

Refereed Publications

IUCF

FY2001

* experimental work done at another laboratory

† NSF support acknowledged

† Complete set of polarization observables in $\bar{p}\bar{p} \rightarrow pp\pi^0$ close to threshold, H.O. Meyer, A. Wellinghausen, J.T. Balewski, J. Doskow, R.E. Pollock, B. v. Przewoski, T. Rinckel, P. Thörngren-Engblom, L.D. Knutson, W. Haeberli, B. Lorentz, F. Rathmann, B. Schwartz, T. Wise, W.W. Daehnick, Swapan K. Saha, and P.V. Pancella, *Phys. Rev. C* **63**, 064002 (2001).

Data analysis techniques for extracting Gamow-Teller strengths from $0^\circ(p,n)$ data, C.D. Goodman, M. Bhattacharya, M.B. Aufderheide, S.D. Bloom, and P. Zupranski, *Nucl. Instrum. and Methods* **462**, 545 (2001).

*† Elliptic flow in Au+Au collisions at $\sqrt{s_{NN}} = 130$ GeV, K.H. Ackermann *et al.* (STAR collaboration), *Phys. Rev. C* **86**, 402 (2001).

*† Energy resolution and energy-light response of CsI(Tl) scintillators for charged particle detection, A. Wagner, W.P. Tan, K. Chalut, R.J. Charity, B. Davin, Y. Laroche, M.D. Lennek, T.X. Liu, X.D. Liu, W.G. Lynch, A.M. Ramos, R. Shomin, L.G. Sobotka, R.T. de Souza, M.B. Tsang, G. Verde, and H.S. Xu, *Nucl. Instrum. and Methods* **456**, 290 (2001).

† Evidence for a three-nucleon-force effect in proton-deuteron elastic scattering, R.V. Cadman, J. Brack, W.J. Cummings, J.A. Fedchak, B.D. Fox, H. Gao, W. Glöckle, J. Golak, C. Grosshauser, R.J. Holt, C.E. Jones, H. Kamada, E.R. Kinney, M.A. Miller, W. Nagengast, A. Nogga, B.R. Owen, K. Rith, F. Schmidt, E.C. Schulte, J. Sowinski, F. Sperisen, E.L. Thorsland, R. Tobey, J. Wilbert, and H. Witała, *Phys. Rev. Lett.* **86**, 967 (2001).

* Gamow-Teller strengths of the inverse beta transitions $^{176}\text{Yb} \rightarrow ^{176}\text{Lu}$ for spectroscopy of proton-proton and other sub-MeV solar neutrinos, M. Fujiwara, H. Akimune, A.M. Van den Berg, M. Cribier, I. Daito, H. Ejiri, H. Fujimura, Y. Fujita, C.D. Goodman, K. Hara, M.N. Harakeh, F. Ihara, T. Ishikawa, J. Jänecke, T. Kawabata, R.S. Raghavan, K. Schwarz, M. Tanaka, T. Yamanaka, M. Yosoi, and R.G.T. Zegers, *Phys. Rev. Lett.* **85**, 4442 (2000).

INPOL - the Indiana University Neutron Polarimeter, M. Palarczyk, J. Rapaport, C. Hautala, K. Hicks, D.L. Prout, T.N. Taddeucci, C.C. Foster, C.D. Goodman, I.J. van Heerden, T. Rinckel, G. Savopoulos, X. Yang, D. Yoder, E. Sugarbaker, D.C. Cooper, and B. Luther, *Nucl. Instrum. and Methods* **457**, 309 (2001).

* Isospin-symmetry structure study at new high-resolution course of RCNP, Y. Fujita, T. Adachi, H. Akimune, A.D. Bacher, G.P.A. Berg, T. Black, I. Daito, C.C. Foster, H. Fujimura, H. Fujita, M. Fujiwara, K. Hara, K. Karada, M.N. Harakeh, K. Hatanaka, T. Inomata, J. Jänecke, J. Kamiya, Y. Kanzaki, K. Katori, T. Kawabata, W. Lozowski, K. Nagayama, T. Noro, D.A. Roberts, H. Sakaguchi, Y. Shimbara, T. Shinada, E.J. Stephenson, A. Tamii, K. Tamura, M. Tanaka, H. Ueno, T. Wakasa, T. Yamanaka, M. Yoshifuku, and M. Yosoi, *Nucl. Phys. A* **687**, 311 (2001).

