. Silverman, P.C. Trepagnier, J. Wolfson, R.K. Yamamoto (MIT, LNS), H.O. Cohn (Oak Ridge), P.F. Jacques, T.C. Ou, R.J. Plano, T.L. Watts, H.D. Taft (Yale U.), E.L. Hart (Tennessee U.), H. Kraybill, D.A. Ljung, T.W. Ludlam, S. Taylor (Stevens Tech), W.M. Bugg, G.T. Condo, T. Handler (Rutgers U.), E.B. Brucker, E.L. Koller, P.E. Stamer, 1979.  
Nucl.Phys.B150 (1979) 109-118.

\*\*\*\*

19.

**AVERAGE CHARGED PARTICLE MULTIPLICITIES IN PI- P INCLUSIVE REACTIONS AT 147-GeV/c.**

By D. Brick, D. Fong, M. Heller, A.M. Shapiro, M. Widgoff (Brown U.), F. Bruyant (CERN), D. Bogert, M. Johnson (Fermilab), R. Burnstein, C. Fu, D. Petersen, M. Robertson, H. Rubin (Illinois Tech), R.D. Sard, A. Snyder, J. Tortora (Illinois U., Urbana), E.D. Alyea (Indiana U.), C.Y. Chien, P. Lucas, A. Pevsner, R. Zdanis (Johns Hopkins U.), F. Barreiro, O. Benary, J.E. Brau, C.E. Detar, J. Grunhaus, E.S. Hafen, R.I. Hulsizer, U. Karshon, V. Kistiakowsky, A. Levy, A. Napier, I.A. Pless, J.P. Silverman, T. Stoughton, P.C. Trepagnier, J. Wolfson, R.K. Yamamoto (MIT, LNS), H.O. Cohn (Oak Ridge), P.F. Jacques, E.B. Brucker, E. Koller, P. Stamer, S. Taylor, T.C. Ou, R.J. Plano, T.L. Watts (Rutgers U. & Yale U. & Tennessee U.), H. Kraybill, D. Ljung, T. Ludlam, H.D. Taft (Stevens Tech), W.M. Bugg, G. Condo, T. Handler, E. Hart, 1979.  
Phys.Rev.D19 (1979) 743-763.

\*\*\*\*

20.

**INCLUSIVE DELTA++ PRODUCTION IN p p, K+ p, pi+ p, AND pi- p INTERACTIONS AT 147-GeV/c.**

By D. Brick, A.M. Shapiro, M. Widgoff (Brown U.), R.E. Ansorge, J.R. Carter, W.W. Neale, J.G. Rushbrooke, D.R. Ward, B.M. Whyman (Cambridge U., Cavendish Lab.), R.A. Burnstein, H.A. Rubin (Illinois Tech), J.W. Cooper, R.L. Plumer, R.D. Sard, J.O. Tortora (Illinois U., Urbana), E.D. Alyea (Indiana U.), L. Bachman, C.Y. Chien, A. Pevsner (Johns Hopkins U.), J.E. Brau, E.S. Hafen, D. Hochman, R.I. Hulsizer, V. Kistiakowsky, A. Levy, P. Lutz, A. Napier, I.A. Pless, J.P. Silverman, P.C. Trepagnier, R.K. Yamamoto (MIT, LNS), F. Grard, J. Hanton, V. Henri, P. Herquet, J.M. Lesceux, R. Windmolders (Mons U.), F. Crijns, H. deBock, W. Kittel, W. Metzger, C. Pols, M. Schouten, R. Van de Walle (Nijmegen U.), H.O. Cohn (Oak Ridge), G. Bressi, E. Calligarich, C. Castoldi, G. Cecchet, R. Dolfini, G. Liguori, S. Ratti (Pavia U.), P.F. Jacques, M. Kalelkar, R.J. Plano, P. Stamer, T.L. Watts (Rutgers U.), Print-80-0005 (MIT), Aug 1979. 28pp.  
Published in Phys.Rev.D21:632,1980.

\*\*\*\*

21.

**CRISIS DETECTOR: CHARACTERISTICS AND PERFORMANCE.**

By A.M. Shapiro (Brown U.), E.D. Alyea, Jr. (Indiana U.), F. Barreiro, D.A. Goloskie,

V. Kistiakowsky, J.B. McManus, T.B. Stoughton, B.F. Wadsworth, Y. Wu (MIT), R.J. Plano (Rutgers U.), W.M. Bugg (Tennessee U.), T. Kitagaki (Tohoku U.), T. Ludlam, O.E. Murphy, R.V. Steiner, H.D. Taft (Yale U.), Sep 1981. 12pp.  
Published in Rev.Sci.Instrum.53:393,1982.

\*\*\*\*\*

\*\*\*\*\*

PARTICLE SEARCH #567  
PARTICLE SEARCH #650

\*\*\*\*

1.

SEARCH FOR D\* PRODUCTION IN PION NUCLEON INTERACTIONS.

By V.L. Fitch, A.D. Montag, S. Palestini, S.S. Sherman, R.C. Webb, M.S. Witherell (Princeton U.), B. Bloch-Devaux, J. Teiger, R. Turlay, A. Zylberstejn (Saclay), R. Cester, E. Menechetti, G. Rinaudo (Turin U.), D. Maurizio, M. May (Brookhaven), 1986.  
Phys. Rev. D33 ( 1986) 1486-1487.

\*\*\*\*

2.

MEASUREMENT OF D\* PRODUCTION IN PION - NUCLEON INTERACTIONS AT 200-GeV/c.

By V.L. Fitch, A.D. Montag, S.S. Sherman, R.C. Webb, M.S. Witherell (Princeton U.), B. Devaux, J. Teiger, R. Turlay, A. Zylberstejn (Saclay), P. Cavaglia, R. Cester, D. Maurizio, G. Rinaudo (Turin U.), M. May (Brookhaven), COO-3072-124, n.d. (recd Feb 1981) 12pp.  
Published in Phys.Rev.Lett.46:761,1981.

\*\*\*\*\*

\*\*\*\*\*

EMULSION/PI- @ 300 #568  
EMULSION/PROTONS @ 500 #576

\*\*\*\*

1.

TWO PARTICLE RAPIDITY CORRELATION IN PROTON - EMULSION NUCLEUS INTERACTIONS AT 400-GEV.

By L. Simic, L. Rak, O. Adamovic, M. Juric (Belgrade, Inst. Phys.), T. Chu, C.O. Kim, J. Lory, B. Willot, D. Schune, C. Meton, R. Kaiser (Paris, Curie Univ. VI, LPNHE), I. Otterlund, E. Stenlund (Lund U.), H. Areti, C.J. Hebert, J. Hebert (Ottawa U.), G. Baumann, R. Devienne (Nancy U.), R. Schmidt (Lyon, IPN), L. Bravo, R. Niembro, A. Ruiz, E. Villar (Santander U.), J.M. Bolta, M.A. Sanchis (Valencia U.), 1979.  
Z.Phys.C2 (1979) 291-294.

\*\*\*\*\*

\*\*\*\*\*

For 30-INCH HYBRID #570: See #565

\*\*\*\*\*

\*\*\*\*\*

For EMULSION/PI- @ 300 #573: See #536

\*\*\*\*\*

\*\*\*\*\*

For EMULSION/PROTONS @ 500 GeV #576: See #568

\*\*\*\*\*

\*\*\*\*\*

ELASTIC SCATTERING #577

\*\*\*\*

1.

LARGE MOMENTUM TRANSFER ELASTIC SCATTERING OF  $\pi^{+-}$ ,  $K^{+-}$ , AND p ON PROTONS AT 100 AND 200 GeV/c.

By R. Rubinstein, W.F. Baker, D.P. Eartly, J.S. Klinger, A.J. Lennox (Fermilab), R.M. Kalbach, K.W. Krueger, A.E. Pifer (Arizona U.), H.G.E. Kobrak, S.F. McHugh (UC, San Diego), D.H. Kaplan, P. Karchin, J. Orear (Cornell U.), FERMILAB-PUB-84/54-E, Jun 1984. 69pp.

Published in Phys.Rev.D30:1413,1984.

\*\*\*\*

2.

ELASTIC SCATTERING OF  $\pi^{+-}$  AND  $K^{+-}$  ON PROTONS AT 100 AND 200 GEV/C.

By R.M. Kalbach, K.W. Krueger, A.E. Pifer (Arizona U.), D.H. Kaplan, P. Karchin, J. Orear (Cornell U.), W.F. Baker, D.P. Eartly, J.S. Klinger, A.J. Lennox, R. Rubinstein (Fermilab), S.F. McHugh (UC, San Diego), 1983.

Phys. Rev. D27 ( 1983) 2752.

\*\*\*\*



3.

ANTI-PROTON - PROTON AND PROTON-PROTON ELASTIC SCATTERING AT 100 AND 200 GeV/c.

By D.H. Kaplan, P. Karchin, J. Orear (Cornell U.), R.M. Kalbach, K.W. Krueger, A.E. Pifer (Arizona U.), W.F. Baker, D.P. Eartly, J.S. Klinger, A.J. Lennox, R. Rubinstein (Fermilab), S.F. McHugh (UC, San Diego), FERMILAB-PUB-82/40-EXP, Jun 1982. 11pp.  
Published in Phys.Rev.D26:723,1982.

\*\*\*\*

4.

OBSERVATION OF STRUCTURE IN LARGE MOMENTUM TRANSFER pi- p ELASTIC SCATTERING AT 200-GeV/c.

By W.F. Baker, D.P. Eartly, J.S. Klinger, A.J. Lennox, R. Rubinstein (Fermilab), R.M. Kalbach, K.W. Krueger, A.E. Pifer (Arizona U.), S.F. McHugh (UC, San Diego), D.H. Kaplan, P. Karchin, J. Orear (Cornell U.), FERMILAB-PUB-81/58-EXP, Sep 1981. 10pp.  
Published in Phys.Rev.Lett.47:1683,1981.

\*\*\*\*\*

\*\*\*\*\*

PARTICLE SEARCH #580

\*\*\*\*

1.

INCLUSIVE STRANGE PARTICLE PRODUCTION IN SINGLE VEE EVENTS IN 200-GeV/c pi- N INTERACTIONS.

By S. Mikocki, J.R. Ficenc, S. Torres, W.P. Trower (Virginia Tech), T.Y. Chen, E.W. Jenkins, K.W. Lai, J. LeBritton, Y.C. Lin, A.E. Pifer (Arizona U.), H.C. Fenker, D.R. Green (Fermilab), J.R. Albright, J.H. Goldman, S.L. Hagopian, J.E. Lannutti, J.E. Piper (Florida State U.), C.C. Chang, T.C. Davis, R.N. Diamond, K.J. Johnson, J.A. Poirier (Notre Dame U.), A. Napier, J. Schneps (Tufts U.), J.M. Marraffino, J.W. Waters, M.S. Webster, E.G.H. Williams (Vanderbilt U.), FERMILAB-PUB-85/132-E, Sep 1985. 37pp.  
Published in Phys.Rev.D34:42,1986.

\*\*\*\*

2.

K\*+- (892) PRODUCTION IN pi- N INTERACTIONS AT 200-GeV/c.

By A. Napier, J. Schneps (Tufts U.), T.Y. Chen, E.W. Jenkins, K.W. Lai, J. LeBritton, Y.C. Lin, A.E. Pifer (Arizona U.), H.C. Fenker, D.R. Green (Fermilab), J.R. Albright, J.H. Goldman, S.L. Hagopian, J.E. Lannutti, J.E. Piper (Florida State U.), C.C. Chang, T.C. Davis, R.N. Diamond, K.J. Johnson, R.W. Joyner, J.A. Poirier (Notre Dame U.), J.M. Marraffino, C.E. Roos, J.W. Waters, M.S. Webster, E.G.H. Williams (Vanderbilt U.), J.R. Ficenc, S. Torres, W.P. Trower (Virginia Tech.), FERMILAB-PUB-84/127-E, Sep 1984. 12pp.  
Published in Phys.Lett.149B:514,1984.

\*\*\*\*

3.

FORWARD  $K_0(S)$   $K_0(S)$  PRODUCTION IN 200-GeV/c  $\pi$ -N INTERACTIONS.

By E.G.H. Williams, J.M. Marraffino, C.E. Roos, J.W. Waters, M.S. Webster (Vanderbilt U.), R.N. Diamond, C.C. Chang, T.C. Davis, K.J. Johnson, R.W. Joyner, J.A. Poirier (Notre Dame U.), A. Napier, J. Schneps (Tufts U.), T.Y. Chen, E.W. Jenkins, K.W. Lai, J. LeBritton, Y.C. Lin, A.E. Pifer (Arizona U.), H.C. Fenker, D.R. Green (Fermilab), J.R. Albright, J.H. Goldman, S.L. Hagopian, J.E. Lannutti, J.E. Piper (Florida State U.), J.R. Ficenece, W.P. Trower (Virginia Tech), FERMILAB-PUB-84/51-E, Jun 1984. 26pp.

Published in Phys.Rev.D30:877,1984.

(Title changed in journal)

\*\*\*\*

4.

BARYON PRODUCTION AND DECAY INTO STRANGE PARTICLE FINAL STATES IN 200-GeV/c  $\pi$ -N INTERACTIONS.

By H.C. Fenker, D.R. Green (Fermilab), T.Y. Chen, W. Dieterle, E.W. Jenkins, K.W. Lai, J. LeBritton, Y.C. Lin, A.E. Pifer (Arizona U.), J.R. Albright, J.H. Goldman, S.L. Hagopian, J.E. Lannutti, J.E. Piper (Florida State U.), C.C. Chang, T.C. Davis, R.N. Diamond, K.J. Johnson, J.A. Poirier (Notre Dame U.), A. Napier, J. Schneps (Tufts U.), J.M. Marraffino, J.W. Waters, M.S. Webster, E.G.H. Williams (Vanderbilt U.), J.R. Ficenece, W.P. Trower (Virginia Tech.), FERMILAB-PUB-84/13-E, Jan 1984. 21pp.

Published in Phys.Rev.D30:872,1984.

\*\*\*\*

5.

DIFFRACTIVE PRODUCTION OF  $K_0(S)$   $K_0(S)$   $\pi^+$   $\pi^-$   $\pi^-$  IN  $\pi$ -N INTERACTIONS AT 200-GeV/c.

By C.C. Chang, T.C. Davis, R.N. Diamond, K.J. Johnson, R.W. Joyner, J.A. Poirier (Notre Dame U.), T.Y. Chen, E.W. Jenkins, K.W. Lai, J. LeBritton, Y.C. Lin, A.E. Pifer (Arizona U.), H.C. Fenker, D.R. Green (Fermilab), J.R. Albright, J.H. Goldman, S.L. Hagopian, J.E. Lannutti, J.E. Piper (Florida State U.), A. Napier (Tufts U.), J.M. Marraffino, J.W. Waters, M.S. Webster, E.G.H. Williams (Vanderbilt U.), J.R. Ficenece, W.P. Trower (Virginia Tech), FERMILAB-PUB-83/99-EXP, Nov 1983. 29pp.

Published in Phys.Rev.D29:1888,1984.

\*\*\*\*

6.

RESONANCE PRODUCTION IN DIFFRACTIVE  $\pi$ -N  $\rightarrow$   $K_0(S)$   $K_0(S)$   $\pi^-$  N-prime AT 200-GeV/c.

By T.Y. Chen, E.W. Jenkins, K.J. Johnson, K.W. Lai, J. Le Britton, Y.C. Lin, A.E. Pifer (Arizona U.), H.C. Fenker, D.R. Green (Fermilab), J.R. Albright, R.N. Diamond, J.H. Goldman, S.L. Hagopian, J.E. Lannutti, J.E. Piper (Florida State U.), T.C. Davis, J.A. Poirier (Notre Dame U.), A. Napier (Tufts U.), J.M. Marraffino, C.E. Roos, J.W. Waters, M.S.

Webster, E.G.H. Williams (Vanderbilt U.), G.B. Collins, J.R. Ficenece, W.P. Trower (Virginia Tech.), FERMILAB-PUB-82/94-EXP, Dec 1982. 14pp.

Published in Phys.Rev.D28:2304,1983.

(Title changed in journal)

\*\*\*\*\*

\*\*\*\*\*

KAON CHARGE EXCHANGE #585

LAMBDA POLARIZATION #663

\*\*\*\*

1.

POLARIZATION OF LAMBDA'S AND ANTI-LAMBDA'S IN P P, ANTI-P P, AND K- P INTERACTIONS AT 176-GEV/C.

By S.A. Gourlay, H.L. Melanson, M.A. Abolins, K.W. Edwards, W.R. Francis, H.G.E. Kobrak, D.P. Owen, R.A. Swanson, P.M. Yager (UC, Davis & Michigan State U. & Carleton U. & UC, San Diego), 1986.

Phys. Rev. Lett. 56 ( 1986) 2244-2247.

\*\*\*\*

2.

A BEAM CHAMBER MEMORY SYSTEM.

By M.A. Abolins, D.L. Edmunds, W.R. Francis, D.P. Owen (Michigan State U.), H.G.E. Kobrak (UC, San Diego), 1982.

Nucl. Instrum. Methods 192 ( 1982) 331-335.

\*\*\*\*

3.

AN SU(3) BASED COMPARISON BETWEEN INCLUSIVE KAON AND PION CHARGE EXCHANGE SCATTERING IN THE TRIPLE REGGE REGION.

By A.V. Barnes, G.C. Fox, R.G. Kennett, R.L. Walker (Cal Tech), P.M. Yager (UC, Davis), H.G.E. Kobrak, R.E. Pitt, R.A. Swanson (UC, San Diego), K.W. Edwards, M. Harrison (Carleton U.), O.I. Dahl, R.W. Kenney, A. Ogawa, M. Pripstein (LBL, Berkeley), M.A. Abolins, W.R. Francis, D.P. Owen (Michigan State U.), CALT-68-886, n.d. (recd Mar 1982) 20pp.

Published in Nucl.Phys.B206:173,1982.

\*\*\*\*

4.

INCLUSIVE KAON CHARGE EXCHANGE IN THE TRIPLE REGGE REGION AT HIGH-ENERGIES.

By P.M. Yager (UC, Davis), H.G.E. Kobrak, R.E. Pitt, R.A. Swanson (UC, San Diego), K.W. Edwards, M. Harrison (Carleton U.), M.A. Abolins, W.R. Francis, D.P. Owen (Michigan State U.), Print-81-0635 (UC,DAVIS), n.d. (recd Aug 1981) 13pp.

Published in Phys.Rev.Lett.46:1358,1981.

\*\*\*\*\*

\*\*\*\*\*

For PARTICLE SEARCH #591: See #442

\*\*\*\*\*

\*\*\*\*\*

NUCLEAR SCALING #592

\*\*\*\*

1.

BACKWARD PRODUCTION OF PIONS AND KAONS IN THE INTERACTION OF 400-GEV PROTONS WITH NUCLEI.

By N.A. Nikiforov, Y.D. Bayukov, V.I. Efremenko, G.A. Leksin, V.I. Chistilin, Y.M. Zaitsev (Moscow, ITEP), S. Frankel, W. Frati, M. Gazzaly (Penn U.), C.F. Perdrisat (William and Mary Coll.), 1980.

Phys.Rev.C22 (1980) 700-710.

\*\*\*\*

2.

BACKWARD PRODUCTION OF LIGHT IONS IN THE INTERACTION OF 400-GEV PROTONS WITH NUCLEI.

By S. Frankel, W. Frati, M. Gazzaly (Penn U.), Y.D. Bayukov, V.I. Efremenko, G.A. Leksin, N.A. Nikiforov, V.I. Chistilin, Y.M. Zaitsev (Moscow, ITEP), C.F. Perdrisat (William and Mary Coll.), 1979.

Phys.Rev.C20 (1979) 2257-2266.

\*\*\*\*

3.

'BACKWARD' PRODUCTION OF PROTONS, DEUTERONS, TRITONS, He-3, He-4 AND, PIONS IN THE INTERACTION OF 400-GeV PROTONS WITH NUCLEI.

By Y.D. Bayukov, V.I. Efremenko, S. Frankel, W. Frati, M. Gazzaly, G.A. Leksin, N.A. Nikiforov, C.F. Perdrisat, V.I. Chistilin, Y.M. Zaitsev (Penn U. & Moscow, ITEP & William and Mary Coll.), UPR-0058E, Nov 1978. 8pp.

Published in Phys.Lett.85B:315,1979.

\*\*\*\*\*

\*\*\*\*\*

NEUTRINO #594

NEUTRINO INTERACTIONS #733

\*\*\*\*

1.

DETERMINATION OF THE NUCLEON STRUCTURE BY MEANS OF THE WEAK NEUTRAL CURRENT.

By D. Bogert, R. Burnstein, R. Fisk, S. Fuess, J. Morfin, T. Ohska, L. Stutte, J.K. Walker

(Fermilab), J. Bofill, W. Busza, T. Eldridge, J.I. Friedman, M.C. Goodman, H.W. Kendall, I.G. Kostoulas, T. Lyons, R. Magahiz, T. Mattison, A. Mukherjee, L. Osborne, R. Pitt, L. Rosenson, A. Sandacz, M. Tartaglia, F.E. Taylor, R. Verdier, S. Whitaker, G.P. Yeh (MIT, LNS), M. Abolins, R. Brock, A. Cohen, J. Ernwein, D. Owen, J. Slate, H. Weerts (Michigan State U.), 1985.

Phys. Rev. Lett. 55 ( 1985) 574-577.

\*\*\*\*

2.

A DETERMINATION OF  $\sin^2\theta_w$  AND  $\rho$  IN DEEP INELASTIC NEUTRINO - NUCLEON SCATTERING.

By D. Bogert, R. Burnstein, R. Fisk, S. Fuess, J.G. Morfin, T. Ohska, L. Stutte, J.K. Walker (Fermilab), J. Bofill, W. Busza, T. Eldridge, J.I. Friedman, M.C. Goodman, H.W. Kendall, I.G. Kostoulas, T. Lyons, R. Magahiz, T. Mattison, A. Mukherjee, L. Osborne, R. Pitt, L. Rosenson, A. Sandacz, M. Tartaglia, F.E. Taylor, R. Verdier, S. Whitaker, G.P. Yeh (MIT, LNS), M. Abolins, R. Brock, A. Cohen, J. Ernwein, D. Owen, J. Slate, H. Weerts (Michigan State U.), FERMILAB-CONF-85/107-E, Aug 1985. 16pp. Submitted to 1985 Int. Symp. on Lepton and Photon Interactions at High Energies, Kyoto, Japan, Aug 19-24, 1985.

Published in Phys.Rev.Lett.55:1969,1985.

\*\*\*\*\*

\*\*\*\*\*

PARTICLE SEARCH #595

\*\*\*\*

1.

FORWARD PRODUCTION OF CHARM STATES AND PROMPT SINGLE MUONS IN 278-GeV  $\pi^-$ -Fe INTERACTIONS.

By J.L. Ritchie, A. Bodek, R. Breedon, R.N. Coleman, W. Marsh, S.L. Olsen, I.E. Stockdale (Rochester U.), B.C. Barish, R.L. Messner, M.H. Shaevitz, E.J. Siskind (Cal Tech), F.S. Merritt (Chicago U.), H.E. Fisk, Y. Fukushima, P.A. Rapidis (Fermilab), G. Donaldson, S.G. Wojcicki (Stanford U., Phys. Dept.), UR-829, Nov 1983. 16pp.

Published in Phys.Lett.138B:213,1984.

\*\*\*\*

2.

FORWARD PRODUCTION OF CHARM STATES AND PROMPT SINGLE MUONS IN 350-GeV  $p$ -Fe INTERACTIONS.

By J.L. Ritchie, A. Bodek, R. Breedon, R.N. Coleman, W. Marsh, S.L. Olsen, I.E. Stockdale (Rochester U.), B.C. Barish, R.L. Messner, M.H. Shaevitz, E.J. Siskind (Cal Tech), F.S. Merritt (Chicago U.), H.E. Fisk, Y. Fukushima, P.A. Rapidis (Fermilab), G. Donaldson, S.G. Wojcicki (Stanford U., Phys. Dept.), UR-828, Jan 1983. 24pp.

Published in Phys.Lett.126B:499,1983.

\*\*\*\*

3.

LIMITS ON  $D_0$  anti- $D_0$  MIXING AND BOTTOM PARTICLE PRODUCTION CROSS-SECTIONS FROM HADRONICALLY PRODUCED SAME SIGN DIMUON EVENTS.

By A. Bodek, R. Breedon, R.N. Coleman, W. Marsh, S. Olsen, J.L. Ritchie (Rochester U.), B.C. Barish, R.L. Messner, M.H. Shaevitz, E.J. Siskind (Cal Tech), F.S. Merritt (Chicago U.), H.E. Fisk, Y. Fukushima, P.A. Rapisdi (Fermilab), G. Donaldson, S.G. Wojcicki (Stanford U., Phys. Dept.), UR-802, Dec 1981. 12pp.

Published in Phys.Lett.113B:82,1982.

\*\*\*\*

4.

A STUDY OF THE FORWARD PRODUCTION OF CHARM PARTICLE PAIRS IN  $p$  Fe AND  $\pi^-$  Fe INTERACTIONS.

By A. Bodek, R. Breedon, R.N. Coleman, W. Marsh, S. Olsen, J.L. Ritchie (Rochester U.), B.C. Barish, R.L. Messner, M.H. Shaevitz, E.J. Siskind (Cal Tech), F.S. Merritt (Chicago U.), H.E. Fisk, Y. Fukushima, P.A. Rapisdi (Fermilab), G. Donaldson, S.G. Wojcicki (Stanford U., Phys. Dept.), UR-804, Dec 1981. 14pp.

Published in Phys.Lett.113B:77,1982.

\*\*\*\*

5.

SEARCH FOR POSSIBLE SIGNATURES OF BOTTOM MESON PRODUCTION IN  $p$  Fe INTERACTIONS AT 400-GeV/c.

By A. Diamant-Berger, J.P. Dishaw, M. Faessler, J. Liu, F. Merritt, Stanley G. Wojcicki (Stanford U., Phys. Dept. & SLAC), Barry C. Barish, J.F. Bartlett, A. Bodek, K.W.B. Merritt, M.H. Shaevitz, E.J. Siskind (Cal Tech), SLAC-PUB-2444, Dec 1979. 12pp.

Published in Phys.Rev.Lett.44:507,1980.

\*\*\*\*

6.

PROMPT MUON PRODUCTION AT SMALL X(F) AND  $p$ -transverse in 350-GeV  $p$  Fe COLLISIONS.

By J.L. Ritchie, A. Bodek, R.N. Coleman, W. Marsh, S. Olsen (Rochester U.), B.C. Barish, R.L. Messner, M.H. Shaevitz, E.J. Siskind (Cal Tech), H.E. Fisk, Y. Fukushima (Fermilab), G. Donaldson, F.S. Merritt, S.G. Wojcicki (Stanford U., Phys. Dept.), UR-717, n.d. (recd Dec 1979) 13pp.

Published in Phys.Rev.Lett.44:230,1980.

\*\*\*\*

7.

OBSERVATION OF MISSING ENERGY ASSOCIATED WITH  $\mu^+$   $\mu^-$  PRODUCED IN  $p$  Fe INTERACTIONS.

By A. Diamant-Berger, J.P. Dishaw, M. Faessler, J. Liu, F. Merritt, Stanley G. Wojcicki (Stanford U., Phys. Dept.), Barry C. Barish, J.F. Bartlett, A. Bodek, K.W.B. Merritt, M.H. Shaevitz, E.J. Siskind (Cal Tech), SLAC-PUB-2389, Aug 1979. 13pp.

Published in Phys.Rev.Lett.43:1774,1979.

\*\*\*\*

8.

OBSERVATION OF PROMPT SINGLE MUON PRODUCTION BY 400-GeV PROTONS.

By K.W. Brown, Barry C. Barish, J.F. Bartlett, A. Bodek, M.H. Shaevitz, E.J. Siskind (Cal Tech), A. Diamant-Berger, J.P. Dishaw, M. Faessler, J. Liu, F. Merritt, Stanley G. Wojcicki (SLAC & Stanford U., Phys. Dept.), SLAC-PUB-2329, May 1979. 13pp.

Published in Phys.Rev.Lett.43:410,1979.

\*\*\*\*

9.

PRODUCTION OF psi (3100) IN 400-GeV PROTON INTERACTIONS.

By E.J. Siskind, B.C. Barish, J.F. Bartlett, A. Bodek, K.W. Brown, M.H. Shaevitz (Cal Tech), A.M. Diamant-Berger, J.P. Dishaw, M. Faessler, J.K. Liu, F.S. Merritt, S.G. Wojcicki (Stanford U., Phys. Dept.), CALT-68-665, Mar 1979. 13pp.

Published in Phys.Rev.D21:628,1980.

\*\*\*\*

10.

LIMITS ON THE PRODUCTION OF NEUTRINO LIKE PARTICLES IN PROTON - NUCLEUS INTERACTIONS FROM CALORIMETRY MEASUREMENTS.

By J.P. Dishaw, A. Diamant-Berger, M. Faessler, J. Liu, F. Merritt, Stanley G. Wojcicki (SLAC & Stanford U., Phys. Dept.), Barry C. Barish, J.F. Bartlett, A. Bodek, K.W. Brown, M.H. Shaevitz, E.J. Siskind (Cal Tech), SLAC-PUB-2291, Mar 1979. 15pp.

Published in Phys.Lett.85B:142,1979.

\*\*\*\*\*

\*\*\*\*\*

For PARTICLE SEARCH #596: See #288

\*\*\*\*\*

\*\*\*\*\*

30-INCH HYBRID #597

\*\*\*\*

1.

OBSERVATION OF A DEPENDENCE IN KOBANIELSEN-OLESEN SCALING DISTRIBUTIONS FOR HIGH-ENERGY HADRON NUCLEUS INTERACTIONS.

By N.N. Biswas, S.J.Y. Ting, M.C.K. Mattingly, J.M. Bishop, N.M. Cason, V.P. Kenney, R.C. Ruchti, W.D. Shephard (Notre Dame U.), W.W. Neale, P.A. Elcombe, M.J. Goodrick, H.C. Hill (Cambridge U., Cavendish Lab), W. Kowald, W.D. Walker (Duke U.), P. Lucas,

L. Voyvodic (Fermilab), R. Ammar, D. Coppage, R. Davis, D. Day, J. Gress, S. Kanekal, N. Kwak, L. Herder (Kansas U.), J. Whitmore, R.A. Lewis, B.Y. Oh, G.A. Smith, W. Toothacker (Penn State U.), 1986. Phys. Rev. D33 ( 1986) 3167-3171.

\*\*\*\*

2.

INCLUSIVE PRODUCTION OF pi0, K0(S), LAMBDA0, AND anti-LAMBDA0 IN 100-GeV/c, 200-GeV/c AND 360-GeV/c pi- p INTERACTIONS.

By N.N. Biswas, P.D. Higgins, J.M. Bishop, R.L. Bolduc, N.M. Cason, V.P. Kenney, R.C. Ruchti, W.D. Shephard, N.C. Yang (Notre Dame U.), A.K. Nandi, R.E. Ansorge, J.R. Carter, W.W. Neale, J.G. Rushbrooke, D.R. Ward (Cambridge U., Cavendish Lab.), E.W. Anderson, H.B. Crawley, A. Firestone, W.J. Kernan, J.W. Lamsa, F. Ogino, D.L. Parker (Iowa State U.), B.Y. Oh, M. Pratap, G.A. Smith, J. Whitmore (Michigan State U.), G.A. Snow (Maryland U.), C. Moore, R. Raja, L. Voyvodic, R.J. Walker (Fermilab), W.J. Robertson, L.R. Fortney, A.T. Goshaw, J.S. Loos, W.D. Walker (Duke U.), V.A. Sreedhar, T.S. Yoon, G. Levman (Toronto U.), G. Hartner, P.M. Patel (McGill U.), Print-80-0068 (NOTRE DAME), n.d. (recd Jan 1980) 41pp.

Published in Nucl.Phys.B167:41,1980.

\*\*\*\*\*

\*\*\*\*\*

For HIGH MASS PAIRS #605: See #288

\*\*\*\*\*

\*\*\*\*\*

For PARTICLE SEARCH #608: See #288

\*\*\*\*\*

\*\*\*\*\*

For HADRON JETS #609: See #395

\*\*\*\*\*



\*\*\*\*\*

For PARTICLE SEARCH #610: See #369

\*\*\*\*\*

\*\*\*\*\*

PHOTON DISSOCIATION #612

\*\*\*\*

1.

DIFFRACTION DISSOCIATION OF PHOTONS ON HYDROGEN.

By T.J. Chapin, R.L. Cool, K. Goulianos, K.A. Jenkins, J.P. Silverman, G.R. Snow, H. Sticker, S.N. White (Rockefeller U.), Hua-Chou Yue (Beijing, Inst. High Energy Phys.), 1985. Phys. Rev. D31 ( 1985) 17-30.

\*\*\*\*

2.

DEVELOPMENT AND PERFORMANCE OF A HIGH PRESSURE HYDROGEN TIME PROJECTION CHAMBER.

By Thomas J. Chapin, Rodney L. Cool, Konstantin Goulianos, Jerome P. Silverman, Gregory R. Snow, Harry Sticker, Sebastian N. White (Rockefeller U.), Yue-Hua Chou (Beijing, Inst. High Energy Phys.), Nucl.Instr.Meth.197:305,1982.

\*\*\*\*\*

\*\*\*\*\*

BEAM DUMP #613

\*\*\*\*

1.

CHARACTERISTICS OF CHARM PRODUCTION BY 400-GeV PROTONS.

By M.E. Duffy, G.K. Fanourakis, R.J. Loveless, D.D. Reeder, E.S. Smith (Wisconsin U., Madison), S. Childress (Fermilab), C. Castoldi, G. Conforto (INFN, Florence), R.C. Ball, C.T. Coffin, H.R. Gustafson, L.W. Jones, M.J. Longo, T.J. Roberts, B.P. Roe, E. Wang (Michigan U.), M.B. Crisler, J.S. Hoftun, T.Y. Ling, T.A. Romanowski, J.T. Volk (Ohio State U.), WISC-EX-86-262, Mar 1986. 15pp. Published in Phys.Rev.Lett.57:1522,1986.

\*\*\*\*

2.

A DEPENDENCE OF CHARM PRODUCTION.

By M.E. Duffy, G.K. Fanourakis, R.J. Loveless, D.D. Reeder, E.S. Smith (Wisconsin U., Madison), S. Childress (Fermilab), C. Castoldi, G. Conforto, R.C. Ball, C.T. Coffin,

H.R. Gustafson, L.W. Jones, M.J. Longo, T.J. Roberts, B.P. Roe, E. Wang (Michigan U.), M.B. Crisler, J.S. Hoftun, T.Y. Ling, T.A. Romanowski, J.T. Volk (Ohio State U.), 1985. Phys. Rev. Lett. 55 ( 1985) 1816-1819.

\*\*\*\*

3.

CHARACTERISTICS OF A LEAD SCINTILLATOR CALORIMETER USED TO DETECT ELECTRON NEUTRINOS.

By M.E. Duffy, G.K. Fanourakis, R.J. Loveless, D.D. Reeder, D.L. Schumann, E.S. Smith (Wisconsin U., Madison), M.B. Crisler (Ohio State U.), 1985.

Nucl. Instrum. Methods 228 ( 1984) 37-44.

\*\*\*\*

4.

SUPERSYMMETRY MASS AND LIFETIME LIMITS FROM A PROTON BEAM DUMP EXPERIMENT.

By R.C. Ball, C.T. Coffin, H.R. Gustafson, I.D. Leedom, L.W. Jones, M.J. Longo, T.J. Roberts, B.P. Roe, E. Wang (Michigan U.), C. Castoldi, G. Conforto (INFN, Florence), M.B. Crisler, J.S. Hoftun, T.Y. Ling, T.A. Romanowski, J.T. Volk (Ohio State U.), S. Childress (Fermilab), M.E. Duffy, G.K. Fanourakis, R.J. Loveless, D.D. Reeder, D.L. Schumann, E.S. Smith (Wisconsin U., Madison), UM HE 84-8, May 1984. 12pp.

Published in Phys.Rev.Lett.53:1314,1984.

\*\*\*\*

5.

PROMPT MUON-NEUTRINO PRODUCTION IN A 400-GEV PROTON BEAM DUMP EXPERIMENT.

By R.C. Ball, C.T. Coffin, H.R. Gustafson, L.W. Jones, M.J. Longo, T.J. Roberts, B.P. Roe, E. Wang (Michigan U.), C. Castoldi, G. Conforto, M.B. Crisler, J.S. Hoftun, T.Y. Ling, T.A. Romanowski, J.T. Volk (Ohio State U.), S. Childress (Washington U., Seattle), M.E. Duffy, G.K. Fanourakis, R.J. Loveless, D.D. Reeder, D.L. Schumann, E.S. Smith (Wisconsin U., Madison), 1983.

Phys. Rev. Lett. 51 ( 1983) 743-746.

\*\*\*\*

6.

VERIFICATION OF MUON - ELECTRON UNIVERSALITY IN CHARM DECAY.

By M.E. Duffy, G.K. Fanourakis, R.J. Loveless, D.D. Reeder, D.L. Schumann, E.S. Smith (Wisconsin U., Madison), S. Childress (Fermilab), C. Castoldi, G. Conforto (INFN, Florence), R.C. Ball, C.T. Coffin, H.R. Gustafson, L.W. Jones, M.J. Longo, T.J. Roberts, B.P. Roe, E. Wang (Michigan U.), M.B. Crisler, J.S. Hoftun, T.Y. Ling, T.A. Romanowski, J.T. Volk (Ohio State U.), WISC-EX-84-235, n.d. (recd Feb 1984) 11pp.

Published in Phys.Rev.Lett.52:1865,1984.

\*\*\*\*

7.

AN INEXPENSIVE, HIGH PERFORMANCE PULSE-HEIGHT READOUT SYSTEM FOR PROPORTIONAL CHAMBERS.

By R.C. Ball, H.R. Gustafson, M.J. Longo, T.J. Roberts (U. of Michigan).

Nucl.Instrum.Methods 197 (1982) 371-377.

\*\*\*\*\*

\*\*\*\*\*

For FORWARD SEARCH #615: See #444

\*\*\*\*\*

\*\*\*\*\*

NEUTRINO #616

\*\*\*\*

1.

MEASUREMENT of  $\sin^2 2\theta$  AND  $\rho$  IN DEEP INELASTIC NEUTRINO - NUCLEON SCATTERING.

By P.G. Reutens, F.S. Merritt (Chicago U., EFI & Chicago U.), D.B. MacFarlane, R.L. Messner, D.B. Novikoff, M.V. Purohit (Cal Tech), R.E. Blair, F.J. Sciulli, M.H. Shaevitz (Columbia U.), H.E. Fisk, Y. Fukushima, B.N. Jin, T. Kondo, P.A. Rapidis, D.D. Yovanovitch (Fermilab), A. Bodek, R.N. Coleman, W.L. Marsh (Rochester U.), O.D. Fackler, K.A. Jenkins (Rockefeller U.), Print-85-0047 (EFI,CHICAGO), n.d. (recd Jan 1985) 16pp.

Published in Phys.Lett.152B:404, 1985

\*\*\*\*

2.

NUCLEON STRUCTURE FUNCTIONS FROM HIGH-ENERGY NEUTRINO INTERACTIONS WITH IRON AND QCD RESULTS.

By D. MacFarlane, M.V. Purohit, R.L. Messner, D.B. Novikoff (Cal Tech), R.E. Blair, F.J. Sciulli, M.H. Shaevitz (Columbia U.), H.E. Fisk, Y. Fukushima, B. Jin, Q.A. Kerns, T. Kondo, P.A. Rapidis, S.L. Segler, R.J. Stefanski, D. Theriot, D. Yovanovich (Fermilab), A. Bodek, R.N. Coleman, W.L. Marsh (Rochester U.), O.D. Fackler, K.A. Jenkins (Rockefeller U.), FERMILAB-PUB-83/108-EXP, Dec 1983. 27pp.

Published in Z.Phys.C26:1,1984.

\*\*\*\*

3.

FURTHER STUDIES OF FERMI MOTION EFFECTS IN LEPTON SCATTERING FROM NUCLEAR TARGETS.

By A. Bodek, J.L. Ritchie (Rochester U.), UR-772, Jan 1981. 22pp.

Published in Phys.Rev.D24:1400,1981.

(\*\* Journal article does not include tables \*\*)

\*\*\*\*

4.

MONITORING AND CALIBRATION SYSTEM FOR NEUTRINO FLUX  
MEASUREMENT IN A HIGH-ENERGY DICHROMATIC BEAM.

By R. Blair, B. Jin, D. MacFarlane, R.L. Messner, D.B. Novikoff, M.V. Purohit (Cal Tech),  
P. Auchincloss, F. Sciulli, M.H. Shaevitz (Columbia U.), D. Edwards, H. Edwards, H.E.  
Fisk, Y. Fukushima, Q.A. Kerns, T. Kondo, P.A. Rapidis, S.L. Segler, R.J. Stefanski,  
D. Theriot, D. Yovanovitch (Fermilab), A. Bodek, R. Coleman, W. Marsh (Rochester U.),  
O. Fackler, K.A. Jenkins (Rockefeller U.), FERMILAB-PUB-83/26-EXP, Nov 1983. 74pp.  
Published in Nucl.Instr.Meth.226:281,1984.

\*\*\*\*

5.

MEASUREMENT OF THE RATE OF INCREASE OF NEUTRINO CROSS-SECTIONS  
WITH ENERGY.

By R. Blair, B.c. Barish, Y.k. Chu, B. Jin, D. Macfarlane, R.l. Messner, J. Lee, J. Ludwig,  
D.b. Novikoff, M.v. Purohit (Cal Tech), P.s. Auchincloss, F.j. Sciulli, M.h. Shaevitz  
(Columbia U.), F. Bartlett, D. Edwards, H. Edwards, H.e. Fisk, Y. Fukushima, Q.a. Kerns,  
T. Kondo, P.a. Rapidis, S.l. Segler, R.j. Stefanski, D. Theriot, D.d. Yovanovitch (Fermilab),  
A. Bodek, R. Coleman, W. Marsh (Rochester U.), O. Fackler, K.a. Jenkins (Rockefeller U.),  
1983.

Phys. Rev. Lett. 51 ( 1983) 343-346.

\*\*\*\*

6.

OBSERVATION OF LIGHT BELOW CERENKOV THRESHOLD IN A 1.5-METER  
LONG INTEGRATING CERENKOV COUNTER.

By A. Bodek, W. Marsh (Rochester U.), M.V. Purohit (Cal Tech), P.S. Auchincloss, R. Blair,  
M.A. Ruiz, F.J. Sciulli, M.H. Shaevitz (Columbia U.), H.E. Fisk, T. Kondo, S. Pordes, P.A.  
Rapidis, D.D. Yovanovitch (Fermilab), M. Abolins, R. Brock, D. Owen (Michigan State U.),  
K.A. Jenkins, O. Fackler (Rockefeller U.), UR-837, Jan 1983. 33pp.

Published in Z.Phys.C18:289,1983.

\*\*\*\*

7.

FERMI MOTION EFFECTS IN DEEP INELASTIC LEPTON SCATTERING FROM  
NUCLEAR TARGETS.

By A. Bodek, J.L. Ritchie (Rochester U.), UR-759, Aug 1980. 42pp.

Published in Phys.Rev.D23:1070,1981.

\*\*\*\*\*

\*\*\*\*\*

CP VIOLATION #617

\*\*\*\*

1.

MEASUREMENT OF THE RATIO GAMMA (K(L) ---> PI+ PI-) / GAMMA (K(L) ---> PI LEPTON NEUTRINO) FOR K(L) WITH 65-GEV/C LABORATORY MOMENTUM.

By D.P. Coupal, R.H. Bernstein, G.J. Bock, D. Carlsmith, J.W. Cronin, G.D. Collin, Ke-Ling Wen, K. Nishikawa, H.W.M. Norton, B. Winstein (Chicago U., EFI), B. Peyaud, R. Turlay, A. Zylberstejn (Saclay), 1985.

Phys. Rev. Lett. 55 ( 1985) 566-569.

\*\*\*\*

2.

MEASUREMENT OF THE K0\* (896) RADIATIVE WIDTH.

By D. Carlsmith, R.H. Bernstein, G.J. Bock, D. Coupal, G.D. Gollin, K. Nishikawa, H.W.M. Norton, B. Winstein (Chicago U., EFI & Chicago U.), B. Peyaud, R. Turlay, A. Zylberstejn (Saclay), EFI-85-57-CHICAGO, Sep 1985. 14pp.