† Measurement of Gamow-Teller strength for $^{176}\text{Yb} \rightarrow ^{176}\text{Lu}$ and the efficiency of a solar neutrino detector, M. Battacharya, C.D. Goodman, R.S. Raghavan, M. Palarczyk, A. Garcia, J. Rapaport, I.J. van Heerden, and P. Zupranski, *Phys. Rev. Lett.* **85**, 4446 (2000).

† Measurements of the spin observables D_{NN} , P , and A_y in inelastic proton scattering from ^{12}C and ^{16}O at 198 MeV, A.K. Opper, S.W. Wissink, A.D. Bacher, J. Lisantti, C. Olmer, R. Sawafta, E.J. Stephenson, and S.P. Wells, *Phys. Rev. C* **63**, 034614 (2001).

*† Midrapidity antiproton-to-proton ratio from Au + Au collisions at $\sqrt{s_{NN}} = 130$ GeV, C. Adler *et al.* (STAR Collaboration), *Phys. Rev. Lett.* **86**, 4778 (2001).

*† Multiplicity distributions and spectra of negatively charged hadrons in Au+Au collisions at $\sqrt{s_{NN}} = 130$ GeV, C. Adler *et al.* (STAR Collaboration), *Phys. Rev. Lett.* **87**, 112303 (2001).

- † Nuclear polarization of hydrogen molecules from recombination of polarized atoms, T. Wise, W. Haeberli, B. Lorentz, P.A. Quin, F. Rathmann, B. Schwartz, T.G. Walker, A. Wellinghausen, J.T. Balewski, J. Doskow, H.O. Meyer, R.E. Pollock, B.v. Przewoski, T. Rinckel, Swapan K. Saha, and P.V. Pancella, Phys. Rev. Lett. **87**, 042701 (2001).
- *† Observation of the spin isovector monopole resonance using the $\text{Pb}(\bar{p}, \bar{n})\text{Bi}$ reaction at 795 MeV, D.L. Prout, J. Rapaport, E. Sugarbaker, D. Cooper, D. Delucia, B. Luther, C.D. Goodman, P.K. Park, L. Rybarczyk, T.N. Taddeucci, and J. Ullmann, Phys. Rev. C **63**, 014603 (2001).
- *† Pion Interferometry at $\sqrt{s_{NN}} = 130$ GeV/c Au+Au Collisions at RHIC, C. Adler *et al.* (STAR collaboration), Phys. Rev. Lett. **87**, 082301 (2001).
- * Production of η' mesons in the $pp \rightarrow pp\eta'$ reaction at 3.67 GeV/c, F. Balestra, Y. Bedfer, R. Bertini, L.C. Bland, A. Brenschede, F. Brochard, M.P. Bussa, Seonho Choi, M. Debowski, M. Dziedzic, J.-Cl. Faivre, I.V. Falomkin, L. Fava, L. Ferrero, J. Foryciarz, I. Fröhlich, V. Frolov, R. Garfagnini, A. Grasso, S. Heinz, V.V. Ivanov, W.W. Jacobs, W. Kühn, A. Maggiora, M. Maggiora, A. Manara, D. Panzneri, H.-W. Pfaff, G. Piragino, G.B. Pontecorvo, A. Popov, J. Ritman, P. Salabura, V. Tchalyshov, F. Tosello, S.E. Vigdor, and G. Zosi, Phys. Lett. B **491**, 29 (2000).
- † Splitting of the dipole and spin-dipole resonances, Sam M. Austin, E. Adamides, A. Galonsky, T. Nees, W.A. Sterrenburg, D.E. Bainum, J. Rapaport, E. Sugarbaker, C.C. Foster, C.D. Goodman, D.J. Horen, C.A. Goulding, and M.B. Greenfield, Phys. Rev. C **63**, 034322 (2001).
- * Testing binomial reducibility and thermal scaling in hadron-induced multifragmentation, L. Beaulieu, T. Lefort, K. Kwiatkowski, W.-C. Hsi, L. Pienkowski, R.G. Korteling, R. Laforest, E. Martin, E. Ramakrishnan, D. Rowland, A. Ruangma, V.E. Viola, E. Winchester, and S.J. Yennello, Phys. Rev. C **63**, 031302 (2001).
- *† ϕ and ω production in pp reactions at $p_{\text{lab}} = 3.67$ GeV/c, F. Balestra, Y. Bedfer, R. Bertini, L.C. Bland, A. Brenschede, F. Brochard, M.P. Bussa, Seonho Choi, M. Debowski, R. Dressler, M. Dziedzic, J.-Cl. Faivre, I.V. Falomkin, L. Fava, L. Ferrero, J. Foryciarz, I. Fröhlich, V. Frolov, R. Garfagnini, A. Grasso, E. Grosse, S. Heinz, V.V. Ivanov, W.W. Jacobs, W. Kühn, A. Maggiora, M. Maggiora, A. Manara, D. Panzneri, H.-W. Pfaff, G. Piragino, G.B. Pontecorvo, A. Popov, J. Ritman, P. Salabura, V. Tchalyshov, F. Tosello, S.E. Vigdor, and G. Zosi, Phys. Rev. C **63**, 024004 (2001).
- † Δ isobars and (p,p') reactions, F. Sammarruca and E.J. Stephenson, Phys. Rev. C **64**, 034006 (2001).

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- *† Breakup time scale studied in the 8 GeV/c $\pi^- + {}^{197}\text{Au}$ reaction, L. Pienkowski, L. Beaulieu, T. Lefort, K. Kwiatkowski, W.-c. Hsi, H. Breuer, R.G. Korteling, R. Laforest, E. Martin, E. Ramakrishnan, D. Rowland, A. Ruangma, V.E. Viola, E. Winchester, and S.J. Yennello, submitted to Nucl. Phys.
- Caloric curves for the 8 GeV/c π^- , $\bar{p} + {}^{197}\text{Au}$ reactions, A. Ruangma, R. Laforest, E. Martin, E. Ramakrishnan, D.J. Rowland, M. Veselsky, E.M. Winchester, S.J. Yennello, L. Beaulieu, W.-c. Hsi, K. Kwiatkowski, T. Lefort, V.E. Viola, A. Botvina, R.G. Korteling, L. Pienkowski, H. Breuer, S. Gushue, L.P. Remsberg, and B. Back, submitted to Phys. Rev. C.
- † Comparison between chiral and meson-theoretic nucleon-nucleon potentials through (p,p') reactions, F. Sammarruca, D. Alonso, and E.J. Stephenson, submitted to Phys. Rev. C.
- *† Event-by-event analysis of proton-induced nuclear multifragmentation: determination of phase transition universality-class in system with extreme finite-size constraints, M.K. Berkenbusch, W. Bauer, K. Dillman, S. Pratt, T. Lefort, K. Kwiatkowski, V.E. Viola, L. Beaulieu, A. Ruangma, S.J. Yennello, R.G. Korteling, L. Pienkowski, to be published in Phys. Rev. Lett.
- High spin two-neutron-hole states via the ${}^{208}\text{Pb}(p,t){}^{206}\text{Pb}$ reaction at 120 MeV, Dimitris N. Mihailidis, Norton M. Hintz, Anil Sethi, and E.J. Stephenson, submitted to Phys. Rev. C.
- † Identified particle elliptic flow in Au + Au collisions at $\sqrt{s_{NN}} = 130$ GeV, C. Adler *et al.*, (STAR Collaboration), Phys. Rev. Lett. **87**, 182301 (2001).

*† The liquid to vapor phase transition in excited nuclei, J.B. Elliott, L.G. Moretto, L. Phair, G.J. Wozniak, L. Beaulieu, H. Breuer, R.G. Korteling, K. Kwiatkowski, T. Lefort, L. Pienkowski, A. Ruangma, V.E. Viola, and S.J. Yennello, to be published in Phys. Rev. Lett.

† Measurement of inclusive antiprotons from Au + Au Collisions at $\sqrt{s_{NN}} = 130$ GeV, C. Adler *et al.*, (STAR Collaboration), Phys. Rev. Lett. **87**, 262302 (2001)

† Mid-Rapidity ϕ production in Au + Au Collisions at $\sqrt{s_{NN}} = 130$ GeV, C. Adler *et al.*, (STAR Collaboration), submitted to Phys. Rev. Lett.

Polarization transfer in (\bar{p}, \bar{n}) reactions on ^2H and $^3,^4\text{He}$ at 197 MeV, D.L. Prout, J. Rapaport, M. Palarczyk, D.A. Cooper, G. Savopoulos, C. Hautala, B. Anderson, A. Baldwin, C.C. Foster, M. Glöckle, C.D. Goodman, R. Howes, M.S. Islam, B. Luther, R. Madey, D.M. Manley, J. Sowinski, E. Sugarbaker, T.N. Taddeucci, I. van Heerden, J.W. Watson, H. Witała, X. Yang, and W.M. Zhang, accepted for publication in Phys. Rev. C.