Published in Phys.Rev.Lett.56:18,1986.

\*\*\*\*

3.

MEASUREMENT OF EPSILON-prime / EPSILON IN THE NEUTRAL KAON SYSTEM.

By R.H. Bernstein, G.J. Bock, D. Carlsmith, D. Coupal, J.W. Cronin, G.D. Gollin, W. Keling, K. Nishikawa, H.W.M. Norton, B. Winstein (Fermilab & Chicago U., EFI), B. Peyaud, R. Turlay, A. Zylberstejn (Saclay), 1985.

Phys. Rev. Lett. 54 ( 1985) 1631-1634.

\*\*\*\*\*

\*\*\*\*\*

For TRANSITION MAGNETIC MOMENT #619: See #008

\*\*\*\*\*

\*\*\*\*\*

For CHARGED HYPERON MAGNETIC MOMENT #620: See #008

\*\*\*\*\*

\*\*\*\*\*

PARTICLE SEARCH #623

\*\*\*\*

1.

OBSERVATION OF DOUBLE PHI MESON PRODUCTION IN 400-GeV/c PROTON -  
NUCLEON INTERACTIONS.

By T.F. Davenport, J.R. Albright, J.H. Goldman, S.L. Hagopian, J.E. Lannutti (Florida State U.), K.W. Lai, J. LeBritton, Y.C. Lin, A.E. Pifer (Arizona U.), H.C. Fenker, D.R. Green (Fermilab), G.E. Canough, C.C. Chang, T.C. Davis, R.W. Joyner, J.A. Poirier (Notre Dame U.), C.H. Georgiopoulos, A. Napier (Tufts U.), J.M. Marraffino, J.W. Waters, M.S. Webster, E.G.H. Williams, J. Woosley (Vanderbilt U.), J.R. Ficenec, S. Torres, W.P. Trower (Virginia Tech), FERMILAB-PUB-85/141-E, Oct 1985. 37pp.

Published in Phys.Rev.D33:2519,1986.

\*\*\*\*

2.

OBSERVATION OF A NARROW ENHANCEMENT IN  $\phi$  K K AND  $\phi$   $\pi$   $\pi$  FINAL  
STATES PRODUCED IN 400-GeV p N INTERACTIONS.

By D.R. Green, H.C. Fenker (Fermilab), K.W. Lai, J. LeBritton, Y.C. Lin, A.E. Pifer (Arizona U.), T.F. Davenport, J.H. Goldman, S.L. Hagopian, J.E. Lannutti (Florida State U.), G. Canough, C.C. Chang, T.C. Davis, R.W. Joyner, J.A. Poirier (Notre Dame U.), C.H. Georgiopoulos, A. Napier, J. Schneps (Tufts U.), J.M. Marraffino, J.W. Waters, M.S. Webster, E.G.H. Williams, J. Woosley (Vanderbilt U.), J.R. Ficenec, S. Torres, W.P. Trower (Virginia Tech), FERMILAB-PUB-85/120-E, Aug 1985. 14pp.

Published in Phys.Rev.Lett.56:1639,1986.

\*\*\*\*

3.

OBSERVATION OF PHI K PI DECAY OF THE  $K^*(2060)$ .

By S. Torres, J.R. Ficenec, S. Mikocki, W.P. Trower (VPI&SU), K.W. Lai, J. LeBritton, Y.C. Lin, A.E. Pifer (U. of Arizona), H.C. Fenker, D.R. Green (Fermilab), T.F. Davenport, J.H. Goldman, S.L. Hagopian, J.E. Lannutti (Florida State U.), G. Canough, C.C. Chang, T.C. Davis, R.W. Joyner, J.A. Poirier (Notre Dame), C.H. Georgiopoulos, A. Napier (Tufts), J.M. Marraffino, J.W. Waters, M.S. Webster, E.G.H. Williams, J.K. Woosley (Vanderbilt)

Phys. Rev. D34 (1986) 707.

\*\*\*\*

4.

OBSERVATION OF THE CABIBBO SUPPRESSED DECAY  $D^{+/-} \rightarrow \phi \pi^{+/-}$ .

By C.H. Georgiopoulos, A. Napier, J. Schneps (Tufts), K.W. Lai, J. LeBritton, Y.C. Lin, A.E. Pifer (U. of Arizona), H.C. Fenker, D.R. Green (Fermilab), J.R. Albright, T.F. Davenport, J.H. Goldman, S.L. Hagopian, J.E. Lannutti (Florida State U.), G. Canough, C.C. Chang, T.C. Davis, R.W. Joyner, J.A. Poirier (Notre Dame), J.M. Marraffino, J.W. Waters, M.S. Webster, E.G.H. Williams, J. Woosley (Vanderbilt), J.R. Ficenec,

S. Torres, W.P. Trower (VPI&State U.)  
Phys. Lett. 152B (1985) 428-432.

\*\*\*\*\*

\*\*\*\*\*

For DIRECT PHOTON PRODUCTION #629: See #272

\*\*\*\*\*

\*\*\*\*\*

For CHARM SEARCH #630: See #490

\*\*\*\*\*

\*\*\*\*\*

NUC CALIBRATION CROSS SEC #631

\*\*\*\*

1.

ABSOLUTE CROSS-SECTION FOR THE PRODUCTION OF NA-24 IN CU BY 400-GeV  
PROTONS.

By S.I. Baker, C.R. Kerns, S.H. Pordes (Fermilab), J.B. Cuming, A. Soukas (Brookhaven),  
V. Agoritsas, G.R. Stevenson (CERN), CERN/PS/MU 83-47, Nov 1983. 26pp.

Published in Nucl.Instr.Meth.222:467,1984.

\*\*\*\*\*

\*\*\*\*\*

For PARTICLE SEARCH #650: See #567

\*\*\*\*\*

\*\*\*\*\*

CHANNELING #660

\*\*\*\*

1.

ANGULAR AND ENERGY DISTRIBUTIONS OF THE GAMMA RAYS EMITTED IN THE CHANNELING OF RELATIVISTIC POSITRONS.

By M.D. Bavizhev, N.K. Bulgakov, A.S. Vodopyanov, R. Wong, I. Voitkovska, W.M. Gibson, V.M. Golovatyuk, Z. Guzik, N.I. Zimin, I.M. Ivanchenko, I.N. Ivakhnenko, R.B. Kadyrov, R.A. Carrigan, T.S. Nigmanov, Yu.V. Nilsen, V.D. Ryabtsov, C.R. Sun, T.E. Toohig, I.A. Tyapkin, N.A. Filatova, E.N. Tsyganov, M.D. Shafranov, A. Forycki, B.A. Yurev (Dubna, JINR), 1984. *Jetp Lett.* 38 ( 1983) 561-565. ( *Pisma Zh. Eksp. Teor. Fiz.* 38 ( 1983) 462-465).

\*\*\*\*

2.

ION CHANNELING STUDY OF RADIATION INDUCED DEFECTS IN A BENT SILICON CRYSTAL.

By G.H. Wang, P.J. Cong, W.M. Gibson, C.R. Sun, I.J. Kim, S. Salman, M. Pisharody (SUNY, Albany), S.I. Baker, R.A. Carrigan (Fermilab), J.S. Forster, I.V. Mitchell (Chalk River, AECL), 1984. *Nucl. Instrum. Methods* 218 ( 1983) 669-672.

\*\*\*\*

3.

FIRST OPERATION WITH A CRYSTAL SEPTUM TO REPLACE A MAGNET IN A CHARGED PARTICLE BEAM.

By S.I. Baker, R.A. Carrigan, Jr., T.E. Toohig (Fermilab), W.M. Gibson, I.J. Kim, F. Sun, C.R. Sun, V. Tanikella, R. Wijayawardana (SUNY, Albany), J.S. Forster, H. Hatton, I.V. Mitchell (Chalk River, AECL), E.N. Tsyganov, T.S. Nigmanov (Dubna, JINR), V.V. Avdeichikov (Khlopin Radium Inst.), J.A. Ellison (New Mexico U.), P. Siffert (Strasbourg, CRN), FERMILAB-PUB-84/45-E, Apr 1984. 10pp. Published in *Nucl.Instr.Meth.*A234:602,1985.

\*\*\*\*

4.

DEFLECTION OF CHARGED PARTICLES IN THE 100-GeV REGIME USING CHANNELING IN BENT SINGLE CRYSTALS.

By S.I. Baker, R.A. Carrigan, Jr., C. Crawford, T.E. Toohig (Fermilab), W.M. Gibson, H. Jin, I.J. Kim, M. Pisharody, S. Salman, C.R. Sun, G.H. Wang, R. Wijayawardana (SUNY, Albany), J.S. Forster, H. Hatton, I.V. Mitchell (Chalk River, AECL), Z. Guzik, T.S. Nigmanov, E.N. Tsyganov (Dubna, JINR), V.V. Avdeichikov (Khlopin Radium Inst.), J.A. Ellison (New Mexico U.), P. Siffert (Strasbourg, CRN), FERMILAB-PUB-83/100-EXP, Nov 1983. 18pp. Published in *Phys.Lett.*137B:129,1984.

\*\*\*\*



5.

STEERING OF THE CHARGED PARTICLE TRAJECTORIES BY A BENT CRYSTAL.

By A.F. Elishev, N.A. Filatova, V.M. Golovatyuk, I.M. Ivanchenko, R.B. Kadyrov, N.N. Karpenko, V.V. Korenkov, T.S. Nigmanov, V.D. Ryabtsov, M.D. Shafranov, B. Sitar, A.E. Senner, B.M. Starchenko, V.A. Sutulin, I.A. Tyapkin, E.N. Tsyganov, D.V. Uralskii, A.S. Vodopyanov (Dubna, JINR), Z. Guzik, A. Forycki, J. Wojtkowska, R. Zelazny (Swierk, Inst. Nucl. Studies), I.A. Grishaev, G.D. Kovalenko, B.I. Shramenko (Kharkov, FTI), M.D. Bavizhev, N.K. Bulgakov (Tomsk Polytechnic Inst.), V.V. Avdeichikov (Khlopin Radium Inst.), R.A. Carrigan, Jr., T.E. Toohig (Fermilab), W.M. Gibson, Ich-Joh Kim, J. Phelps, C.R. Sun (SUNY, Albany), JINR-D1-12716, Aug 1979. 10pp. Published in Phys.Lett.88B:387,1979, JETP Lett.30:442,1979. (\*Vodopianov first author in JETP Lett.\*)

\*\*\*\*

6.

MODULATION OF NUCLEAR INTERACTIONS USING CHANNELING AT MULTI - 100-GeV ENERGIES.

By R.A. Carrigan, Jr., B.L. Chrisman, T.E. Toohig (Fermilab), W.M. Gibson, Ick-Joh Kim, C.R. Sun (SUNY, Albany), Z. Guzik, T.S. Nigmanov, E.N. Tsyganov, A.S. Vodopyanov (Dubna, JINR), M.A. Hasan, A.S. Kanofsky, R. Allen (Lehigh U.), J. Kubic, D.H. Stork, A.B. Watson (UCLA), FERMLAB-79/43-EXP, Jun 1979. 41pp. Published in Nucl.Phys.B163:1,1980.

\*\*\*\*

7.

CONTROL OF CHARGED PARTICLE TRAJECTORIES BY MEANS OF A BENT MONOCRYSTAL. (In Russian)

By Dubna-Swierk-Kharkov-Tomsk-Batavia-New York-Leningrad Collaboration (A.S. Vodopyanov, et al.), 1979. Pisma Zh.Eksp.Teor.Fiz.30 (1979) 474-478.

\*\*\*\*\*

\*\*\*\*\*

For LAMBDA POLARIZATION #663: See #585

\*\*\*\*\*

\*\*\*\*\*

For HADRON JETS #672: See #557

\*\*\*\*\*

\*\*\*\*\*

For CHI MESON #673: See #369

\*\*\*\*\*

\*\*\*\*\*

TAGGED PHOTON #691

\*\*\*\*

1.

MEASUREMENT OF THE D+ AND D0 LIFETIMES.

By Tagged Photon Spectrometer Collaboration: J.C. Anjos, J.A. Appel, S.B. Bracker, T.E. Browder, L.M. Cremaldi, J.R. Elliott, C.O. Escobar, P. Estabrooks, M.C. Gibney, G.F. Hartner, P.E. Karchin, B.R. Kumar, M.J. Losty, G.J. Luste, P.M. Mantsch, J.F. Martin, S. McHugh, S.R. Menary, R.J. Morrison, T. Nash, U. Nauenberg, P. Ong, J. Pinfeld, G. Punkar, M.V. Purohit, J.R. Raab, A.F.S. Santoro, J.S. Sidhu, K. Sliwa, M.D. Sokoloff, M.H.G. Souza, W.J. Spalding, M.E. Streetman, A.B. Stundzia and M.S. Witherell.  
FERMILAB-PUB-86/155-E, Nov 1986. 12pp.  
Published in Phys.Rev.Lett.58:311,1987.

\*\*\*\*

2.

AN EXPERIMENTAL STUDY OF THE A-DEPENDENCE OF J / psi PHOTOPRODUCTION.

By Fermilab Tagged Photon Spectrometer Collaboration (M.D. Sokoloff, et al.),  
FERMILAB-PUB-86/120-E, Aug 1986. 11pp.  
Published in Phys.Rev.Lett.57:3003,1986.

\*\*\*\*

3.

A COMPARISON OF DIFFRACTIVE LAMBDA AND XI- PHOTOPRODUCTION.

By Tagged Photon Spectrometer Collaboration (R.G. Kennett, et al.), Print-86-0201 (UC, SANTA BARBARA), n.d. (recd Feb 1986) 26pp.  
Published in Nucl.Phys.B282:626,1987.

\*\*\*\*\*

\*\*\*\*\*

NEUTRINO OSCILLATION #701

\*\*\*\*

1.

SEARCH FOR MUON NEUTRINO AND ANTI-NEUTRINOS OSCILLATIONS IN THE MASS RANGE  $15\text{-eV}^{**2}/c^{**4} < \Delta M^{**2} < 1000\text{-eV}^{**2}/c^{**4}$ .  
By I.E. Stockdale, A. Bodek, F. Borcharding, N. Giokaris, K. Lang (Rochester U.),

D. Garfinkle, F.S. Merritt, M. Oreglia, P. Reutens (Chicago U., EFI), P.S. Auchincloss, R. Blair, C. Haber, M. Ruiz, F. Sciulli, M.H. Shaevitz, W.H. Smith, R. Zhu (Columbia U.), R. Coleman, H.E. Fisk, B. Jin, D. Levinthal, W. Marsh, P.A. Rapidis, H.B. White, D. Yovanovitch (Fermilab), UR-894, Sep 1984. 17pp.  
Published in Z.Phys.C27:53,1985.

\*\*\*\*

2.

LIMITS ON MUON NEUTRINO OSCILLATIONS IN THE MASS RANGE  $55\text{-eV}^2 < \Delta m^2 < 800\text{-eV}^2$ .

By I.E. Stockdale, A. Bodek, F. Borcharding, N. Giokaris, K. Lang (Rochester U.), D. Garfinkle, F.S. Merritt, M. Oreglia, P. Reutens (Chicago U., EFI), P.S. Auchincloss, R. Blair, C. Haber, M. Ruiz, F. Sciulli, M.H. Shaevitz, W.H. Smith, R. Zhu (Columbia U.), R. Coleman, H.E. Fisk, B. Jin, D. Levinthal, W. Marsh, P.A. Rapidis, H.B. White, D. Yovanovitch (Fermilab), UR-860, Jan 1984. 10pp.  
Published in Phys.Rev.Lett.52:1384,1984.

(\*Title changed in journal\*)

\*\*\*\*

3.

HADRON SHOWER PUNCHTHROUGH FOR INCIDENT HADRONS OF MOMENTUM 15-GeV/c, 25-GeV/c, 50-GeV/c, 100-GeV/c, 200-GeV/c, AND 300-GeV/c.

By F.S. Merritt, M. Oreglia, H. Schellman, B.A. Schumm (Chicago U., EFI), K.T. Backmann, R.H. Bernstein, R.E. Blair, C. Foudas, W.C. Lefmann, S.R. Mishra, E. Oltman, F. Sciulli, M.H. Shaevitz, W.H. Smith (Columbia U.), F. Borcharding, H.E. Fisk, D. Yovanovitch, M.J. Lamm, W. Marsh, K.W.B. Merritt, P.A. Rapidis (Fermilab), A. Bodek, H.S. Budd, W.K. Sakumoto (Rochester U.), UR-916, May 1985. 19pp.

Presented at Workshop on Muon Identification and Momentum Measurement at SSC and LHC Energies, Madison, WI, Apr 4-6, 1985.

Published in Nucl.Instr.Meth.A245:27,1986.

\*\*\*\*\*

\*\*\*\*\*

CHI MESON #705

\*\*\*\*

1.

A MEASUREMENT OF THE RESPONSE OF AN SCG1-C SCINTILLATION GLASS ARRAY TO A 4-GeV/c TO 14-GeV/c PIONS.

By B. Cox, C.M. Jenkins, D.J. Judd, G. Hale, P.O. Mazur, C.T. Murphy, R. Rameika, F. Turkot, D.E. Wagoner (Fermilab), S. Conetti, M. Haire, P. Lebrun, C. Leroy, T. Ryan, D. Stairs, L. Turnbull (McGill U.), R.A. Gearhart (SLAC), M. Abolins, D. Owen (Michigan State U.), S. Tzamarias (Athens U., Nucl. Phys. Lab.), FERMILAB-CONF-84/23-E, Jan 1984. 24pp.

Submitted to 1983 Nuclear Science Symp., San Francisco, CA, Oct 19-21, 1983.  
Published in Nucl.Instrum.Meth.A238:321,1985.

\*\*\*\*

2.

MEASUREMENT OF ELECTROMAGNETIC SHOWER POSITION AND SIZE WITH A SATURATED AVALANCHE TUBE HODOSCOPE AND A FINE GRAINED SCINTILLATOR.

By R. Rameika, B. Cox, C.M. Jenkins, D.J. Judd, G. Hale, P.O. Mazur, C.T. Murphy, F. Turkot, D.E. Wagoner (Fermilab), S. Conetti, M. Haire, P. Lebrun, C. Leroy, T. Ryan, L. Turnbull (McGill U.), R.A. Gearhart (SLAC), C. Shen (Shandong U.), FERMILAB-CONF-84/22-E, Jan 1984. 19pp.

Submitted to 1983 Nuclear Science Symp., San Francisco, CA, Oct 19-21, 1983.  
Published in Nucl.Instr.Meth.A236:42,1985.

\*\*\*\*

3.

A MEASUREMENT OF THE ENERGY RESOLUTION AND RELATED PROPERTIES OF AN SCG1-C SCINTILLATION GLASS SHOWER COUNTER ARRAY FOR 1-GeV TO 25-GeV POSITRONS.

By D.E. Wagoner, B. Cox, D.J. Judd, G. Hale, P.O. Mazur, C.T. Murphy, R. Rameika, F. Turkot (Fermilab), S. Conetti, M. Haire, P. Lebrun, C. Leroy, T. Ryan, L. Turnbull (McGill U.), R.A. Gearhart (SLAC), S. Tzamarias (Athens U., Nucl. Phys. Lab.), FERMILAB-CONF-84/21-E, Jan 1984. 18pp. Submitted to 1983 Nuclear Science Symp., San Francisco, CA,

Oct 19-21, 1983. Published in Nucl.Instr.Meth.A238:315,1985.

\*\*\*\*\*

\*\*\*\*\*

For DIRECT PHOTON #706: See #272

\*\*\*\*\*

\*\*\*\*\*

For SIGMA BETA DECAY #715: See #497

\*\*\*\*\*



\*\*\*\*\*

FREE QUARK SEARCH #720

\*\*\*\*

1.

CRYOGENIC SEARCH FOR FRACTIONALLY CHARGED PARTICLES.

By W. Kutschera, J.P. Schiffer, D. Frekers, W. Henning, M. Paul, K.W. Shepard (Argonne), C.D. Curtis, C.W. Schmidt (Fermilab), 1984.

Phys. Rev. D29 ( 1984) 791-803.

\*\*\*\*\*

\*\*\*\*\*

GRAVITATIONAL DETECTOR #723

\*\*\*\*

1.

SEARCH FOR LONG RANGE INTERACTIONS AT HIGHLY RELATIVISTIC VELOCITIES.

By P. Reiner, A.C. Melissinos, J. Rogers, J. Semertzidis, W. Wuensch (Rochester U.), W.B. Fowler (Fermilab), UR-940, n.d. (recd Mar 1986) 16pp.

Published in Phys.Lett.176B:233,1986.

also in Berkeley High Energy Phys.1986:1487 (QCD161:H51:1986)

\*\*\*\*

2.

OBSERVATION OF  $4 \times 10^{17}$ -CM HARMONIC DISPLACEMENT USING A 10-GHZ SUPERCONDUCTING PARAMETRIC CONVERTER.

By C.E. Reece, P.J. Reiner, A.C. Melissinos (Rochester U.), 1984.

Phys. Lett. 104A ( 1984) 341-344.

\*\*\*\*\*

\*\*\*\*\*

For EMULSION/SIGMA-MINUS @ 250 #730: See #666

\*\*\*\*\*

\*\*\*\*\*

For NEUTRINO INTERACTIONS #733: See #594

\*\*\*\*\*

\*\*\*\*\*

CHARM PRODUCTION #743

\*\*\*\*

1.

INCLUSIVE CHARM CROSS-SECTIONS IN 800-GeV/c p p INTERACTIONS.  
By LEBC-MPS Collaboration: (R. Ammar et al.) CERN-EP/86-122, Sep 1986. 16pp.  
Published in Phys.Lett.183B:110,1987.

\*\*\*\*

2.

MULTIPLICITY OF CHARGED PARTICLES IN 800-GeV p p INTERACTIONS.  
By LEBC-MPS Collaboration (R. Ammar, et al.), CERN-EP/86-85, Jul 1986. 14pp.  
Published in Phys.Lett.178B:124,1986.

\*\*\*\*

3.