† Spin correlations in $\bar{p}\bar{p} \rightarrow p n \pi^+$ pion productions near threshold, W.W. Daehnick, Swapan K. Saha, R.W. Flammang, H.O. Meyer, J.T. Balewski, R.E. Pollock, B. von Przewoski, B. Lorentz, F. Rathmann, B. Schwartz, T. Wise, and P.V. Pancella, submitted to Phys. Rev. C.

The STAR endcap electromagnetic calorimeter, C.E. Allgower, B.D. Anderson, A.R. Baldwin, J. Balewski, M. Belt-Tonjes, L.C. Bland, R.L. Brown, R.V. Cadman, W. Christie, I. Syliax, V. Dunin, G. Eppley, C.A. Gagliardi, N. Gagumashvili, T. Hallman, W. Hunt, W.W. Jacobs, A. Klyachko, K. Krueger, A. Kulikov, A. Ogawa, Y. Panebratsev, M. Planinic, J. Puskar-Pasewicz, G. Rakness, S. Razin, O. Rogashevski, S. Shimankys, K.A. Solberg, J. Sowinski, H. Spinka, E.J. Stephenson, V. Tikhomirov, M. Tokarev, R.E. Tribble, D. Underwood, A.M. Vander Molen, S.E. Vigdor, J.W. Watson, G. Westfall, S.W. Wissink, and A. Yokosawa, submitted to Nucl. Instrum. and Methods A.

*† Thermal excitation-energy deposition in 5-15 GeV/c hadron-induced reaction with ^{197}Au . I. Reconstruction of thermal source properties, T. Lefort, L. Beaulieu, K. Kwiatkowski, W.-c. Hsi, V.E. Viola, R. Laforest, E. Martin, E. Ramakrishnan, D. Rowland, A. Ruangma, E. Winchester, S.J. Yennello, L. Pienkowski, R.G. Korteling, and H. Breuer, submitted to Phys. Rev. **C64**, 064603 (2001).

*† Thermal excitation-energy deposition in 5-15 GeV/c hadron-induced reactions with ^{197}Au . II. Relation between excitation energy and reaction variables, L. Beaulieu, T. Lefort, K. Kwiatkowski, W.-c. Hsi, G. Wang, D.S. Bracken, E. Cornell, D.S. Ginger, K.B. Morley, V.E. Viola, F. Gimeno-Nogues, R. Laforest, E. Martin, E. Ramakrishnan, D. Rowland, A. Ruangma, E. Winchchester, S.J. Yennello, R.G. Korteling, L. Pienkowski, H. Breuer, B. Back, S. Gushue, L.P. Remsberg, M.J. Huang, W.G. Lynch, M.B. Tsang, and H. Xi, Phys. Rev. **C64**, 064604 (2001).

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Conference Proceedings

• invited, ◦ contributed, ¶ poster

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Few Body Problems in Physics, Taipei, Taiwan, March 6-10, 2000, eds. C.-Y. Cheung, Y.K. Ho, T.-S.H. Lee, and S.N. Yang, Nucl. Phys. **A684** (2001).

- † Investigation of the three-nucleon force at IUCF, J. Sowinski, p. 569c.
- * Meson production in pp reactions at 2.85 GeV, W. Kuhn, S.A. Baginyan, F. Balestra, Y. Bedfer, R. Bertini, L.C. Bland, A.Y. Bonushkina, F. Brochard, M.P. Bussa, V. Chalyshev, S. Choi, M. Debowski, R. Dressler, M. Dzemidzic, J.C. Faivre, I.V. Falomkin, I. Fava, L. Ferrero, J. Foryciarz, V. Frolov, I. Frohlich, R. Garfagnini, A. Grasso, S. Heinz, V.V. Ivanov, W.W. Jacobs, A. Maggiora, M. Maggiora, A. Manara, D. Panzieri, H.W. Pfaff, G. Piragino, G.B. Pontecorvo, A. Popov, J. Ritman, A.M. Rozhdestvensky, P.

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- * Isospin fractionation in nuclear fragmentation, G. Verde, H.S. Xu, T.X. Liu, X.D. Liu, W.G. Lynch, W.P. Tan, M.B. Tsang, A. VanderMolen, A. Wagner, H.F. Xi, C.K. Gelbke, L. Beaulieu, B. Davin, Y. Larochele, T. Lefort, R.T. de Souza, R. Yanez, V. Viola, R.J. Charity, and L.G. Sobotka, p. 299c.
- * Signals for the transition from liquid to gas in hot nuclei, V.E. Viola, T. Lefort, L. Beaulieu, K. Kwiatkowski, G. Wang, R. de Souza, L. Pienkowski, A. Botvina, H. Breuer, D. Durand, R.G. Korteling, R. Laforest, E. Martin, E. Ramakrishnan, D. Rowland, A. Ruangma, E. Winchester, and S.J. Yennello, p. 267c.

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- † Spin-flipping a stored polarized proton beam with an rf dipole, B.B. Blinov, Y.S. Derbenev, T. Kageya, D.Y. Kantsyrev, A.D. Krisch, V.S. Morozov, D.W. Sivers, V.K. Wong, V.A. Anferov, P. Schwandt, and B. von Przewoski, p. 662.
- Spin physics program at STAR, W.W. Jacobs for the STAR collaboration, p. 689.
- Testing the spin dependence of the in-medium nucleon-nucleon interaction using polarization observables in (\vec{p}, \vec{p}') scattering at intermediate energies, F. Sammarruca and E.J. Stephenson, p. 459.

Proc. of the 7th Int. Topical Conf. on Giant Resonances, Osaka, Japan, June 12-15, 2000, eds. T. Wakasa, M. Fujiwara, M. Nomachi, and H. Ejiri, Nucl. Phys. A687 (2001).

- Isospin symmetry-structure study at new high-resolution course of RCNP, Y. Fujita, T. Adachi, H. Akimune, A.D. Bacher, G.P.A. Berg, T. Black, I. Daito, C.C. Foster, H. Fujimura, H. Fujita, M. Fujiwara, K. Hara, K. Harada, M.N. Harakeh, K. Hatanaka, T. Inomata, J. Jänecke, J. Kamiya, Y. Kanzaki, K. Katori, T. Kawabata, W. Lozowski, K. Nagayama, T. Noro, D.A. Roberts, H. Sakaguchi, Y. Shimbara, T. Shinada, E.J. Stephenson, A. Tamii, K. Tamura, M. Tanaka, H. Ueno, T. Wakasa, T. Yamanaka, M. Yoshifuku, and M. Yosoi, p. 311c.

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- † Three-nucleon interactions: evidence from polarized pd elastic scattering, E.R. Kinney, R.V. Cadman, J. Brack, W.J. Cummings, J.A. Fedchak, B.D. Fox, H. Gao, W. Glöckle, C. Grosshauser, R.J. Holt, C.E. Jones, M.A. Miller, W. Nagengast, B.R. Owen, K. Rith, F. Schmidt, E.C. Schulte, J. Sowinski, F. Sperisen, E.L. Thorsland, R. Tobey, J. Wilbert, and H. Witata, p. 33.

Conferences held in FY2001

Meeting of the Division of Nuclear Physics of the American Physical Society, Williamsburg, Virginia, October 4-7, 2000.

- ¶ Compression of a non-neutral plasma using a rotation electric field, D. Bahr and R. Pollock.
- ¶ Development of plastic scintillators for the detection of charged particles in a magnetic channel, J. Shoup, A. Bacher, and M. Pickar.
- Exact treatment of the Pauli exclusion operator in nuclear matter, F. Sammarruca, E.J. Stephenson, and X. Meng.
- * Experimental aspects of determining ΔG from direct photon + jet events in polarized pp collisions using the STAR detector at RHIC, Chris Allgower, STAR collaboration.

- The high resolution array HiRA, Marc-Jan van Goethem, A. Caraley, R.J. Charity, R.T. deSouza, P. Hosmer, William Lynch, A. Moroni, L.G. Sobotka, G. Verde, V.E. Viola, and M. Wallace.
- Imaging of emitting sources in heavy ion systems by d- α correlation functions, G. Verde, David A. Brown, P. Danielewicz, C.K. Gelbke, T.X. Liu, X.D. Liu, W.G. Lynch, W.P. Tan, M.B. Tsang, H.S. Xu, H.F. Xi, B. Davin, R.T. deSouza, Y. Larochele, R.J. Charity, and L.G. Sobotka.
- * The STAR spin physics program, L.C. Bland, STAR collaboration.
- ¶ A tagged proton experiment to confirm NASA's model for evaluating the risk of failure in silicon off-the-shelf microelectronics parts and systems, T. Brandt, C.C. Foster, K.M. Murray, and P. O'Neill.