DEFLECTION OF AN 800-GeV PARTICLE BEAM USING CHANNELING.  
By S.I. Baker, R.A. Carrigan, Jr., R.L. Dixon, H.C. Fenker, R.J. Stefanski (Fermilab), J.S.  
Forster (Chalk River, AECL), R.L. Wijayawardana (SUNY, Albany), S. Reucroft (CERN),  
FERMILAB-PUB-86/20, Jan 1986. 24pp.  
Published in Nucl.Instr.Meth.A248:301,1986.

\*\*\*\*\*

\*\*\*\*\*

EMULSION EXPOSURE @ 1 TEV #751

\*\*\*\*

1.

SHORT AND LONG RANGE CORRELATIONS OF PRODUCED PARTICLES AT VERY  
HIGH-ENERGIES.  
By P.L. Jain, K. Sengupta, G. Singh (SUNY, Buffalo), 1986.  
Phys. Rev. D34 ( 1986) 2886-2889.

\*\*\*\*\*

\*\*\*\*\*

### Ph.D. Theses from Fermilab Experiments

\*\*\*\*\*

\*\*\*\*

1.

UPPER LIMIT FOR NU MU OSCILLATION INTO NU TAU IN A DICHROMATIC BEAM.

By Juan Bofill Abadias (MIT, Massachusetts), 1984. 77pp. E594

\*\*\*\*

2.

A STUDY OF J/PSI PRODUCTION IN 260 GeV PI MINUS NUCLEUS COLLISIONS.

By Chris Adolphsen (U. of Chicago), 1985. 229pp. E615

\*\*\*\*

3.

BEAM JET STRUCTURES IN SOFT AND HARD PROTON-PROTON COLLISIONS AT  $S^{1/2} = 27.4$  GeV.

By Seung-chan Ahn (Rutgers U., New Brunswick), 1986. 193pp. E557

\*\*\*\*

4.

INELASTIC HADRON PROTON SCATTERING AT FNAL ENERGIES IN THE TRIPLE REGGE KINEMATIC REGION.

By William Aitkenhead (MIT, LNS), 1979. E118

\*\*\*\*

5.

A STUDY OF MASSIVE MUON PAIR PRODUCTION AT HIGH XF.

By James P. Alexander (U. of Chicago), 1985. 223pp. E615

\*\*\*\*

6.

PARTICLES PRODUCED IN ASSOCIATION WITH PSI (3098).

By G.O. Alverson (Illinois U., Urbana), COO-1195-440-mc (microfiche), 1979. 97pp. E369

\*\*\*\*

7.

PHOTOPRODUCTION OF THE  $D^{*+-}$ .

By Paul Ralph Avery (U. of Illinois, Urbana), 1980. 161pp. E87A

\*\*\*\*

8.

MEASUREMENT OF THE RADIATIVE DECAY WIDTH OF THE NEGATIVE  $K^*$ -MESON.

BY David Mark Berg (Rochester U.), UMI 83-21652-mc (microfiche). 1983. 163 pp.

\*\*\*\*

9.  
PRODUCTION OF OMEGA AND PHI MESONS BY 193 GeV/c PIONS AND 250 GeV/c PROTONS ON A BERYLLIUM TARGET.  
By James Nugent Bellinger (U. of Illinois, Urbana-Champaign), 1985. 152pp. E673  
\*\*\*\*
  10.  
A STUDY OF CP-VIOLATION THROUGH A PRECISION MEASUREMENT OF  $\eta_{A00}/\eta_{A+-}$ .  
By Robert H. Bernstein (U. of Chicago), 1984. 337pp. E617  
\*\*\*\*
  11.  
A MEASUREMENT OF THE  $K_0^*(890)$  RADIATIVE WIDTH  
By Duncan L. Carlsmith (U. of Chicago), 1984. 163pp. E617  
\*\*\*\*
  12.  
A MEASUREMENT OF THE MASS, FULL WIDTH, AND RADIATIVE WIDTH OF THE  $B_+(1237)$  MESON.  
By Bruce David Collick (U. of Minnesota), 1984. 159pp. E272  
\*\*\*\*
  13.  
LARGE TRANSVERSE MOMENTUM DIRECT PHOTON,  $\pi^0$  AND  $\eta$  PRODUCTION WITH A CARBON TARGET.  
By Steven R.W. Cooper (Michigan State U.), 1985. 105pp. E629  
\*\*\*\*
  14.  
HADRON IDENTIFICATION AT 200 GeV/c USING A RING-IMAGING CERENKOV COUNTER.  
By G.B. Coutrakon (SUNY/Stony Brook), 1982. 137pp. E605  
\*\*\*\*
  15.  
THE MAGNETIC MOMENT OF THE CASCADE-ZERO HYPERON.  
By Peter Timothy Cox (U. of Michigan), 1980. 259pp. E495  
\*\*\*\*
  16.  
INCLUSIVE HADRONIC PRODUCTION CROSS SECTIONS MEASURED IN 400 GeV PROTON-NUCLEUS COLLISIONS.  
By James Arthur Crittenden (Columbia U.), 1986. 128 pp. E605  
\*\*\*\*
-



17.

OBSERVATION OF DOUBLE PHI MESON PRODUCTION IN 400 GeV/c PROTON-NUCLEON INTERACTIONS.

By Tom Forest Davenport III (Florida State U.), FSU-HEP-841203, 1984. 114pp. E623

\*\*\*\*

18.

THE POLARIZATION AND MAGNETIC MOMENT OF THE SIGMA MINUS HYPERON.

By Leslie Ludwig Deck (Rutgers U.), 1981. 124pp. E620

\*\*\*\*

19.

INELASTIC AND ELASTIC PHOTOPRODUCTION OF J/PSI(3097).

By Bruce Hayes Denby (U. of California, Santa Barbara), 1983. 175pp. E516

\*\*\*\*

20.

INTERACTIONS OF HADRONS WITH HEAVY NUCLEI AT 200 GeV/c.

By Robert Louis Dimarco (State U. of New Jersey, New Brunswick), May 1985. 121pp. E565/570

\*\*\*\*

21.

THE PRODUCTION OF NEUTRINOS AND NEUTRINO-LIKE PARTICLES IN PROTON-NUCLEUS INTERACTIONS.

By John Patrick Dishaw (SLAC), SLAC-216, 1979. 147pp. E379

\*\*\*\*

22.

A HIGH STATISTICS STUDY OF LAMBDA BETA DECAY.

By Jay Samuel Dworkin (U. of Michigan), 1983. 126pp. E621

\*\*\*\*

23.

MEASUREMENTS OF ELASTIC RHO, OMEGA, AND PHI MESON PHOTO-PRODUCTION CROSS SECTIONS ON PROTONS FROM 30 TO 180 GeV.

By Roland M. Egloff (U. of Toronto, Toronto, Ontario) 1979. 235pp. E25A

\*\*\*\*

24.

TOTAL CROSS SECTION MEASUREMENTS FOR MUON NEUTRINO AND ANTINEUTRINO CHARGED CURRENT DEEP INELASTIC SCATTERING.

By Terrance Foy Eldridge (MIT, Cambridge), 1985. 98pp. E594

\*\*\*\*

---

25.

MEASUREMENT OF THE LIFETIMES OF THE CHARMED  $D^+$   $F^+$  MESONS AND  $LAMBDA^+C$  CHARMED BARYON.

By Steven Michael Errede (Ohio State U., Columbus), 1981. 250pp. E531

\*\*\*\*

26.

UPPER LIMITS ON THE HADRONIC PRODUCTION OF CHARMED  $D^0$  AND anti- $D^0$  MESONS AT HIGH ENERGIES.

By Ralph Fabrizio (Michigan U.), UMI 79-16700-(microfiche), 1979. 112pp. E357

\*\*\*\*

27.

INCLUSIVE PARTICLE PRODUCTION IN  $PI^+P$ ,  $K^+P$ , AND  $PP$  INTERACTIONS AT 200 GeV/c.

By Thomas Anselm Frank (MIT, Cambridge), 1985. 153pp. E570

\*\*\*\*

28.

OBSERVATION OF THE CABIBBO-SUPRESSED DECAY  $D^{+-}$  YIELDS  $PHI PI^{+-}$ .

By Christos H. Georgiopoulos (Tufts U., Medford), 1985. 110pp. E623

\*\*\*\*

29.

MEASUREMENT OF THE ANGULAR AND ATOMIC WEIGHT DEPENDENCES OF HIGH TRANSVERSE MOMENTUM HADRON PRODUCTION IN  $PI-N$  COLLISIONS.

By Nikos Giokaris (Enrico Fermi Institute, Chicago), 1981. 198pp. E258

\*\*\*\*

30.

RATIOS OF SINGLE HADRONS PRODUCED AT HIGH TRANSVERSE MOMENTUM IN 400 GeV/c PROTON-NUCLEON COLLISIONS.

By Henry Donald Glass (SUNY), 1985. 167pp. E605

\*\*\*\*

31.

CHARM PRODUCTION BY MUONS AND ITS ROLE IN SCALE-NONINVARIANCE.

By George D. Gollin (Princeton U.), 1980. 213pp. E203/391

\*\*\*\*

32.

A STUDY OF ZWEIG'S RULE USING  $PHI$  MESONS IN A BROAD BAND NEUTRAL BEAM.

By Maury Charles Goodman (U. of Illinois, Urbana), 1979. 128pp. E87

\*\*\*\*

33.

MASSIVE LEPTON PAIR PRODUCTION I 800 GeV/c PROTON-NUCLEUS COLLISIONS.

By R. Gray (Univ. of Washington). E605

\*\*\*\*

34.

A MEASUREMENT OF HIGH TRANSVERSE MOMENTUM CHARGED HADRON PRODUCTION USING A PION BEAM AND HYDROGEN TARGET.

By James Green (Enrico Fermi Institute, Chicago), 1981. 193pp. E258

\*\*\*\*

35.

A STUDY OF PHOTONS FROM DECAYS OF THE K<sub>0</sub>L.

By John Field Greenhalgh (Stanford U.), January 1981. E533

\*\*\*\*

36.

A STUDY OF THE PRODUCTION OF MASSIVE MUON PAIRS IN 225 GeV PI MINUS-NUCLEUS COLLISIONS.

By Herbert B. Greenlee (U. of Chicago), 1985. 223pp. E326

\*\*\*\*

37.

THE LIFETIME OF THE D<sub>0</sub> CHARMED MESON.

By Michael John Gutzwiller (Ohio State U.), 1981. 172pp. E531

\*\*\*\*

38.

PRODUCTION OF CHARMONIUM STATES IN 225 GeV/c PI-MINUS BERYLLIUM INTERACTIONS.

By Stephen R. Hahn (U. of Illinois, Urbana), 1983. 231pp. E610

\*\*\*\*

39.

THE CHANNELING OF 35, 100, AND 250 GeV/c MIXED BEAM OF PIONS, KAONS, AND PROTONS IN A 2cm THICK GERMANIUM SINGLE CRYSTAL.

By Abul Muhammad Hasan (Lehigh U.), 1980. 235pp. E507

\*\*\*\*

40.

A MEASUREMENT OF THE RATE OF FORMATION OF PI-MU ATOMS IN K<sub>0</sub>L DECAY.

By David Hedin (U. of Wisconsin, Madison), 1980. 139pp. E533

\*\*\*\*

41.  
PRODUCTION OF HIGH MASS MUON PAIRS BY 225 GeV/c HADRON BEAMS AND  
A DETERMINATION OF THE PION STRUCTURE FUNCTION.  
By Gary Elliott Hogan (Princeton U.), COO-3072-102, 1979. 256pp. E444  
\*\*\*\*
42.  
A STUDY OF HIGH TRANSVERSE ENERGY EVENTS IN PROTON-PROTON AND  
PROTON-NUCLEUS COLLISIONS AT SQUARE ROOT  $S = 27.4$  GeV.  
By Richard Scott Holmes (U. of Maryland, College Park), 1985. 344pp. E557  
\*\*\*\*
43.  
NUCLEON-NUMBER DEPENDENCE OF MASSIVE HADRON PAIR PRODUCTION IN  
400 GeV/c PROTON-NUCLEUS COLLISIONS.  
By Yee Bob Hsiung (Columbia U.), 1986. 158pp. E605  
\*\*\*\*
44.  
HIGH TRANSVERSE MOMENTUM HADRON PRODUCTION IN 400 AND 800 GeV/c  
PROTON-NUCLEON COLLISIONS.  
By D.E. Jaffe (SUNY/Stony Brook), 1987. E605  
\*\*\*\*
45.  
MEASUREMENT OF THE RADIATIVE DECAY WIDTH OF THE RHO MESON.  
By Terrence C. Jensen (U. of Rochester), 1980. 170pp. E272  
\*\*\*\*
46.  
RESONANT AND CONTINUUM PRODUCTION OF MASSIVE MUON PAIRS IN 400  
GeV PROTON-NUCLEUS COLLISIONS.  
By Daniel Moshe Kaplan (SUNY, Stony Brook), 1979. 178pp. E288  
\*\*\*\*
47.  
LARGE MOMENTUM TRANSFER ANTIPROTON-PROTON AND PROTON-PROTON  
ELASTIC SCATTERING AT 100 AND 200 GeV/c.  
By David Howard Kaplan (Cornell U.), August 1983. 264pp. E577  
\*\*\*\*
48.  
MEASUREMENT OF PION PROTON DEEP ELASTIC SCATTERING AT 13.7 AND  
19.4 GeV CENTER OF MASS ENERGIES.  
By Paul Edmund Karchin (Cornell U.), 1982. 122pp. E577  
\*\*\*\*

49.

EXPERIMENTAL TEST OF TRIPLE REGGE THEORY.

By Rosemary Gillian Kennett (California Institute of Technology, Pasadena), 1979. 333pp.

E260

\*\*\*\*

50.

THE TOTAL CROSS SECTION FOR NU MU E ELASTIC SCATTERING.

By Kenneth Alan Lefler (U. of Maryland), 1981. 191pp. E253

\*\*\*\*

51.

FORWARD CHARGE FLOW IN HADRONIC J/PSI PRODUCTION.

By Wei-guo Li (U. of Illinois, Urbana-Champaign), 1985. 136pp. E610/673

\*\*\*\*

52.

A STUDY OF THE OMEGA MINUS HYPERON.

By Kam-Biu Luk (Rutgers U.), February 1983. 124pp. E620

\*\*\*\*

53.

NEUTRAL STRANGE PARTICLE PRODUCTION AND POLARIZATION AT LARGE PT.

By Byron Gene Lundberg (U. of Wisconsin, Madison), 1984. 184pp. E555

\*\*\*\*

54.

A STUDY OF THE PROPERTIES OF MUONS PRODUCED IN THE DECAYS OF CHARMED PARTICLES.

By Patricia Louise McBride (Yale U.), 1984. 170pp. E630

\*\*\*\*

55.

A STUDY OF HADRON-PROTON ELASTIC SCATTERING AT HIGH ENERGY AND LARGE MOMENTUM TRANSFER.

By Sean Francis McHugh (U. of California, San Diego), 1983. 197pp. E585

\*\*\*\*

56.

OBSERVATION OF THE INVERSE MUON DECAY IN A DICHROMATIC NEUTRINO BEAM.

By Richard Alan Magahiz (MIT, Cambridge), May 1985. 137pp. E594

\*\*\*\*

57.

MUOPRODUCTION OF J PSI (3100).

By Thomas W. Markiewicz (U. of California, Berkeley), October 1981.

165pp. E203

\*\*\*\*

58.  
COMPARISON OF CHARGED AND NEUTRAL CURRENT STRUCTURE FUNCTIONS.  
By Thomas Stewart Mattison (MIT, Cambridge), 1986. 623pp. E594  
\*\*\*\*
59.  
MEASUREMENT OF THE NUCLEON STRUCTURE FUNCTION USING HIGH  
ENERGY MUONS.  
By Peter Daniel Meyers (U. of California, Berkeley), 1983. 139pp. E203/391  
\*\*\*\*
60.  
INCLUSIVE RESONANCE PRODUCTION IN SINGLE-VEE EVENTS IN PI MINUS N  
INTERACTIONS AT 200 GeV.  
By Stanislaw Mikocki (Virginia Polytechnic Institute and State U.), 1985. 63pp. E580  
\*\*\*\*
61.  
A GAS CALORIMETER FOR HIGH ENERGY EXPERIMENT AND STUDY OF HIGH  
ENERGY CASCADE SHOWER.  
By Hitoshi Miyata (U. of Tsukuba), UTPP-17, 1984. 123pp. E741  
\*\*\*\*
62.  
A HIGH STATISTICS SEARCH FOR NARROW RESONANCES IN THE DIMUON  
SPECTRUM FROM 800 GeV/c PROTON-NUCLEUS COLLISIONS.  
By G. Moreno (Fermilab/CINESTAV, Mexico). E605  
\*\*\*\*
63.  
AZIMUTHAL ENERGY FLOW IN DEEP INELASTIC NEUTRINO SCATTERING.  
By Ascet Mukherjee (MIT, Cambridge), 1986. 155pp. E594  
\*\*\*\*
64.  
NEUTRAL PARTICLE PRODUCTION IN DIFFRACTIVE PION-PROTON AND  
PROTON-PROTON INTERACTIONS AT 147 GeV/c.  
By Austin Napier (MIT, Cambridge), 1979. 183pp. E299  
\*\*\*\*
65.  
A MONTE CARLO STUDY OF HIGH TRANSVERSE ENERGY TRIGGERS IN PP  
COLLISIONS AT P LAB = 400 GeV/c.  
By Charles Joseph Naudet (Rice U.), 54pp. E609  
\*\*\*\*

66.  
MEASUREMENT OF HIGH MASS MUON PAIRS PRODUCED IN HADRONIC COLLISIONS AND A DETERMINATION OF THE PION STRUCTURE FUNCTION.  
By Catherine Newman (Enrico Fermi Institute, U. of Chicago), 1979. 276pp. E444  
\*\*\*\*
67.  
A DETERMINATION OF THE BRANCHING RATIO OF KL TO GAMMA GAMMA.  
By Hamish W.M. Norton (U. of Chicago), 1984. 213pp. E617  
\*\*\*\*
68.  
QUARK-PARTON AND THE LOW TRANSVERSE MOMENTUM HADRON-HADRON INTERACTION.  
By Seong Hwan Oh (U. of Maryland), 1981. 115pp. E299  
\*\*\*\*
69.  
DIMUON PRODUCTION BY HIGH ENERGY NEUTRINOS AND ANTINEUTRINOS IN THE FERMILAB FIFTEEN-FOOT BUBBLE CHAMBER.  
By John L. Orthel (LBL, Berkeley), 1979. LBL-10035, 134pp. E546  
\*\*\*\*
70.  
NEUTRAL STRANGE PARTICLE PRODUCTION IN INTERACTIONS AT 147 GeV/c.  
By Tungching, Ou (Rutgers U.), 1979. 105pp. E154  
\*\*\*\*
71.  
CHERENKOV RING IMAGING FOR PARTICLE IDENTIFICATION IN THE INVESTIGATION OF ELEMENTARY PARTON-PARTON INTERACTIONS.  
By A. Peisert (U. of Geneva), 1982. E605  
\*\*\*\*
72.  
FORWARD PRODUCTION OF HIGH MASS MUON PAIRS IN PION-NUCLEON INTERACTIONS.  
By Sandro Palestini (Princeton U.), 1984. 185pp. E615  
\*\*\*\*
73.  
THE SIGMA-LAMBDA TRANSITION MAGNETIC MOMENT.  
By Priscilla Cushman Petersen (Rutgers U.), 1985. 165pp. E619  
\*\*\*\*
74.  
LIFETIME MEASUREMENTS OF THE D+, F+ AND LAMBDA+C.  
By Dale Barbara Pitman (U. of Toronto). 208pp. E531  
\*\*\*\*

75.

A STUDY OF INCLUSIVE KAON CHARGE EXCHANGE IN THE TRIPLE REGGE REGION

By Randall Evans Pitt (San Diego, CA), 1980. 225pp. E383

\*\*\*\*

76.

ASSOCIATED ELECTRON-MUON EVENTS FROM HIGH ENERGY HADRONIC COLLISIONS.

By R.E. Plaag (U. of Washington), 1986. 114pp. E605

\*\*\*\*

77.

A MEASUREMENT OF NEUTRAL MESON AND DIRECT PHOTON PRODUCTION AT LARGE TRANSVERSE MOMENTUM.

By Jim David Povlis (U. of Minnesota), 1984. 213pp. E629

\*\*\*\*

78.

THE POLARIZATION AND MAGNETIC MOMENT OF THE CASCADE MINUS HYPERON.

By Regina Abby Rameika (Rutgers U.), 1981. 174pp. E620

\*\*\*\*

79.

SEARCH FOR ANOMALOUS LONG RANGE INTERACTIONS AT HIGHLY RELATIVISTIC VELOCITIES.

By Philip John Reiner (U. of Rochester), 1985. 179pp. E723

\*\*\*\*

80.

HIGH TRANSVERSE ENERGY PROTON-NUCLEAR INTERACTIONS.

By James Allen Rice (Rice U., Houston), 1983. 184pp. E609

\*\*\*\*

81.

NEUTRINO INTERACTIONS IN A HYBRID EMULSION - BUBBLE CHAMBER DETECTOR.

By Robert Ludwig Rosenblatt (U. of Washington), 1981. 98pp. E564

\*\*\*\*

82.

PHOTOPRODUCTION OF CHARMED BARYONS.

By James John Russell (U. of Illinois, Urbana), 1980. 107pp. E87

\*\*\*\*



83.  
STUDY OF THE ATOMIC WEIGHT DEPENDENCE OF HIGH PT SINGLE HADRON  
PRODUCTION IN PROTON-NUCLEUS COLLISIONS AT 400 GeV/c.  
By Yoshihide Sakai (Kyoto U.), 1984. 170pp. E605  
\*\*\*\*
84.  
STRANGE QUARK SUPPRESSION IN 225 GeV/c PI-MINUS BERYLLIUM  
INTERACTIONS.  
By Paul V. Schoessow (U. of Illinois, Urbana), 1983. 119pp. E610  
\*\*\*\*
85.  
FOUR-PRONG PI-P INTERACTIONS AT 250 GeV/c.  
By James Scouras (U. of Maryland, College Park), 1980. 100pp. E234  
\*\*\*\*
86.  
PRODUCTION OF THE  $\psi(3100)$  RESONANCE IN 400-GeV PROTON - IRON  
INTERACTIONS.  
By Eric J. Siskind (Cal Tech), UMI 79-17934-mc (microfiche), 1979. 117pp. E595  
\*\*\*\*
87.  
A COMPARISON OF NEUTRAL TO CHARGED CURRENT, NEUTRINO-NUCLEON  
INTERACTIONS IN A WIDE BAND NEUTRINO BEAM AT FERMILAB.  
By John Allen Slate (Michigan State U.), 1985. 175pp. E594  
\*\*\*\*
88.  
COMPARISON OF PROMPT  $\nu_e$  AND  $\nu_\mu$  FLUXES FROM 400 GeV P-W  
INTERACTIONS.  
By Elton Shouse Smith (U. of Wisconsin, Madison), 1983. 171pp. E613  
\*\*\*\*
89.  
MASSIVE MUON PAIR PRODUCTION IN 400 GeV PROTON-NUCLEUS COLLISIONS.  
By Stephen Robert Smith (U. of Washington), 1981. 158pp. E439  
\*\*\*\*
90.  
STUDY OF RARE PROCESSES INDUCED BY 209-GeV MUONS.  
By Wesley Harold Smith (U. of California, Berkeley), 1981. 104pp. E203/391  
\*\*\*\*
91.  
DIFFRACTIVE PHOTON DISSOCIATION IN A HIGH PRESSURE HYDROGEN TIME  
PROJECTION CHAMBER.  
By Gregory R. Snow (Rockefeller U.), 1983. 203pp. E612

\*\*\*\*

92.

EVIDENCE FOR HARD GLUON BREMSSTRAHLUNG IN A NEUTRINO EXPERIMENT.

By Michael David Sokoloff (U. of California, Berkeley), 1983. E546

\*\*\*\*

93.

STUDY OF WEAK NEUTRAL AND CHARGED CURRENT INTERACTIONS IN DEUTERIUM.

By Steven Eugene Sommers (SUNY, Stony Brook), 1980. 158pp. E545

\*\*\*\*

94.

PION-PION DECAY DISTRIBUTION FOR  $\pi^-$ -P YIELDS  $\pi^+$   $\pi^-$  APPROXIMATELY AT 100 AND 175 GeV/c.

By Stuart Reh. Stampke (California Institute of Technology, Pasadena), 1982. 272pp. E110

\*\*\*\*

95.

CORRELATIONS BETWEEN HIGH TRANSVERSE MOMENTUM HADRONS IN  $\pi^+$ -P, K-P AND PP COLLISIONS AT 200 GeV/c.

By Robert Walter Stanek (U. of Illinois, Chicago), 1980. 229pp. E260

\*\*\*\*

96.

ATOMIC MASS DEPENDENCE OF HADRON PAIRS IN 800 GeV/c PROTON-NUCLEUS COLLISIONS.

By P.B. Straub (U. of Washington). E605

\*\*\*\*

97.

INCLUSIVE K+K- PRODUCTION IN REACTIONS  $\pi^+$ -P K+ P AND PP AT 200 GeV/c.

By Victor Suchorebrow (Yale U.), 1985. 86pp. E565/570

\*\*\*\*

98.

A STUDY OF THE DECAY  $D^0$  K-  $\pi^+$   $\pi^0$  IN HIGH ENERGY PHOTOPRODUCTION.

By Donald Joseph Summers (U. of California, Santa Barbara), 1984. 216pp. E516

\*\*\*\*

99.

THE ATOMIC MASS DEPENDENCE OF MASSIVE MUON PAIR PRODUCTION IN 225 GeV/c  $\pi^+$ -NUCLEUS INTERACTIONS.

By Morris L. Swartz (U. of Chicago), 1984. 251pp. E326

\*\*\*\*

100.

A STUDY OF THE MOMENTUM DISTRIBUTIONS OF THE FINAL STATE HADRONS  
IN NEUTRINO-NUCLEUS INTERACTIONS.

By Gregory M. Swider (U. of Washington, Seattle) 1980. 130pp. E546

\*\*\*\*

101.

AN IMPROVED 8 GeV BEAM TRANSPORT SYSTEM FOR THE FERMI NATIONAL  
ACCELERATOR LABORATORY.

By Michael James Syphers (U. of Illinois, Chicago), 1987. 173pp.

\*\*\*\*

102.

A MEASUREMENT OF THE ELASTIC SCATTERING CROSS SECTION,  $\nu\mu + e^-$   
YIELDS  $\nu\mu + e^-$ .

By Michael Albert Tartaglia (MIT, Cambridge), 1984. E594

\*\*\*\*

103.

WEAK DECAYS OF CHARMED PARTICLES.

By Marc Gilles Turcotte (McGill University, Montreal), May 1986. E531

\*\*\*\*

104.

MEASUREMENT OF THE HADRONIC CHARM PRODUCTION CROSS SECTION IN A  
HIGH RESOLUTION STREAMER CHAMBER EXPERIMENT.

By Liang Tzeng (Yale U.), 1984. 190pp. E630

\*\*\*\*

105.

PROTON DEUTERON ELASTIC SCATTERING FROM 20 TO 220 GeV/c.

By Gary Warren (U. of Rochester), UR-691, 1979. 104pp. E198A

\*\*\*\*

106.

APPLICATION OF A CRYSTAL SEPTUM TO REPLACE A MAGNET IN A CHARGED  
PARTICLE BEAM AND STUDY OF DECHANNELING AND FEEDING-IN EFFECTS IN  
A SINGLE SILICON CRYSTAL.

By Ranjith Laxman Wijayawardana (SUNY, Albany), May 1985. 209pp. E660

\*\*\*\*

107.

THE POLARIZATION AND MAGNETIC MOMENT OF THE SIGMA PLUS HYPERON.

By Carol Ann Wilkinson (U. of Wisconsin, Madison), 1985. 117pp. E620

\*\*\*\*

108.

DIMUON PRODUCTION BY HIGH ENERGY NEUTRINO AND ANTINEUTRINO  
NUCLEON COLLISIONS.

By David Roberts Winn (U. of Wisconsin, Madison), 1979. 290pp. E310

\*\*\*\*

109.

NEUTRAL CURRENT AND CHARGED CURRENT STRUCTURE FUNCTIONS OF THE  
NUCLEON.

By Gong Ping Yeh (MIT, Cambridge), 1984. 108pp. E594

\*\*\*\*

110.

DIELECTRON PRODUCTION IN 800 GeV/c PROTON-NUCLEUS COLLISIONS.

By T. Yoshida (Kyoto U.), 1987. E605

\*\*\*\*

111.

STUDY OF HADRONIC JETS PRODUCED BY CHARGED PION AND PROTON  
BEAMS INCIDENT ON HYDROGEN AND ALUMINUM TARGETS.

By Kar Woo Yung (California Institute of Technology, Pasadena), 1979. 199pp. E260

\*\*\*\*\*

03 JAN 1988

FERMI NATIONAL ACCELERATOR LABORATORY

## SUMMARY OF PROPOSAL STATUS

## APPROVED PROPOSALS - 368

1A NEUTRINO #1A(CLINE, DAVID B.)  
 3 MONOPOLE #3(EBERHARD, PHILIPPE)  
 7 ELASTIC SCATTERING #7(MEYER, DONALD I.)  
 12 NEUTRON BACKWARD SCATTERING #12(REAY, NEVILLE W.)  
 21A NEUTRINO #21A(BARISH, BARRY C.)  
 25A PHOTON TOTAL CROSS SECTION #25A(CALDWELL, DAVID O.)  
 27A NEUTRON DISSOCIATION #27A(ROSEN, JEROME L.)  
 31A 15-FOOT ANTI-NEUTRINO/H2 #31A(DERRICK, MALCOLM)  
 36A PROTON-PROTON SCATTERING #36A(COOL, RODNEY L.)  
 45A 15-FOOT NEUTRINO/H2 #45A(NEZRICK, FRANK A.)  
 51A MISSING MASS #51A(VON GOELER, EBERHARD)  
 61 POLARIZED SCATTERING #61(CHAMBERLAIN, OWEN)  
 67A PROTON-PROTON MISSING MASS #67A(SANNES, FELIX)  
 70 LEPTON #70(LEDERMAN, LEON M.)  
 75 QUARK #75(YAMANOUCI, TAIJI)  
 81A NUCLEAR CHEMISTRY #81A(KAUFMAN, SHELDON)  
 86A PION DISSOCIATION #86A(LUBATTI, HENRY J.)  
 90 EMULSION/PROTONS @ 200 #90(WOLTER, WLADYSLAW)  
 96 ELASTIC SCATTERING #96(RITSON, DAVID)  
 99 ASSOCIATED PRODUCTION #99(DIEBOLD, ROBERT E.)  
 103 EMULSION/PROTONS @ 200 #103(KING, DAVID T.)  
 105 EMULSION/PROTONS @ 200 #105(MALHOTRA, PRINCE K.)  
 110A MULTIPARTICLE #110A(DZIERBA, ALEXANDER R.)  
 114 EMULSION/PROTONS @ 200 #114(JAIN, PIYARE L.)  
 116 EMULSION/PROTONS @ 200 #116(HEBERT, JACQUES D.)  
 118A INCLUSIVE SCATTERING #118A(BRANDENBURG, GEORGE W.)  
 121A 30-INCH P+ & P - P @ 100 #121A(LANDER, RICHARD L.)  
 137 50-INCH P+ - P @ 200 #137(HUSON, FRED RUSS)  
 141A 30-INCH P-P @ 200 #141A(FIELDS, THOMAS H.)  
 143A 30-INCH P+ - P @ 300 #143A(KALBFLEISCH, GEORGE R.)  
 152B PHOTOPRODUCTION #152B(HEUSCH, CLEMENS A.)  
 155 15-FOOT EMI TEST #155(PETERSON, VINCENT Z.)  
 161 30-INCH P - P&NE @ 300 #161(MAPP, JAMES)  
 171 EMULSION/PROTONS @ 200 #171(LORD, JERE J.)  
 177A PROTON-PROTON ELASTIC #177A(OREAR, JAY)  
 180 15-FOOT ANTI-NEUTRINO/H2&NE#180(ERMOLOV, PAVEL F.)  
 183 EMULSION/PROTONS @ 200 #183(TRETJAKOVA, M. I.)  
 186 PROTON-DEUTERON SCATTERING #186(MELISSINOS, ADRIAN)  
 188 PROTON-NUCLEON INCLUSIVE #188(SANNES, FELIX)  
 194 30-INCH P - D @ 100 #194(MURPHY, C. THORNTON)  
 196 30-INCH P - D @ 400 #196(ENGELMANN, RODERICH J.)  
 199 MASSIVE PARTICLE SEARCH #199(FRANKEL, SHERMAN)  
 203A MUON #203A(KERTH, LEROY T.)  
 209 30-INCH P - D @ 300 #209(DAO, FU TAK)  
 216 FORM FACTOR #216(STORK, DONALD H.)  
 218 30-INCH P+ - D @ 200 #218(YAGER, PHILIP M.)  
 226 K ZERO CHARGE RADIUS #226(TELEGDI, VALENTINE L.)  
 229 DETECTOR DEVELOPMENT #229(YUAN, LUKE C. L.)  
 232 EMULSION/PROTONS @ 300 #232(KING, DAVID T.)  
 234 15-FOOT ENGINEERING RUN #234(HUSON, FRED RUSS)  
 237 EMULSION/PROTONS @ 300 #237(LORD, JERE J.)  
 239 LONG-LIVED PARTICLES #239(FRATI, WILLIAM)  
 243 EMULSION/PROTONS @ 400 #243(NIU, KIYOSHI)  
 245 EMULSION/PROTONS @ 400 #245(JAIN, PIYARE L.)  
 248 NEUTRON ELASTIC SCATTERING #248(LONGO, MICHAEL J.)  
 250 EMULSION/PROTONS @ 300 #250(KUSUMOTO, OSAMU)  
 252 30-INCH P-P @ 100 #252(FERBEL, THOMAS)  
 254 NEUTRINO #254(KALBFLEISCH, GEORGE R.)  
 258 PION INCLUSIVE #258(SHOCHET, MELVYN J.)  
 261 DETECTOR DEVELOPMENT #261(WANG, CHING LIN)  
 264 EMULSION/PI- @ 200 #264(YOUNG, POH SHIEN)  
 268 INCLUSIVE PHOTON #268(MELLEMA, JOEL)  
 272 HADRON DISSOCIATION #272(FERBEL, THOMAS)  
 276 QUARK #276(VAN GINNEKEN, ANDREAS)  
 280 30-INCH P - D @ 200 #280(FIELDS, THOMAS H.)  
 284 PARTICLE PRODUCTION #284(WALKER, JAMES K.)  
 288 DI-LEPTON #288(LEDERMAN, LEON M.)  
 290 BACKWARD SCATTERING #290(BAKER, WINSLOW F.)  
 295 30-INCH P+ & P - D @ 200 #295(YEKUTIELI, GIDEON)  
 299 30-INCH HYBRID #299(PLESS, IRWIN A.)  
 305 NEUTRON DISSOCIATION #305(GOBBI, BRUNO)  
 311 50-INCH PBAR - P @ 100 #311(NEALE, WILLIAM W.)  
 317 PROTON-NUCLEON INELASTIC #317(COOL, RODNEY L.)  
 320 NEUTRINO #320(SCIULLI, FRANK)  
 324 INCLUSIVE SCATTERING #324(WEISBERG, HOWARD L.)  
 326 DI-MUON #326(SHOCHET, MELVYN J.)  
 2B 30-INCH HYBRID #2B(SMITH, GERALD A.)  
 4 NEUTRON CROSS SECTION #4(LONGO, MICHAEL J.)  
 8 NEUTRAL HYPERON #8(PONDROM, LEE G.)  
 14A PROTON-PROTON INELASTIC #14A(FRANZINI, PAOLO)  
 22 MULTIGAMMA #22(COLLINS, GEORGE B.)  
 26 MUON #26(HAND, LOUIS N.)  
 28A 15-FOOT NEUTRINO/H2&NE #28A(FRY, WILLIAM F.)  
 34 DETECTOR DEVELOPMENT #34(HUGGETT, RICHARD W.)  
 37A 30-INCH P-P @ 300 #37A(MALAMUD, ERNEST I.)  
 48 MUON SEARCH #48(ADAIR, ROBERT K.)  
 53A 15-FOOT NEUTRINO/H2&NE #53A(BALTAY, CHARLES)  
 63A PHOTON SEARCH #63A(WALKER, JAMES K.)  
 69A ELASTIC SCATTERING #69A(LACH, JOSEPH)  
 72 QUARK #72(LEIPUNER, LAWRENCE B.)  
 76 MONOPOLE #76(CARRIGAN, RICHARD A.)  
 82 K ZERO REGENERATION #82(TELEGDI, VALENTINE L.)  
 87A PHOTOPRODUCTION #87A(OHALLORAN, THOMAS)  
 95A PHOTON SEARCH #95A(COX, BRADLEY B.)  
 98 MUON #98(ANDERSON, HERBERT L.)  
 100A PARTICLE SEARCH #100A(PIROU, PIERRE A.)  
 104 TOTAL CROSS SECTION #104(KYVIA, THADDEUS F.)  
 108 BEAM DUMP #108(AWSCHALOM, MIGUEL)  
 111 PION CHARGE EXCHANGE #111(TOLLESTRUP, ALVIN V.)  
 115 LONG-LIVED PARTICLES #115(STEVENSON, M. LYNN)  
 117A EMULSION/PROTONS @ 200 #117A(KUSUMOTO, OSAMU)  
 120 PHOTON SEARCH #120(CLINE, DAVID B.)  
 125 30-INCH P+ - P @ 100 #125(MORRISON, DOUGLAS R. O.)  
 138 30-INCH P-P @ 400 #138(VANDER VELDE, JACK C.)  
 142 SUPER-HEAVY ELEMENTS #142(STOUGHTON, RAYMOND W.)  
 147 SUPER-HEAVY ELEMENTS #147(DEBEAUVAIS, MONIQUE)  
 154 30-INCH HYBRID #154(PLESS, IRWIN A.)  
 156 EMULSION/PROTONS @ 200 #156(NIU, KIYOSHI)  
 163A 30-INCH P+ - P&NE @ 200 #163A(WALKER, WILLIAM D.)  
 172 15-FOOT ANTI-NEUTRINO/H2&NE#172(LUBATTI, HENRY J.)  
 178 MULTIPLICITIES #178(BUSZA, WIT)  
 181 EMULSION/PROTONS @ 300 #181(CARY, ARTHUR S.)  
 184 PARTICLE SEARCH #184(WANDERER, PETER J.)  
 187 PARTICLE SEARCH #187(LEDERMAN, LEON M.)  
 189 EMULSION/PROTONS @ 200 #189(RITSON, DAVID)  
 195 EMULSION/PROTONS @ 300 #195(LIM, YU K.)  
 198A PROTON-NUCLEON SCATTERING #198A(OLSEN, STEPHEN L.)  
 202 TACHYON MONOPOLE #202(BARTLETT, DAVID F.)  
 205A EMULSION/MUONS @ 150 #205A(KUSUMOTO, OSAMU)  
 211 BEAM DUMP #211(GOEBEL, KLAUS)  
 217 30-INCH P+ & P - P @ 200 #217(LANDER, RICHARD L.)  
 221 PROTON-PROTON INELASTIC #221(FRANZINI, PAOLO)  
 228 30-INCH P+ & P - P @ 60 #228(FERBEL, THOMAS)  
 230 MULTIGAMMA #230(LONGO, MICHAEL J.)  
 233 EMULSION/PROTONS @ 300 #233(HEBERT, JACQUES D.)  
 236A HADRON JETS #236A(MOCKETT, PAUL M.)  
 238 EMULSION/PROTONS @ 400 #238(LORD, JERE J.)  
 242 EMULSION/PROTONS @ 300 #242(NIU, KIYOSHI)  
 244 EMULSION/PROTONS @ 300 #244(JAIN, PIYARE L.)  
 247 PARTICLE SEARCH #247(BURHOP, ERIC H. S.)  
 249 EMULSION/PROTONS @ 400 #249(WOLTER, WLADYSLAW)  
 251 EMULSION/PROTONS @ 400 #251(KUSUMOTO, OSAMU)  
 253 NEUTRINO #253(MO, LUKE W.)  
 255 EMULSION/MUONS @ 150 #255(JAIN, PIYARE L.)  
 260 HADRON JETS #260(MCLEOD, DONALD W.)  
 262 NEUTRINO #262(BARISH, BARRY C.)  
 265 EMULSION/PROTONS @ 400 #265(YOUNG, POH SHIEN)  
 271 EMULSION/PROTONS @ 200 #271(GOTTFRIED, KURT)  
 275 PLASTIC DETECTORS #275(ENGE, WOLFGANG)  
 279 EMULSION/PROTONS @ 400 #279(KING, DAVID T.)  
 281 30-INCH HYBRID #281(SMITH, GERALD A.)  
 285 SUPER-HEAVY ELEMENTS #285(LEDERMAN, LEON M.)  
 289 PROTON-HELIUM SCATTERING #289(MALAMUD, ERNEST I.)  
 292 EMULSION/PROTONS @ 400 #292(GOTTFRIED, KURT)  
 297 QUARK #297(LEIPUNER, LAWRENCE B.)  
 300 PARTICLE SEARCH #300(PIROU, PIERRE A.)  
 310 NEUTRINO #310(CLINE, DAVID B.)  
 313 PROTON-PROTON POLARIZATION #313(NEAL, HOMER A.)  
 319 MUON #319(CHEN, K. WENDELL)  
 321 PROTON-PROTON INELASTIC #321(Lee-FRANZINI, JULIET)  
 325 PARTICLE SEARCH #325(PIROU, PIERRE A.)  
 327 DETECTOR DEVELOPMENT #327(ALLISON, MADE W. M.)

328 EMULSION/PI- @ 200 #328(TRETJAKOVA, M. I.)  
330 PARTICLE SEARCH #330(GUSTAFSON, RICHARD)  
335 MUON SEARCH #335(FACKLER, ORRIN D.)  
337 DI-MUON #337(EARTLY, DAVID P.)  
339 EMULSION/PI- @ 200 #339(WOLTER, WLADYSLAW)  
341 15-FOOT P - P @ 400 #341(KO, WINSTON)  
344 30-INCH PBAR - P @ 50 #344(GUTAY, LASZLO J.)  
346 EMULSION/PROTONS @ 400 #346(EKSPONG, GOSTA)  
356 NEUTRINO #356(SCIULLI, FRANK)  
358 DI-MUON #358(LEE, MONYONG)  
362 EMULSION/PI- @ 200 #362(JAIN, PIYARE L.)  
365 PARTICLE SEARCH #365(GARELICK, DAVID A.)  
369 PARTICLE SEARCH #369(KIRK, THOMAS B. W.)  
371 SUPER-HEAVY ELEMENTS #371(JURIC, MIRA)  
374 EMULSION/PROTONS @ 300 #374(DAVIS, D. H.)  
380 15-FOOT NEUTRINO/H28NE #380(BALTAY, CHARLES)  
382 PARTICLE SEARCH #382(HAND, LOUIS N.)  
385 EMULSION/PROTONS @ 400 #385(PRAKASH, YOG)  
387 EMULSION/PI- @ 200 #387(WILKES, RICHARD J.)  
390 15-FOOT ANTI-NEUTRINO/D2 #390(GARFINKEL, ARTHUR F.)  
395 HADRON JETS #395(SELOVE, WALTER)  
397 PARTICLE SEARCH #397(ROSEN, JEROME L.)  
399 EMULSION/ELECTRONS @ >100 #399(GOLDEN, ROBERT L.)  
401 PHOTOPRODUCTION #401(GORMLEY, MICHAEL F.)  
415 PARTICLE PRODUCTION #415(PONDROM, LEE G.)  
418 PARTICLE PRODUCTION #418(SANNES, FELIX)  
421 EMULSION/PROTONS @ 300 #421(DZHELEPOV, VENEDICT P.)  
424 EMULSION/MUONS @ 200 #424(WADA, TOMONORI)  
426 FRAGMENTATION PARTICLES #426(FUKUI, KATSURA)  
428 EMULSION/PROTONS @ 400 #428(HEBERT, JACQUES D.)  
435 MUON SEARCH #435(ADAIR, ROBERT K.)  
438 NEUTRON-NUCLEUS INELASTIC #438(JONES, LAWRENCE W.)  
440 LAMBDA MAGNETIC MOMENT #440(BUNCE, GERRY M.)  
442 NUCLEAR FRAGMENTS #442(TURKOT, FRANK)  
448 MUON #448(LOOMIS, WILLIAM A.)  
456 FORM FACTOR #456(STORK, DONALD H.)  
461 EMULSION/PROTONS @ 400 #461(LORD, JERE J.)  
463 EMULSION/PROTONS @ 400 #463(TRETJAKOVA, M. I.)  
467 TEST MUON IRRADIATION #467(FREEDMAN, MELVIN)  
469 PARTICLE SEARCH #469(CUTTS, DAVID)  
481 EMULSION/PI- @ 300 #481(TAKAHASHI, YOSHIYUKI)  
486 K ZERO CROSS SECTION #486(WINSTEIN, BRUCE D.)  
494 DI-HADRON #494(GOOD, MYRON L.)  
497 CHARGED HYPERON #497(LACH, JOSEPH)  
499 EMULSION/PROTONS @ 400 #499(IHAI, JUNSUKE)  
502 MONOPOLE #502(BARTLETT, DAVID F.)  
505 PROTON POLARIZATION #505(YAMIN, SAMUEL PETER)  
507 HIGH ENERGY CHANNELING #507(TSYGANOV, EDOUARD N.)  
509 EMULSION/MUONS @ 200 #509(SHIRAI, T.)  
515 PARTICLE SEARCH #515(ROSEN, JEROME L.)  
522 PROTON POLARIZATION #522(OGREN, HAROLD O.)  
525 EMULSION/PI- @ 300 #525(WILKES, RICHARD J.)  
533 PI-MU ATOMS #533(THOMSON, GORDON B.)  
537 DI-MUON #537(COX, BRADLEY B.)  
545 15-FOOT NEUTRINO/D28HIZ #545(SNOW, GEORGE A.)  
547 EMULSION/PROTONS @ 400 #547(JACQUOT, C. J.)  
552 P-N SCATTERING #552(SANNES, FELIX)  
555 NEUTRAL HYPERON #555(DEVLIN, THOMAS J.)  
564 15-FOOT & EMULSION/NEUTRINO#564(VOYVODIC, LOUIS)  
567 PARTICLE SEARCH #567(WITHERELL, MICHAEL S.)  
570 30-INCH HYBRID #570(PLESS, IRWIN A.)  
574 EMULSION/PI- @ 300 #574(WOLTER, WLADYSLAW)  
576 EMULSION/PROTONS @ 500 #576(HEBERT, JACQUES D.)  
580 PARTICLE SEARCH #580(GREEN, DANIEL R.)  
584 PARTICLE SEARCH #584(WINSTEIN, BRUCE D.)  
591 PARTICLE SEARCH #591(GUTAY, LASZLO J.)  
594 NEUTRINO #594(WALKER, JAMES K.)  
596 PARTICLE SEARCH #596(LEDERMAN, LEON M.)  
605 HIGH MASS PAIRS #605(RUTHERFOORD, JOHN P.)  
609 HADRON JETS #609(SELOVE, WALTER)  
612 PHOTON DISSOCIATION #612(GOULIANOS, KONSTANTIN)  
615 FORD SEARCH #615(MCDONALD, KIRK T.)  
617 CP VIOLATION #617(WINSTEIN, BRUCE D.)  
620 CHARGED HYPERON MAG MOMENT #620(PONDROM, LEE G.)  
622 QUARK #622(GUSTAFSON, RICHARD)  
629 DIRECT PHOTON PRODUCTION #629(NELSON, CHARLES A. JR.)  
631 NUC CALIBRATION CROSS SECT #631(BAKER, SAMUEL I.)  
635 NEUTRINO #635(MO, LUKE W.)  
636 BEAM DUMP #636(KITAGAKI, TOSHIO)  
650 PARTICLE SEARCH #650(WEBB, ROBERT C.)  
660 CHANNELING #660(GIBSON, WALTER M.)  
665 TEVATRON MUON #665(MONTGOMERY, HUGH ELLIOTT)  
329 EMULSION/PROTONS @ 300 #329(TRETJAKOVA, M. I.)  
331 DI-MUON #331(PILCHER, JAMES E.)  
336 EMULSION/PROTONS @ 400 #336(OGATA, TAKESHI)  
338 30-INCH PI- - D @ 360 #338(MORIYASU, KEIHACHIRO)  
340 EMULSION/ELECTRONS @ HI E #340(DAKE, SHOJI)  
343 15-FOOT P - P @ 300 #343(ENGLMANN, RODERICH J.)  
345 30-INCH PBAR - D @ 100 #345(EKSPONG, GOSTA)  
350 INCLUSIVE NEUTRAL MESON #350(KENNEY, ROBERT W.)  
357 PARTICLE SEARCH #357(MEYER, DONALD I.)  
361 LAMBDA BETA-DECAY #361(PONDROM, LEE G.)  
363 PARTICLE SEARCH #363(OLSEN, STEPHEN L.)  
366 PARTICLE SEARCH #366(ABOLINS, MARIS A.)  
370 NEUTRINO #370(CLINE, DAVID B.)  
373 EMULSION/MUONS @ 200 #373(JAIN, PIYARE L.)  
379 PARTICLE SEARCH #379(WOJCICKI, STANLEY G.)  
381 PROTON-NUCLEON SCATTERING #381(MALAMUD, ERNEST I.)  
383 INCLUSIVE K-SHORT #383(KOBRAK, HANS G. E.)  
386 EMULSION/NEW PARTICLES #386(LORD, JERE J.)  
388 15-FOOT ANTI-NEUTRINO/H28NE#388(PETERSON, VINCENT Z.)  
391 MUON #391(KERTH, LEROY T.)  
396 HADRON DISSOCIATION #396(GOULIANOS, KONSTANTIN)  
398 MUON #398(WILSON, RICHARD)  
400 PARTICLE SEARCH #400(WISS, JAMES E.)  
404 INCLUSIVE NEUTRON #404(GUSTAFSON, RICHARD)  
416 PARTICLE SEARCH #416(LUBATTI, HENRY J.)  
419 EMULSION/PROTONS @ 300 #419(GIACOMELLI, GIORGIO)  
423 EMULSION/PROTONS @ 400 #423(SUGIMOTO, HISAHIKO)  
425 K ZERO REGENERATION #425(TELEGDI, VALENTINE L.)  
427 DETECTOR DEVELOPMENT #427(YUAN, LUKE C. L.)  
434 EMULSION/PROTONS @ 400 #434(DAKE, SHOJI)  
436 DI-MUON #436(ADAIR, ROBERT K.)  
439 MULTI-MUON #439(GARELICK, DAVID A.)  
441 LAMBDA POLARIZATION #441(PONDROM, LEE G.)  
444 DI-MUON #444(SMITH, A. J. STEWART)  
451 INCLUSIVE SCATTERING #451(BARTON, DONALD S.)  
458 PHOTOPRODUCTION #458(LEE, MONYONG)  
462 EMULSION/PROTONS @ 400 #462(GIACOMELLI, GIORGIO)  
466 NUCLEAR FRAGMENTS #466(PORILE, NORBERT T.)  
468 PARTICLE SEARCH #468(STEINBERG, PHILLIP H.)  
472 PARTICLE SEARCH #472(STANFIELD, KENNETH C.)  
482 NEUTRINO #482(BARISH, BARRY C.)  
490 PARTICLE SEARCH #490(SANDWEISS, JACK)  
495 XI-ZERO PRODUCTION #495(HELLER, KENNETH J.)  
498 DETECTOR DEVELOPMENT #498(GRUHN, CHARLES R.)  
501 TEST MUON IRRADIATION #501(LANDE, KENNETH)  
503 EMULSION/PI- @ 300 #503(OGATA, TAKESHI)  
506 EMULSION/PI- @ 300 #506(DAKE, SHOJI)  
508 EMULSION/PROTONS @ 500 #508(WOLTER, WLADYSLAW)  
510 EMULSION/ELECTRONS @ HI E #510(NIU, KIYOSHI)  
516 PHOTOPRODUCTION #516(NASH, E. THOMAS)  
524 EMULSION/PROTONS > 500 GEV #524(WILKES, RICHARD J.)  
531 NEUTRINO #531(REAY, NEVILLE W.)  
536 EMULSION/NEUTRINO #536(NIU, KIYOSHI)  
540 PARTICLE SEARCH #540(LONGO, MICHAEL J.)  
546 15-FOOT NEUTRINO/H28NE #546(HUSON, FRED RUSS)  
549 QUARK #549(LONGO, MICHAEL J.)  
553 NEUTRINO #553(SHEPARD, PAUL F.)  
557 HADRON JETS #557(MALAMUD, ERNEST I.)  
565 30-INCH HYBRID #565(PLESS, IRWIN A.)  
568 EMULSION/PI- @ 300 #568(HEBERT, JACQUES D.)  
573 EMULSION/PI- @ 300 #573(USHIDA, NORIYUKI)  
575 EMULSION/PROTONS @ 400 #575(LORD, JERE J.)  
577 ELASTIC SCATTERING #577(RUBINSTEIN, ROY)  
581 POLARIZED SCATTERING #581(YOKOSAWA, AKIHIKO)  
585 KAON CHARGE EXCHANGE #585(FRANCIS, WILLIAM R.)  
592 NUCLEAR SCALING #592(FRANKEL, SHERMAN)  
595 PARTICLE SEARCH #595(BODEK, ARIE)  
597 30-INCH HYBRID #597(WHITMORE, J. JAMES)  
608 PARTICLE SEARCH #608(BROWN, CHARLES N.)  
610 PARTICLE SEARCH #610(KIRK, THOMAS B. W.)  
613 BEAM DUMP #613(ROE, BYRON P.)  
616 NEUTRINO #616(SCIULLI, FRANK)  
619 TRANSITION MAGNETIC MOMENT #619(DEVLIN, THOMAS J.)  
621 CP VIOLATION #621(THOMSON, GORDON B.)  
623 PARTICLE SEARCH #623(GREEN, DANIEL R.)  
630 CHARM PARTICLE #630(SANDWEISS, JACK)  
632 15-FT NEUTRINO/H2 & NE #632(MORRISON, DOUGLAS R. O.)  
(PETERS, MICHAEL W.)  
646 15-FT BEAM DUMP #646(PETERS, MICHAEL W.)  
653 PARTICLE SEARCH #653(REAY, NEVILLE W.)  
663 LAMBDA POLARIZATION #663(KOBRAK, HANS G. E.)  
666 EMULSION EXPOSURE #666(WILKES, RICHARD J.)

672A HADRON JETS #672(ZIEMINSKI, ANDRZEJ)  
683 PHOTOPRODUCTION OF JETS #683(CORCORAN, MARJORIE B.)  
690 PARTICLE SEARCH #690(KNAPP, BRUCE)  
701 NEUTRINO OSCILLATION #701(SHAEVITZ, MICHAEL H.)  
705 CHI MESON #705(COX, BRADLEY B.)  
710 TOTAL CROSS-SECTION #710(OREAR, JAY)  
713 HIGHLY IONIZING PARTICLES #713(PRICE, P. BUFORD)  
720 FREE QUARK SEARCH #720(SCHIFFER, JOHN P.)  
723 GRAVITATIONAL DETECTOR #723(MELISSINOS, ADRIAN)  
730 EMULSION/SIGMA-MINUS @ 250 #730(WILKES, RICHARD J.)  
733 NEUTRINO INTERACTIONS #733(BROCK, RAYMOND L.)  
740 D-0 DETECTOR #740(GRANNIS, PAUL D.)  
743 CHARM PRODUCTION #743(REUCROFT, STEPHEN)  
745 MUON NEUTRINO #745(KITAGAKI, TOSHIO)  
750 MULTIPARTICLE PRODUCTION #750(SHIVPURI, RAM K.)  
753 CHANNELING STUDIES #753(FORSTER, JAMES S.)  
755 BEAUTY & CHARM STUDY #755(MAJKA, RICHARD D.)  
758 EMULSION EXPOSURE #758(KAZUNO, MITSUKO)  
760 CHARMONIUM STATES #760(CESTER, ROSANNA)  
762 EMULSION/PROTONS @ 800 GEV #762(DAKE, SHOJI)  
764 EMULSION EXPOSURE #764(NANJO, HIROTADA)  
766T MR TUNNEL NEUTRONS #766(MCCASLIN, JOSEPH B.)  
770 QUAD TRIPLET NEUTRINO #770(SMITH, WESLEY H.)  
772 DIMUONS #772(MOSS, JOEL)  
774 ELECTRON BEAM DUMP #774(CRISLER, MICHAEL B.)  
776 NUCLEAR CAL. CROSS SECTIONS#776(BAKER, SAMUEL I.)  
778 MAGNET APERTURE STUDIES #778(EDWARDS, DONALD A.)

673 CHI MESON #673(COOPER, JOHN W.)  
687 PHOTOPRODUCTION #687(BUTLER, JOEL)  
691 TAGGED PHOTON #691(WITHERELL, MICHAEL S.)  
704 POLARIZED BEAM #704(YOKOSAWA, AKIHIKO)  
706 DIRECT PHOTON #706(SLATTERY, PAUL)  
711 CONSTITUENT SCATTERING #711(LEVINTHAL, DAVID A.)  
715 SIGMA BETA DECAY #715(COOPER, PETER S.)  
721 CP VIOLATION #721(ROSEN, JEROME L.)  
729 EMULSION/PROTONS @ 1 TEV #729(GURTU, ATUL)  
731 CP VIOLATION #731(WINSTEIN, BRUCE D.)  
735 PARTICLE SEARCH #735(GUTAY, LASZLO J.)  
741 COLLIDER DETECTOR #741(SCHWITTERS, ROY F.)  
744 CHARGED INTERACTIONS #744(MERRITT, FRANK S.)  
747 CHARGED PARTICLES #747(HAHN, ALAN A.)  
751 EMULSION EXPOSURE @ 1 TEV #751(JAIN, PIYARE L.)  
754 CHANNELING TESTS #754(SUN, CHIH-REE)  
756 MAGNETIC MOMENT #756(LUK, KAM-BIU)  
759 EMULSION EXPOSURE #759(TSUZUKI, YOSHIHIRO)  
761 HYPERON RADIATIVE DECAY #761(VOROBYOV, ALEXEI)  
763 EMULSION/PROTONS @ 800 GEV #763(OGATA, TAKESHI)  
765 EMULSION/PROTONS @ 800 GEV #765(IMAEDA, K.)  
769 PION & KAON CHARM PROD. #769(APPEL, JEFFREY A.)  
771 BEAUTY PRODUCTION #771(COX, BRADLEY B.)  
773 ETA00 & ETA+- PHASE DIFF. #773(GOLLIN, GEORGE D.)  
775 CDF UPGRADE #775(SCHWITTERS, ROY F.)  
777 MR TUNNEL NEUTRONS #777(MCCASLIN, JOSEPH B.)

03 JAN 1988

FERMI NATIONAL ACCELERATOR LABORATORY

LIST 25. APPROVED AND PENDING PROPOSALS LISTED BY BEAM LINE

NOTE: THE EXTENT OF RUNNING FOR EXPERIMENTS UNDERWAY IS SHOWN IN PARENTHESES.

EXPERIMENTAL AREA AND BEAM LINE SHORT TITLE OF PROPOSAL	SPOKESPERSON	PROPOSAL STATUS	EXPERIMENT SITUATION	EXTENT
<b>MESON AREA-M1 BEAM</b>				
ELASTIC SCATTERING #7	MEYER, DONALD I.	APPROVED	COMPLETED	2,350 HOURS
POLARIZED SCATTERING #61	CHAMBERLAIN, OMEN	APPROVED	COMPLETED	1,900 HOURS
PION DISSOCIATION #86A	LUBATTI, HENRY J.	APPROVED	COMPLETED	800 HOURS
TOTAL CROSS SECTION #104	KYCIA, THADDEUS F.	APPROVED	COMPLETED	2,650 HOURS
FORM FACTOR #216	STORK, DONALD H.	APPROVED	COMPLETED	900 HOURS
DETECTOR DEVELOPMENT #229	YUAN, LUKE C. L.	APPROVED	COMPLETED	300 HOURS
HADRON JETS #236A	MOCKETT, PAUL M.	APPROVED	COMPLETED	1,700 HOURS
DETECTOR DEVELOPMENT #261	MANG, CHING LIN	APPROVED	COMPLETED	600 HOURS
HADRON DISSOCIATION #272	FERBEL, THOMAS	APPROVED	COMPLETED	1,950 HOURS
INCLUSIVE SCATTERING #324	WEISBERG, HOWARD L.	APPROVED	COMPLETED	1,200 HOURS
MUON SEARCH #335	FACKLER, ORRIN D.	APPROVED	COMPLETED	300 HOURS
PARTICLE SEARCH #416	LUBATTI, HENRY J.	APPROVED	COMPLETED	400 HOURS
DETECTOR DEVELOPMENT #427	YUAN, LUKE C. L.	APPROVED	COMPLETED	40 HOURS
FORM FACTOR #456	STORK, DONALD H.	APPROVED	COMPLETED	1,450 HOURS
PARTICLE SEARCH #490	SANDWEISS, JACK	APPROVED	COMPLETED	850 HOURS
HIGH ENERGY CHANNELING #507	TSYGANOV, EDOUARD N.	APPROVED	COMPLETED	350 HOURS
PARTICLE SEARCH #515	ROSEN, JEROME L.	APPROVED	COMPLETED	2,650 HOURS
DIRECT PHOTON PRODUCTION #629	NELSON, CHARLES A. JR.	APPROVED	COMPLETED	600 HOURS
*****				
<b>MESON AREA-EAST</b>				
HIGH MASS PAIRS #605	RUTHERFOORD, JOHN P.	APPROVED	COMPLETED	3,970 HOURS
DIMUONS #772	MOSS, JOEL	APPROVED	IN PROGRESS	(UNSPECIFIED)
PARTICLE SEARCH #690	KNAPP, BRUCE	APPROVED	SET UP IN A YEAR	UNSPECIFIED
B-QUARK MESONS & BARYONS #789	KAPLAN, DANIEL M.	UNCONSIDERED		UNSPECIFIED
*****				
<b>MESON AREA-M2 BEAM</b>				
NEUTRAL HYPERON #8	PONDROM, LEE G.	APPROVED	COMPLETED	2,450 HOURS
MULTIGAMMA #22	COLLINS, GEORGE B.	APPROVED	COMPLETED	350 HOURS
MISSING MASS #51A	VON GOELER, EBERHARD	APPROVED	COMPLETED	800 HOURS
QUARK #75	YAMANOUCHI, TAJI	APPROVED	COMPLETED	1,050 HOURS
BEAM DUMP #108	ANSCHALOM, MIGUEL	APPROVED	COMPLETED	350 HOURS
PION CHARGE EXCHANGE #111	TOLLESTRUP, ALVIN V.	APPROVED	COMPLETED	1,800 HOURS
INCLUSIVE PHOTON #268	MELLEMA, JOEL	APPROVED	COMPLETED	1,850 HOURS
INCLUSIVE NEUTRAL MESON #350	KENNEY, ROBERT W.	APPROVED	COMPLETED	900 HOURS
PARTICLE SEARCH #357	MEYER, DONALD I.	APPROVED	COMPLETED	1,700 HOURS
LAMBDA BETA-DECAY #361	PONDROM, LEE G.	APPROVED	COMPLETED	1,250 HOURS
PARTICLE SEARCH #365	GARELICK, DAVID A.	APPROVED	COMPLETED	200 HOURS
HADRON JETS #395	SELOVE, WALTER	APPROVED	COMPLETED	1,150 HOURS
INCLUSIVE NEUTRON #404	GUSTAFSON, RICHARD	APPROVED	COMPLETED	350 HOURS
PARTICLE PRODUCTION #415	PONDROM, LEE G.	APPROVED	COMPLETED	100 HOURS
MULTI-MUON #439	GARELICK, DAVID A.	APPROVED	COMPLETED	1,700 HOURS
LAMBDA MAGNETIC MOMENT #440	BUNCE, GERRY M.	APPROVED	COMPLETED	250 HOURS
LAMBDA POLARIZATION #441	PONDROM, LEE G.	APPROVED	COMPLETED	400 HOURS
PARTICLE SEARCH #468	STEINBERG, PHILLIP H.	APPROVED	COMPLETED	300 HOURS
PARTICLE SEARCH #472	STANFIELD, KENNETH C.	APPROVED	COMPLETED	1,100 HOURS
XI-ZERO PRODUCTION #495	HELLER, KENNETH J.	APPROVED	COMPLETED	700 HOURS
PROTON POLARIZATION #505	YAMIN, SAMUEL PETER	APPROVED	COMPLETED	50 HOURS
NEUTRAL HYPERON #555	DEVLIN, THOMAS J.	APPROVED	COMPLETED	650 HOURS
BEAM DUMP #613	ROE, BYRON P.	APPROVED	COMPLETED	1,800 HOURS
CHARGED HYPERON MAG MOMENT #620	PONDROM, LEE G.	APPROVED	COMPLETED	900 HOURS
QUARK #622	GUSTAFSON, RICHARD	APPROVED	COMPLETED	UNSPECIFIED
*****				
<b>MESON AREA-POLARIZED PROTON BEAM</b>				
POLARIZED BEAM #704	YOKOSAWA, AKIHIKO	APPROVED	BEING INSTALLED	1,200 HOURS
POLARIZED SCATTERING #581	YOKOSAWA, AKIHIKO	APPROVED	APPROVED/INACTIVE	UNSPECIFIED
POLARIZED BEAM #682	UNDERWOOD, DAVID G.	UNCONSIDERED		1,700 HOURS
POLARIZED BEAM #688	DITZLER, W. RODNEY	UNCONSIDERED		400 HOURS
POLARIZED BEAM #699	STANEK, ROBERT W.	UNCONSIDERED		1,000 HOURS
*****				



EXPERIMENTAL AREA AND BEAM LINE SHORT TITLE OF PROPOSAL	SPOKESPERSON	PROPOSAL STATUS	EXPERIMENT SITUATION	EXTENT
<b>MESON AREA-M3 BEAM</b>				
NEUTRON CROSS SECTION #4	LONGO, MICHAEL J.	APPROVED	COMPLETED	1,450 HOURS
NEUTRON BACKWARD SCATTERING #12	REAY, NEVILLE W.	APPROVED	COMPLETED	1,300 HOURS
NEUTRON DISSOCIATION #27A	ROSEN, JEROME L.	APPROVED	COMPLETED	850 HOURS
MULTIGAMMA #230	LONGO, MICHAEL J.	APPROVED	COMPLETED	50 HOURS
NEUTRON ELASTIC SCATTERING #248	LONGO, MICHAEL J.	APPROVED	COMPLETED	2,400 HOURS
NEUTRON DISSOCIATION #305	GOBBI, BRUNO	APPROVED	COMPLETED	1,400 HOURS
PARTICLE SEARCH #366	ABOLINS, MARIS A.	APPROVED	COMPLETED	2,500 HOURS
PARTICLE SEARCH #397	ROSEN, JEROME L.	APPROVED	COMPLETED	1,150 HOURS
NEUTRON-NUCLEUS INELASTIC #438	JONES, LAWRENCE W.	APPROVED	COMPLETED	350 HOURS
PI-MU ATOMS #533	THOMSON, GORDON B.	APPROVED	COMPLETED	2,050 HOURS
PARTICLE SEARCH #540	LONGO, MICHAEL J.	APPROVED	COMPLETED	600 HOURS
PARTICLE SEARCH #584	WINSTEIN, BRUCE D.	APPROVED	COMPLETED	400 HOURS
CP VIOLATION #617	WINSTEIN, BRUCE D.	APPROVED	COMPLETED	2,300 HOURS
*****				
<b>MESON AREA-CENTER</b>				
CP VIOLATION #731	WINSTEIN, BRUCE D.	APPROVED	IN PROGRESS	(1,400 HOURS)
ETA00 & ETA+- PHASE DIFF. #773	GOLLIN, GEORGE D.	APPROVED	UNSCHEDULED	UNSPECIFIED
*****				
<b>MESON AREA-M4 BEAM</b>				
QUARK #72	LEIPUNER, LAWRENCE B.	APPROVED	COMPLETED	500 HOURS
K ZERO REGENERATION #82	TELEGDI, VALENTINE L.	APPROVED	COMPLETED	3,500 HOURS
K ZERO CHARGE RADIUS #226	TELEGDI, VALENTINE L.	APPROVED	COMPLETED	1,200 HOURS
PARTICLE SEARCH #330	GUSTAFSON, RICHARD	APPROVED	COMPLETED	150 HOURS
INCLUSIVE K-SHORT #383	KOBRAK, HANS G. E.	APPROVED	COMPLETED	2,200 HOURS
K ZERO REGENERATION #425	TELEGDI, VALENTINE L.	APPROVED	COMPLETED	1,400 HOURS
K ZERO CROSS SECTION #486	WINSTEIN, BRUCE D.	APPROVED	COMPLETED	950 HOURS
KAON CHARGE EXCHANGE #585	FRANCIS, WILLIAM R.	APPROVED	COMPLETED	3,150 HOURS
CHANNELING #660	GIBSON, WALTER M.	APPROVED	COMPLETED	425 HOURS
LAMBDA POLARIZATION #663	KOBRAK, HANS G. E.	APPROVED	COMPLETED	500 HOURS
*****				
<b>MESON AREA-BOTTOM</b>				
CHANNELING STUDIES #753	FORSTER, JAMES S.	APPROVED	COMPLETED	150 HOURS
CHANNELING TESTS #754	SUN, CHIH-REE	APPROVED	UNSCHEDULED	UNSPECIFIED
*****				
<b>MESON AREA-M6 BEAM</b>				
ELASTIC SCATTERING #69A	LACH, JOSEPH	APPROVED	COMPLETED	2,800 HOURS
ELASTIC SCATTERING #96	RITSON, DAVID	APPROVED	COMPLETED	2,550 HOURS
ASSOCIATED PRODUCTION #99	DIEBOLD, ROBERT E.	APPROVED	COMPLETED	750 HOURS
MULTIPARTICLE #110A	DZIERBA, ALEXANDER R.	APPROVED	COMPLETED	1,600 HOURS
INCLUSIVE SCATTERING #118A	BRANDENBURG, GEORGE W.	APPROVED	COMPLETED	2,550 HOURS
MULTIPLICITIES #178	BUSZA, MIT	APPROVED	COMPLETED	800 HOURS
HADRON JETS #260	MCLEOD, DONALD W.	APPROVED	COMPLETED	2,300 HOURS
BACKWARD SCATTERING #290	BAKER, WINSLOW F.	APPROVED	COMPLETED	1,500 HOURS
HADRON DISSOCIATION #396	GOULIANOS, KONSTANTIN	APPROVED	COMPLETED	1,200 HOURS
INCLUSIVE SCATTERING #451	BARTON, DONALD S.	APPROVED	COMPLETED	500 HOURS
PARTICLE SEARCH #469	CUTTS, DAVID	APPROVED	COMPLETED	400 HOURS
ELASTIC SCATTERING #577	RUBINSTEIN, ROY	APPROVED	COMPLETED	1,550 HOURS
PARTICLE SEARCH #580	GREEN, DANIEL R.	APPROVED	COMPLETED	800 HOURS
HADRON JETS #609	SELOVE, WALTER	APPROVED	COMPLETED	620 HOURS
PARTICLE SEARCH #623	GREEN, DANIEL R.	APPROVED	COMPLETED	425 HOURS
*****				
<b>MESON AREA-MT BEAM</b>				
EMULSION/PROTONS @ 500 #508	WOLTER, WLADYSLAW	APPROVED	COMPLETED	7 EMULSION STACKS
EMULSION/PROTONS > 500 GEV #524	WILKES, RICHARD J.	APPROVED	COMPLETED	6 EMULSION STACKS
HADRON JETS #557	MALAMUD, ERNEST I.	APPROVED	COMPLETED	1,470 HOURS
EMULSION/PROTONS @ 1 TEV #729	GURU, ATUL	APPROVED	COMPLETED	2 EMULSION STACKS
CHARM PRODUCTION #743	REUCROFT, STEPHEN	APPROVED	COMPLETED	1.256K PIX
EMULSION EXPOSURE @ 1 TEV #751	JAIN, PIYARE L.	APPROVED	COMPLETED	1 EMULSION STACKS
EMULSION EXPOSURE #758	KAZUNO, MITSUKO	APPROVED	COMPLETED	2 EMULSION STACKS
EMULSION EXPOSURE #759	SHIBUYA, HIROSHI	APPROVED	COMPLETED	2 EMULSION STACKS
EMULSION/PROTONS @ 800 GEV #762	TSUZUKI, YOSHIHIRO	APPROVED	COMPLETED	18 EMULSION STACKS
EMULSION/PROTONS @ 800 GEV #763	DAKE, SHOJI	APPROVED	COMPLETED	2 EMULSION STACKS
EMULSION EXPOSURE #764	OGATA, TAKESHI	APPROVED	COMPLETED	1 EMULSION STACKS
EMULSION/PROTONS @ 800 GEV #765	NANJO, HIROTADA	APPROVED	COMPLETED	7 EMULSION STACKS
BEAUTY & CHARM STUDY #T755	IMADA, K.	APPROVED	COMPLETED	UNSPECIFIED
	MAJKA, RICHARD D.	APPROVED	BEING INSTALLED	UNSPECIFIED
	SLAUGHTER, ANNA JEAN			
*****				
<b>MESON AREA-WEST</b>				
HADRON JETS #672	ZIEMINSKI, ANDRZEJ	APPROVED	IN PROGRESS	(UNSPECIFIED)
DIRECT PHOTON #706	SLATTERY, PAUL	APPROVED	IN PROGRESS	(UNSPECIFIED)
*****				

EXPERIMENTAL AREA AND BEAM LINE SHORT TITLE OF PROPOSAL	SPOKESPERSON	PROPOSAL STATUS	EXPERIMENT SITUATION	EXTENT
<b>MESON AREA (MISCELLANEOUS)</b>				
NUCLEAR CHEMISTRY #81A	KAUFMAN, SHELDON	APPROVED	COMPLETED	197 BOMBARDMENTS
EMULSION/PROTONS @ 200 #90	WOLTER, HLADYSLAW	APPROVED	COMPLETED	4 STACKS
EMULSION/PROTONS @ 200 #103	KING, DAVID T.	APPROVED	COMPLETED	1 STACK
EMULSION/PROTONS @ 200 #105	MALHOTRA, PRINCE K.	APPROVED	COMPLETED	1 STACK
EMULSION/PROTONS @ 200 #114	JAIN, PIYARE L.	APPROVED	COMPLETED	1 STACK
EMULSION/PROTONS @ 200 #116	HEBERT, JACQUES D.	APPROVED	COMPLETED	5 STACKS
EMULSION/PROTONS @ 200 #117A	KUSUMOTO, OSAMU	APPROVED	COMPLETED	11 STACKS
SUPER-HEAVY ELEMENTS #147	DEBEAUVAIS, MONIQUE	APPROVED	COMPLETED	4 EXPOSURES
EMULSION/PROTONS @ 200 #156	NIU, KIYOSHI	APPROVED	COMPLETED	13 STACKS
EMULSION/PROTONS @ 200 #171	LORD, JERE J.	APPROVED	COMPLETED	6 STACKS
EMULSION/PROTONS @ 200 #183	TRETJAKOVA, M. I.	APPROVED	COMPLETED	3 STACKS
EMULSION/PROTONS @ 200 #189	RITSON, DAVID	APPROVED	COMPLETED	2 PLATES
DI-MUON #337	EARTLY, DAVID P.	APPROVED	COMPLETED	5 HOURS
SUPER-HEAVY ELEMENTS #371	JURIC, MIRA	APPROVED	COMPLETED	2 STACKS
FRAGMENTATION PARTICLES #426	FUKUI, KATSURA	APPROVED	COMPLETED	16 STACKS
*****				
<b>NEUTRINO AREA-DICHROMATIC NEUTRINO BEAM</b>				
NEUTRINO #21A	BARISH, BARRY C.	APPROVED	COMPLETED	2,450 HOURS
NEUTRINO #254	KALBFLEISCH, GEORGE R.	APPROVED	COMPLETED	550 HOURS
NEUTRINO #262	BARISH, BARRY C.	APPROVED	COMPLETED	400 HOURS
NEUTRINO #320	SCIULLI, FRANK	APPROVED	COMPLETED	500 HOURS
NEUTRINO #356	SCIULLI, FRANK	APPROVED	COMPLETED	1,350 HOURS
15-FOOT NEUTRINO/H2&NE #380	BALTAY, CHARLES	APPROVED	COMPLETED	196K PIX
15-FOOT ANTI-NEUTRINO/H2&NE#388	PETERSON, VINCENT Z.	APPROVED	COMPLETED	181K PIX
NEUTRINO #594	WALKER, JAMES K.	APPROVED	COMPLETED	4,400 HOURS
NEUTRINO #616	SCIULLI, FRANK	APPROVED	COMPLETED	2,900 HOURS
NEUTRINO OSCILLATION #701	SHAEVITZ, MICHAEL H.	APPROVED	COMPLETED	2,250 HOURS
*****				
<b>NEUTRINO AREA-WIDE BAND HORN NEUTRINO BEAM</b>				
NEUTRINO #1A	CLINE, DAVID B.	APPROVED	COMPLETED	2,850 HOURS
15-FOOT NEUTRINO/H2&NE #28A	FRY, WILLIAM B.	APPROVED	COMPLETED	97K PIX
15-FOOT ANTI-NEUTRINO/H2 #31A	DERRICK, MALCOLM	APPROVED	COMPLETED	211K PIX
15-FOOT NEUTRINO/H2 #45A	NEZRICK, FRANK A.	APPROVED	COMPLETED	162K PIX
15-FOOT NEUTRINO/H2&NE #53A	BALTAY, CHARLES	APPROVED	COMPLETED	440K PIX
15-FOOT EMI TEST #155	PETERSON, VINCENT Z.	APPROVED	COMPLETED	14K PIX
15-FOOT ANTI-NEUTRINO/H2&NE#172	LUBATTI, HENRY J.	APPROVED	COMPLETED	49K PIX
PARTICLE SEARCH #247	BURHOP, ERIC H. S.	APPROVED	COMPLETED	350 HOURS
NEUTRINO #253	MO, LUKE W.	APPROVED	COMPLETED	2,050 HOURS
NEUTRINO #310	CLINE, DAVID B.	APPROVED	COMPLETED	3,800 HOURS
NEUTRINO #531	REAY, NEVILLE W.	APPROVED	COMPLETED	3,800 HOURS
EMULSION/NEUTRINO #536	NIU, KIYOSHI	APPROVED	COMPLETED	2 STACKS
15-FOOT NEUTRINO/D2&HIZ #545	SNOW, GEORGE A.	APPROVED	COMPLETED	317K PIX
NEUTRINO #553	SHEPARD, PAUL F.	APPROVED	COMPLETED	1,500 HOURS
15-FOOT & EMULSION/NEUTRINO#564	VOYVODIC, LOUIS	APPROVED	COMPLETED	277K PIX
15-FOOT ANTI-NEUTRINO/H2&NE#180	ERMOLOV, PAVEL F.	APPROVED	APPROVED/INACTIVE	273K PIX
15-FOOT ANTI-NEUTRINO/D2 #390	GARFINKEL, ARTHUR F.	APPROVED	APPROVED/INACTIVE	10K PIX
*****				
<b>NEUTRINO AREA-QUADRUPOLE TRIPLET NEUTRINO BEAM</b>				
NEUTRINO #370	CLINE, DAVID B.	APPROVED	COMPLETED	400 HOURS
NEUTRINO #482	BARISH, BARRY C.	APPROVED	COMPLETED	1,600 HOURS
15-FOOT NEUTRINO/H2&NE #546	HUSON, FRED RUSS	APPROVED	COMPLETED	375K PIX
*****				
<b>NEUTRINO AREA-CENTER</b>				
CHARGED INTERACTIONS #744	MERRITT, FRANK S.	APPROVED	COMPLETED	1,900 HOURS
15-FT NEUTRINO/H2 & NE #632	PETERS, MICHAEL W. MORRISON, DOUGLAS R. O.	APPROVED	IN PROGRESS	(154K PIX)
NEUTRINO INTERACTIONS #733	BROCK, RAYMOND L.	APPROVED	IN PROGRESS	(1,900 HOURS)
MUON NEUTRINO #745	KITAGAKI, TOSHIO	APPROVED	IN PROGRESS	(193K PIX)
QUAD TRIPLET NEUTRINO #770	SMITH, WESLEY H.	APPROVED	IN PROGRESS	(UNSPECIFIED)
NEUTRINO OSCILLATIONS #788	BERNSTEIN, ROBERT H.	UNCONSIDERED		UNSPECIFIED
*****				
<b>NEUTRINO AREA-PROMPT BEAM</b>				
NEUTRINO #635	MO, LUKE W.	APPROVED	UNSCHEDULED	UNSPECIFIED
BEAM DUMP #636	PLESS, IRWIN A. KITAGAKI, TOSHIO	APPROVED	UNSCHEDULED	UNSPECIFIED
15-FT BEAM DUMP #646	PETERS, MICHAEL W.	APPROVED	UNSCHEDULED	UNSPECIFIED
*****				

EXPERIMENTAL AREA AND BEAM LINE SHORT TITLE OF PROPOSAL	SPOKESPERSON	PROPOSAL STATUS	EXPERIMENT SITUATION	EXTENT
<b>NEUTRINO AREA-MUON/HADRON BEAM</b>				
MUON #26	HAND, LOUIS N.	APPROVED	COMPLETED	900 HOURS
MUON #98	ANDERSON, HERBERT L.	APPROVED	COMPLETED	1,800 HOURS
MUON #203A	KERTH, LEROY T.	APPROVED	COMPLETED	1,200 HOURS
MUON #319	CHEN, K. WENDELL	APPROVED	COMPLETED	900 HOURS
DI-MUON #331	PILCHER, JAMES E.	APPROVED	COMPLETED	1,400 HOURS
PARTICLE SEARCH #369	KIRK, THOMAS B. W.	APPROVED	COMPLETED	1,000 HOURS
PARTICLE SEARCH #382	HAND, LOUIS N.	APPROVED	COMPLETED	200 HOURS
MUON #391	KERTH, LEROY T.	APPROVED	COMPLETED	UNSPECIFIED
MUON #398	WILSON, RICHARD	APPROVED	COMPLETED	1,100 HOURS
DI-MUON #444	SMITH, A. J. STEWART	APPROVED	COMPLETED	1,100 HOURS
MUON #448	LOOMIS, WILLIAM A.	APPROVED	COMPLETED	900 HOURS
TEST MUON IRRADIATION #501	LANDE, KENNETH	APPROVED	COMPLETED	2 TARGETS EXPOSED
PARTICLE SEARCH #596	LEDERMAN, LEON M.	APPROVED	COMPLETED	200 HOURS
PARTICLE SEARCH #610	KIRK, THOMAS B. W.	APPROVED	COMPLETED	1,250 HOURS
CHI MESON #673	COOPER, JOHN W.	APPROVED	COMPLETED	1,100 HOURS
MUONS IN IM B.C. #782	KITAGAKI, TOSHIO	UNCONSIDERED		UNSPECIFIED
*****				
<b>NEUTRINO AREA-MUON BEAM</b>				
TEVATRON MUON #665	MONTGOMERY, HUGH ELLIOTT	APPROVED	IN PROGRESS	(UNSPECIFIED)
TEVATRON MUON #786	WILSON, RICHARD	UNCONSIDERED		UNSPECIFIED
*****				
<b>NEUTRINO AREA-15-FT HADRON BEAM</b>				
15-FOOT ENGINEERING RUN #234	HUSON, FRED RUSS	APPROVED	COMPLETED	57K PIX
15-FOOT P - P @ 400 #341	KO, WINSTON	APPROVED	COMPLETED	34K PIX
15-FOOT P - P @ 300 #343	ENGELMANN, RODERICH J.	APPROVED	COMPLETED	27K PIX
PARTICLE SEARCH #379	WOJCICKI, STANLEY G.	APPROVED	COMPLETED	1,250 HOURS
PARTICLE SEARCH #595	BODEK, ARIE	APPROVED	COMPLETED	1,450 HOURS
*****				
<b>NEUTRINO AREA-30-IN HADRON BEAM</b>				
30-INCH HYBRID #2B	SMITH, GERALD A.	APPROVED	COMPLETED	479K PIX
30-INCH P-P @ 300 #37A	MALAMUD, ERNEST I.	APPROVED	COMPLETED	51K PIX
30-INCH PI+ & P - P @ 100 #121A	LANDER, RICHARD L.	APPROVED	COMPLETED	104K PIX
30-INCH PI- - P @ 100 #125	MORRISON, DOUGLAS R. O.	APPROVED	COMPLETED	53K PIX
30-INCH PI- - P @ 200 #137	HUSON, FRED RUSS	APPROVED	COMPLETED	48K PIX
30-INCH P-P @ 400 #138	VANDER VELDE, JACK C.	APPROVED	COMPLETED	52K PIX
30-INCH P-P @ 200 #141A	FIELDS, THOMAS H.	APPROVED	COMPLETED	67K PIX
30-INCH PI- - P @ 300 #143A	KALBFLEISCH, GEORGE R.	APPROVED	COMPLETED	51K PIX
30-INCH HYBRID #154	PLESS, IRWIN A.	APPROVED	COMPLETED	105K PIX
30-INCH P - P&NE @ 300 #161	MAPP, JAMES	APPROVED	COMPLETED	51K PIX
30-INCH PI- - P&NE @ 200 #163A	WALKER, WILLIAM D.	APPROVED	COMPLETED	52K PIX
30-INCH P - D @ 100 #194	MURPHY, C. THORNTON	APPROVED	COMPLETED	92K PIX
30-INCH P - D @ 400 #196	ENGELMANN, RODERICH J.	APPROVED	COMPLETED	109K PIX
30-INCH P - D @ 300 #209	DAO, FU TAK	APPROVED	COMPLETED	106K PIX
30-INCH PI+ & P - P @ 200 #217	LANDER, RICHARD L.	APPROVED	COMPLETED	85K PIX
30-INCH PI- - D @ 200 #218	YAGER, PHILIP M.	APPROVED	COMPLETED	72K PIX
30-INCH PI+ & P - P @ 60 #228	FERBEL, THOMAS	APPROVED	COMPLETED	37K PIX
30-INCH P-P @ 100 #252	FERBEL, THOMAS	APPROVED	COMPLETED	33K PIX
30-INCH P - D @ 200 #280	FIELDS, THOMAS H.	APPROVED	COMPLETED	103K PIX
30-INCH HYBRID #281	SMITH, GERALD A.	APPROVED	COMPLETED	301K PIX
30-INCH PI+ & P - D @ 200 #295	YEKUTIELI, GIDEON	APPROVED	COMPLETED	156K PIX
QUARK #297	LEIPUNER, LAWRENCE B.	APPROVED	COMPLETED	50 HOURS
30-INCH HYBRID #299	PLESS, IRWIN A.	APPROVED	COMPLETED	431K PIX
30-INCH PBAR - P @ 100 #311	NEALE, WILLIAM W.	APPROVED	COMPLETED	98K PIX
30-INCH PI- - D @ 360 #338	MORIYASU, KEIHACHIRO	APPROVED	COMPLETED	53K PIX
30-INCH PBAR - P @ 50 #344	GUTAY, LASZLO J.	APPROVED	COMPLETED	145K PIX
30-INCH PBAR - D @ 100 #345	EKSPONG, GOSTA	APPROVED	COMPLETED	61K PIX
30-INCH HYBRID #565	PLESS, IRWIN A.	APPROVED	COMPLETED	1,068K PIX
30-INCH HYBRID #570	PLESS, IRWIN A.	APPROVED	COMPLETED	1,068K PIX
30-INCH HYBRID #597	WHITMORE, J. JAMES	APPROVED	COMPLETED	658K PIX
*****				
<b>NEUTRINO AREA-EAST</b>				
PARTICLE SEARCH #653	REAY, NEVILLE W.	APPROVED	IN PROGRESS	(1,100 HOURS)
CONSTITUENT SCATTERING #711	LEVINTHAL, DAVID A.	APPROVED	IN PROGRESS	(400 HOURS)
CHARM PRODUCTION BY PROTONS#780	POTTER, DOUGLAS	UNCONSIDERED		UNSPECIFIED
	LIPTON, RONALD J.			
*****				

EXPERIMENTAL AREA AND BEAM LINE SHORT TITLE OF PROPOSAL	SPOKESPERSON	PROPOSAL STATUS	EXPERIMENT SITUATION	EXTENT
NEUTRINO AREA (MISCELLANEOUS)				
MONOPOLE #3	EBERHARD, PHILIPPE	APPROVED	COMPLETED	4 TARGETS EXPOSED
PROTON-PROTON INELASTIC #14A	FRANZINI, PAOLO	APPROVED	COMPLETED	140 HOURS
DETECTOR DEVELOPMENT #34	HUGGETT, RICHARD W.	APPROVED	COMPLETED	50 HOURS
MONOPOLE #76	CARRIGAN, RICHARD A.	APPROVED	COMPLETED	5 TARGETS EXPOSED
LONG-LIVED PARTICLES #115	STEVENSON, M. LYNN	APPROVED	COMPLETED	6 HOURS
SUPER-HEAVY ELEMENTS #142	STOUGHTON, RAYMOND W.	APPROVED	COMPLETED	1 TARGET
EMULSION/PROTONS @ 300 #181	CARY, ARTHUR S.	APPROVED	COMPLETED	3 STACKS
EMULSION/PROTONS @ 300 #195	LIM, YU K.	APPROVED	COMPLETED	3 STACKS
MASSIVE PARTICLE SEARCH #199	FRANKEL, SHERMAN	APPROVED	COMPLETED	2 TARGETS EXPOSED
TACHYON MONOPOLE #202	BARTLETT, DAVID F.	APPROVED	COMPLETED	COSMIC RAY RUNNING
EMULSION/MUONS @ 150 #205A	KUSUMOTO, OSAMU	APPROVED	COMPLETED	2 STACKS
BEAM DUMP #211	GOEBEL, KLAUS	APPROVED	COMPLETED	2 HOURS
EMULSION/PROTONS @ 300 #232	KING, DAVID T.	APPROVED	COMPLETED	2 STACKS
EMULSION/PROTONS @ 300 #233	HEBERT, JACQUES D.	APPROVED	COMPLETED	8 STACKS
EMULSION/PROTONS @ 300 #237	LORD, JERE J.	APPROVED	COMPLETED	5 STACKS
EMULSION/PROTONS @ 400 #238	LORD, JERE J.	APPROVED	COMPLETED	9 STACKS
LONG-LIVED PARTICLES #239	FRATI, WILLIAM	APPROVED	COMPLETED	350 HOURS
EMULSION/PROTONS @ 300 #242	NIU, KIYOSHI	APPROVED	COMPLETED	2 STACKS
EMULSION/PROTONS @ 400 #243	NIU, KIYOSHI	APPROVED	COMPLETED	7 STACKS
EMULSION/PROTONS @ 300 #244	JAIN, PIYARE L.	APPROVED	COMPLETED	1 STACK
EMULSION/PROTONS @ 400 #245	JAIN, PIYARE L.	APPROVED	COMPLETED	1 STACK
EMULSION/PROTONS @ 400 #249	WOLTER, WLADYSLAW	APPROVED	COMPLETED	3 STACKS
EMULSION/PROTONS @ 300 #250	KUSUMOTO, OSAMU	APPROVED	COMPLETED	1 STACK
EMULSION/PROTONS @ 400 #251	KUSUMOTO, OSAMU	APPROVED	COMPLETED	3 STACKS
EMULSION/MUONS @ 150 #255	JAIN, PIYARE L.	APPROVED	COMPLETED	1 STACK
EMULSION/PI- @ 200 #264	YOUNG, POH SHIEN	APPROVED	COMPLETED	2 STACKS
EMULSION/PROTONS @ 400 #265	YOUNG, POH SHIEN	APPROVED	COMPLETED	3 STACKS
EMULSION/PROTONS @ 200 #271	GOTTFRIED, KURT	APPROVED	COMPLETED	10 STACKS
PLASTIC DETECTORS #275	ENGE, WOLFGANG	APPROVED	COMPLETED	4 STACKS
QUARK #276	VAN GINNEKEN, ANDREAS	APPROVED	COMPLETED	3 TARGETS EXPOSED
EMULSION/PROTONS @ 400 #279	KING, DAVID T.	APPROVED	COMPLETED	3 STACKS
SUPER-HEAVY ELEMENTS #285	LEDERMAN, LEON M.	APPROVED	COMPLETED	3 TARGETS EXPOSED
EMULSION/PROTONS @ 400 #292	GOTTFRIED, KURT	APPROVED	COMPLETED	12 STACKS
DETECTOR DEVELOPMENT #327	ALLISON, MADE W. M.	APPROVED	COMPLETED	50 HOURS
EMULSION/PI- @ 200 #328	TRETJAKOVA, M. I.	APPROVED	COMPLETED	5 STACKS
EMULSION/PROTONS @ 300 #329	TRETJAKOVA, M. I.	APPROVED	COMPLETED	2 STACKS
EMULSION/PROTONS @ 400 #336	OGATA, TAKESHI	APPROVED	COMPLETED	2 STACKS
EMULSION/PI- @ 200 #339	WOLTER, WLADYSLAW	APPROVED	COMPLETED	4 STACKS
EMULSION/PROTONS @ 400 #346	EKSPONG, GOSTA	APPROVED	COMPLETED	1 STACK
EMULSION/PI- @ 200 #362	JAIN, PIYARE L.	APPROVED	COMPLETED	1 STACK
EMULSION/MUONS @ 200 #373	JAIN, PIYARE L.	APPROVED	COMPLETED	2 STACKS
EMULSION/PROTONS @ 300 #374	DAVIS, D. H.	APPROVED	COMPLETED	1 STACK
EMULSION/PROTONS @ 400 #385	PRAKASH, YOG	APPROVED	COMPLETED	1 STACK
EMULSION/NEW PARTICLES #386	LORD, JERE J.	APPROVED	COMPLETED	1 STACK
EMULSION/PI- @ 200 #387	WILKES, RICHARD J.	APPROVED	COMPLETED	4 STACKS
EMULSION/PROTONS @ 300 #419	GIACOMELLI, GIORGIO	APPROVED	COMPLETED	1 STACK
EMULSION/PROTONS @ 300 #421	DZHELEPOV, VENEDICT P.	APPROVED	COMPLETED	1 STACK
EMULSION/PROTONS @ 400 #423	SUGIMOTO, HISAHIKO	APPROVED	COMPLETED	4 STACKS
EMULSION/MUONS @ 200 #424	HADA, TOMONORI	APPROVED	COMPLETED	1 STACK
EMULSION/PROTONS @ 400 #428	HEBERT, JACQUES D.	APPROVED	COMPLETED	14 STACKS
EMULSION/PROTONS @ 400 #434	DAKE, SHOJI	APPROVED	COMPLETED	3 STACKS
EMULSION/PROTONS @ 400 #461	LORD, JERE J.	APPROVED	COMPLETED	6 STACKS
EMULSION/PROTONS @ 400 #462	GIACOMELLI, GIORGIO	APPROVED	COMPLETED	1 STACK
EMULSION/PROTONS @ 400 #463	TRETJAKOVA, M. I.	APPROVED	COMPLETED	2 STACKS
TEST MUON IRRADIATION #467	FREEDMAN, MELVIN	APPROVED	COMPLETED	4 TARGETS EXPOSED
EMULSION/PI- @ 300 #481	TAKAHASHI, YOSHIYUKI	APPROVED	COMPLETED	7 STACKS
EMULSION/PROTONS @ 400 #499	IHAI, JUNSUKE	APPROVED	COMPLETED	5 STACKS
MONOPOLE #502	BARTLETT, DAVID F.	APPROVED	COMPLETED	COSMIC RAY RUNNING
EMULSION/PI- @ 300 #503	OGATA, TAKESHI	APPROVED	COMPLETED	4 STACKS
EMULSION/PI- @ 300 #506	DAKE, SHOJI	APPROVED	COMPLETED	2 STACKS
EMULSION/MUONS @ 200 #509	SHIRAI, T.	APPROVED	COMPLETED	1 STACK
EMULSION/PI- @ 300 #525	WILKES, RICHARD J.	APPROVED	COMPLETED	2 STACKS
EMULSION/PROTONS @ 400 #547	JACQUOT, C. J.	APPROVED	COMPLETED	24 STACKS
EMULSION/PI- @ 300 #568	HEBERT, JACQUES D.	APPROVED	COMPLETED	3 STACKS
EMULSION/PI- @ 300 #573	USHIDA, MORIYUKI	APPROVED	COMPLETED	3 STACKS
EMULSION/PI- @ 300 #574	WOLTER, WLADYSLAW	APPROVED	COMPLETED	4 STACKS
EMULSION/PROTONS @ 400 #575	LORD, JERE J.	APPROVED	COMPLETED	2 STACKS
NUC CALIBRATION CROSS SECT #631	BAKER, SAMUEL I.	APPROVED	COMPLETED	41 EXPOSURES
QUARK #549	LONGO, MICHAEL J.	APPROVED	APPROVED/INACTIVE	1 TARGET EXPOSURE
EMULSION/PROTONS @ 500 #576	HEBERT, JACQUES D.	APPROVED	COMPLETED	1 EMULSION STACKS
MULTIPARTICLE PRODUCTION #750	SHIVPURI, RAM K.	APPROVED	COMPLETED	1 EMULSION STACKS

\*\*\*\*\*

EXPERIMENTAL AREA AND BEAM LINE SHORT TITLE OF PROPOSAL	SPOKESPERSON	PROPOSAL STATUS	EXPERIMENT SITUATION	EXTENT
<b>PROTON AREA-EAST</b>				
PHOTON TOTAL CROSS SECTION #25A	CALDWELL, DAVID O.	APPROVED	COMPLETED	1,850 HOURS
PHOTOPRODUCTION #87A	OHALLORAN, THOMAS	APPROVED	COMPLETED	4,800 HOURS
PARTICLE SEARCH #100A	PIROUE, PIERRE A.	APPROVED	COMPLETED	1,150 HOURS
PHOTOPRODUCTION #152B	HEUSCH, CLEMENS A.	APPROVED	COMPLETED	1,950 HOURS
PARTICLE SEARCH #300	PIROUE, PIERRE A.	APPROVED	COMPLETED	750 HOURS
PARTICLE SEARCH #325	PIROUE, PIERRE A.	APPROVED	COMPLETED	1,500 HOURS
DI-MUON #358	LEE, HONYONG	APPROVED	COMPLETED	400 HOURS
PHOTOPRODUCTION #401	GORMLEY, MICHAEL F.	APPROVED	COMPLETED	2,100 HOURS
DETECTOR DEVELOPMENT #498	GRUHN, CHARLES R.	APPROVED	COMPLETED	50 HOURS
PHOTOPRODUCTION #516	NASH, E. THOMAS	APPROVED	COMPLETED	4,500 HOURS
PHOTON DISSOCIATION #612	GOULIANOS, KONSTANTIN	APPROVED	COMPLETED	1,850 HOURS
PHOTOPRODUCTION #458	LEE, HONYONG	APPROVED	APPROVED/INACTIVE	UNSPECIFIED
PARTICLE SEARCH #400	NISS, JAMES E.	APPROVED	COMPLETED	2,210 HOURS
TAGGED PHOTON #691	WITHERELL, MICHAEL S.	APPROVED	COMPLETED	1,400 HOURS
PION & KAON CHARM PROD. #769	APPEL, JEFFREY A.	APPROVED	IN PROGRESS	(UNSPECIFIED)
HADROPRODUCTION OF BEAUTY #791	APPEL, JEFFREY A.	UNCONSIDERED		UNSPECIFIED
*****				
<b>PROTON AREA-BROAD BAND BEAM</b>				
CHARGED PARTICLES #747	HAHN, ALAN A.	APPROVED	COMPLETED	UNSPECIFIED
PHOTOPRODUCTION #687	BUTLER, JOEL	APPROVED	IN PROGRESS	(UNSPECIFIED)
PHOTOPRODUCTION OF JETS #683	CORCORAN, MARJORIE B.	APPROVED	UNSCHEDULED	UNSPECIFIED
ELECTRON BEAM DUMP #774	CRISLER, MICHAEL B.	APPROVED	UNSCHEDULED	UNSPECIFIED
*****				
<b>PROTON AREA-CENTER</b>				
MUON SEARCH #48	ADAIR, ROBERT K.	APPROVED	COMPLETED	500 HOURS
LEPTON #70	LEDERMAN, LEON M.	APPROVED	COMPLETED	2,800 HOURS
PARTICLE SEARCH #187	LEDERMAN, LEON M.	APPROVED	COMPLETED	200 HOURS
DI-LEPTON #288	LEDERMAN, LEON M.	APPROVED	COMPLETED	6,850 HOURS
MUON SEARCH #435	ADAIR, ROBERT K.	APPROVED	COMPLETED	250 HOURS
DI-MUON #436	ADAIR, ROBERT K.	APPROVED	COMPLETED	200 HOURS
DI-HADRON #494	GOOD, MYRON L.	APPROVED	COMPLETED	1,950 HOURS
CHARGED HYPERON #497	LACH, JOSEPH	APPROVED	COMPLETED	2,500 HOURS
PARTICLE SEARCH #608	BROHN, CHARLES N.	APPROVED	COMPLETED	600 HOURS
TRANSITION MAGNETIC MOMENT #619	DEVLIN, THOMAS J.	APPROVED	COMPLETED	675 HOURS
CHARM PARTICLE #630	SANDWEISS, JACK	APPROVED	COMPLETED	1,150 HOURS
EMULSION EXPOSURE #666	WILKES, RICHARD J.	APPROVED	COMPLETED	6 STACKS
SIGMA BETA DECAY #715	COOPER, PETER S.	APPROVED	COMPLETED	820 HOURS
CP VIOLATION #621	THOMSON, GORDON B.	APPROVED	COMPLETED	2,470 HOURS
EMULSION/SIGMA-MINUS @ 250 #730	WILKES, RICHARD J.	APPROVED	COMPLETED	4 HOURS
MAGNETIC MOMENT #756	LUK, KAM-BIU	APPROVED	IN PROGRESS	(UNSPECIFIED)
HYPERON RADIATIVE DECAY #761	VOROBYOV, ALEXEI	APPROVED	SET UP IN A YEAR	UNSPECIFIED
LARGE-X BARYON SPECTROMETER#781	RUSS, JAMES S.	UNCONSIDERED		UNSPECIFIED
*****				
<b>PROTON AREA-WEST</b>				
PHOTON SEARCH #95A	COX, BRADLEY B.	APPROVED	COMPLETED	3,400 HOURS
PROTON-PROTON ELASTIC #177A	OREAR, JAV	APPROVED	COMPLETED	2,400 HOURS
PION INCLUSIVE #258	SHOCHET, MELVYN J.	APPROVED	COMPLETED	1,500 HOURS
PARTICLE PRODUCTION #284	WALKER, JAMES K.	APPROVED	COMPLETED	1,150 HOURS
DI-MUON #326	SHOCHET, MELVYN J.	APPROVED	COMPLETED	2,000 HOURS
DI-MUON #537	COX, BRADLEY B.	APPROVED	COMPLETED	2,700 HOURS
PARTICLE SEARCH #567	WITHERELL, MICHAEL S.	APPROVED	COMPLETED	1,650 HOURS
NUCLEAR SCALING #592	FRANKEL, SHERMAN	APPROVED	COMPLETED	500 HOURS
PARTICLE SEARCH #650	WEBB, ROBERT C.	APPROVED	COMPLETED	550 HOURS
FORWARD SEARCH #615	MCDONALD, KIRK T.	APPROVED	COMPLETED	2,260 HOURS
CHI MESON #705	COX, BRADLEY B.	APPROVED	IN PROGRESS	(1,500 HOURS)
CP VIOLATION #721	ROSEN, JEROME L.	APPROVED	IN TEST STAGE	(0 HOURS)
BEAUTY PRODUCTION #771	COX, BRADLEY B.	APPROVED	UNSCHEDULED	UNSPECIFIED
*****				
<b>PROTON AREA (MISCELLANEOUS)</b>				
EMULSION/ELECTRONS @ HI E #340	DAKE, SHOJI	APPROVED	COMPLETED	10 STACKS
EMULSION/ELECTRONS @ >100 #399	GOLDEN, ROBERT L.	APPROVED	COMPLETED	6 STACKS
EMULSION/ELECTRONS @ HI E #510	NIU, KIYOSHI	APPROVED	COMPLETED	6 STACKS
NUCLEAR FRAGMENTS #466	PORILE, NORBERT T.	APPROVED	IN PROGRESS	(102 TARGETS EXPOSED)
*****				
<b>INTERNAL TARGET AREA (C-0)</b>				
PROTON-PROTON SCATTERING #36A	COOL, RODNEY L.	APPROVED	COMPLETED	700 HOURS
PHOTON SEARCH #63A	WALKER, JAMES K.	APPROVED	COMPLETED	2,600 HOURS
PROTON-PROTON MISSING MASS #67A	SANNES, FELIX	APPROVED	COMPLETED	600 HOURS
PHOTON SEARCH #120	CLINE, DAVID B.	APPROVED	COMPLETED	1,200 HOURS

EXPERIMENTAL AREA AND BEAM LINE SHORT TITLE OF PROPOSAL	SPOKESPERSON	PROPOSAL STATUS	EXPERIMENT SITUATION	EXTENT
PARTICLE SEARCH #184	MANDERER, PETER J.	APPROVED	COMPLETED	800 HOURS
PROTON-DEUTERON SCATTERING #186	MELISSINOS, ADRIAN	APPROVED	COMPLETED	450 HOURS
PROTON-NUCLEON INCLUSIVE #188	SANNES, FELIX	APPROVED	COMPLETED	1,050 HOURS
PROTON-NUCLEON SCATTERING #198A	OLSEN, STEPHEN L.	APPROVED	COMPLETED	900 HOURS
PROTON-PROTON INELASTIC #221	FRANZINI, PAOLO	APPROVED	COMPLETED	950 HOURS
PROTON-HELIUM SCATTERING #289	MALAMUD, ERNEST I.	APPROVED	COMPLETED	1,050 HOURS
PROTON-PROTON POLARIZATION #313	NEAL, HOMER A.	APPROVED	COMPLETED	850 HOURS
PROTON-NUCLEON INELASTIC #317	COOL, RODNEY L.	APPROVED	COMPLETED	1,400 HOURS
PROTON-PROTON INELASTIC #321	LEE-FRANZINI, JULIET	APPROVED	COMPLETED	1,900 HOURS
PARTICLE SEARCH #363	OLSEN, STEPHEN L.	APPROVED	COMPLETED	650 HOURS
PROTON-NUCLEON SCATTERING #381	MALAMUD, ERNEST I.	APPROVED	COMPLETED	600 HOURS
PARTICLE PRODUCTION #418	SANNES, FELIX	APPROVED	COMPLETED	900 HOURS
NUCLEAR FRAGMENTS #442	TURKOT, FRANK	APPROVED	COMPLETED	1,200 HOURS
PROTON POLARIZATION #522	OGREN, HAROLD O.	APPROVED	COMPLETED	700 HOURS
P-N SCATTERING #552	SANNES, FELIX	APPROVED	COMPLETED	950 HOURS
PARTICLE SEARCH #591	GUTAY, LASZLO J.	APPROVED	COMPLETED	1,950 HOURS
*****				
COLLISION AREA-(B-0)				
COLLIDER DETECTOR #741	TOLLESTRUP, ALVIN V. SCHWITTERS, ROY F.	APPROVED	IN PROGRESS	(UNSPECIFIED)
CDF UPGRADE #775	SCHWITTERS, ROY F. TOLLESTRUP, ALVIN V.	APPROVED	UNSCHEDULED	UNSPECIFIED
*****				
COLLISION AREA-(C-0)				
GRAVITATIONAL DETECTOR #723	MELISSINOS, ADRIAN	APPROVED	COMPLETED	TEST RUNNING
PARTICLE SEARCH #735	GUTAY, LASZLO J.	APPROVED	IN PROGRESS	(UNSPECIFIED)
TEVATRON BEAUTY FACTORY #783	REAY, NEVILLE W.	UNCONSIDERED		(UNSPECIFIED)
BOTTOM AT THE COLLIDER #784	LOCKYER, NIGEL S.	UNCONSIDERED		UNSPECIFIED
PARTICLE SEARCH #787	GUTAY, LASZLO J. WALKER, WILLIAM D.	UNCONSIDERED		UNSPECIFIED
*****				
COLLISION AREA-(D-0)				
HIGHLY IONIZING PARTICLES #713	PRICE, P. BUFORD	APPROVED	IN PROGRESS	(UNSPECIFIED)
D-0 DETECTOR #740	GRANNIS, PAUL D.	APPROVED	UNSCHEDULED	UNSPECIFIED
ELECTRON TARGET FACILITY #719	LEE, MONYONG	NOT APPROVED		UNSPECIFIED
*****				
COLLISION AREA-(E-0)				
TOTAL CROSS-SECTION #710	RUBINSTEIN, ROY OREAR, JAY	APPROVED	IN PROGRESS	(UNSPECIFIED)
*****				
COLLISION AREA (MISCELLANEOUS)				
MR TUNNEL NEUTRONS #766	MCCASLIN, JOSEPH B.	APPROVED	COMPLETED	UNSPECIFIED
MR TUNNEL NEUTRONS #777	MCCASLIN, JOSEPH B.	APPROVED	COMPLETED	UNSPECIFIED
MAGNET APERTURE STUDIES #778	EDWARDS, DONALD A.	APPROVED	IN PROGRESS	(UNSPECIFIED)
*****				
UNSPECIFIED BEAM				
EMULSION/PI- @ 500 #667	WOLTER, MLADYSLAW	UNCONSIDERED		EMULSION EXPOSURE
EMULSION/PI- @ 800 #668	WOLTER, MLADYSLAW	UNCONSIDERED		EMULSION EXPOSURE
CALORIMETER FOR ZEUS #790	SCIULLI, FRANK	UNCONSIDERED		UNSPECIFIED
*****				
MISCELLANEOUS AREA				
FREE QUARK SEARCH #720	SCHIFFER, JOHN P.	APPROVED	COMPLETED	UNSPECIFIED
NUCLEAR CAL. CROSS SECTIONS#776	BAKER, SAMUEL I.	APPROVED	BEING INSTALLED	UNSPECIFIED
LOW ENERGY ANTIMATTER #785	BONNER, BILLY PINSKY, LAWRENCE	UNCONSIDERED		UNSPECIFIED
*****				
ACCUMULATOR RING				
CHARMONIUM STATES #760	CESTER, ROSANNA	APPROVED	BEING INSTALLED	UNSPECIFIED