Int. Workshop on Polarized Partons at High Q^2 Region, Kyoto University, Kyoto, Japan, October 13-14, 2000.

- * STAR commissioning and prospects for the spin runs, L. Bland.
- Summary of the previous (August 3) meeting, S. Vigdor.

Meeting of the Division of Plasma Physics of the American Physical Society, Quebec City, Canada, October 15, 2000.

- ¶ † Electron plasma expanded by a tilted fast proton beam, R.E. Pollock, D.J. Bahr, Robert A. Kopenac, and D.S. Todd.

14th Int. Spin Physics Symposium, Osaka University, Osaka, Japan, October 16-21, 2000.

- Conventional and non-conventional medium effects in (p,p') reactions, E.J. Stephenson.
- * Extracting $\Delta G(x)$ from the $\vec{p}\vec{p} \rightarrow \gamma + \text{jet} + X$ reaction with the STAR detector at RHIC, S.W. Wissink.
- ¶ Implications for the πNN coupling constant from spin transfer measurements in pp elastic scattering at 200 MeV, S.W. Wissink.
- Precise determination of the spin-transfer coefficient $K_{NN'}$ for $\vec{n}\vec{p}$ elastic scattering at 187 MeV, S.W. Wissink.
- ¶ A search for non-conventional medium effects in (p,p') reactions, E.J. Stephenson and F. Sammarruca.
- ¶ Search for the charge symmetry breaking reaction $dd \rightarrow {}^4\text{He}\pi^0$, C. Allgower, V. Anferov, A.D. Bacher, G.P.A. Berg, B. Chujko, J. Doskow, R. Finlay, C.C. Foster, W. Fox, D. Friesel, U. van Kolck, V. Medvedev, G.A. Miller, H. Nann, P.V. Pancella, D. Patalahka, M.A. Pickar, A. Prudkoglyad, J. Rapaport, T. Rinckel, A. Smith, K. Solberg, H.M. Spinka, and E.J. Stephenson.
- * W^\pm production in polarized proton collisions with the STAR detector at RHIC, S.E. Vigdor.

16th Int. Conf. on the Application of Accelerators in Research and Industry, Denton, Texas, November 1-4, 2000 (AIP Conf. Proc. 576, New York, 2001).

- A CW RFQ injector for the IUCF cyclotron, D.L. Friesel, V. Anferov, and R.W. Hamm, p. 651.
- † Absolute Calibration of the in-beam proton polarimeter at IUCF, E.J. Stephenson, p. 575.
- Radiation effects facilities, dosimetry, and program at the Indiana University Cyclotron Facility, C.C. Foster, C.M. Berg, E.R. Hall, S.B. Klein, B. v. Przewoski, and K.M. Murray, p. 647.

Proc. of the 17th Winter Workshop on Nuclear Dynamics, Park City, UT, March 10-17, 2001

- *† Setting bounds on critical exponents with event-by-event analysis of nuclear fragmentation data, W. Bauer, M.K. Berkenbusch, L. Beaulieu, R. Lefort, R.G. Korteling, K. Kwiatkowski, L. Pienkowski, S. Pratt, A. Ruangma, V.E. Viola, and S.J. Yennello.

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- A current mode ion chamber for the $n+p \rightarrow D+\gamma$ parity violation experiment, William M. Snow, for the NPDG Collaboration, p. 70.
- * Decay characteristics of an excited projectile-like fragment in $^{106,114}\text{Cd}+^{98,92}\text{Mo}$ reactions at 50 MeV/A, R. Alfaro, B. Davin, L. Beaulieu, R.T. DeSouza, Y. Larochele, T. Lefort, V.E. Viola, H.S. Xu, R. Yanez, C.K. Gelbke, T.X. Liu, X.D. Liu, W.G. Lynch, A. vander Molen, R. Shomin, W.P. Tan, M.B. Tsang, A. Wagner, H.F. Xi, R.J. Charity, L.G. Sobotka, and A. Botvina, p. 161.
- * Isotope yield systematics from Cd+Mo reactions at $E/A=50$ MeV, H.S. Xu, B. Davin, R. Alfaro-Molina, R.T. De Souza, L. Beaulieu, Y. Larochele, T. Lefort, V.E. Viola, R. Yanez, T.X. Liu, X.D. Liu, W.G. Lynch, R. Shomin, W.P. Tan, M.B. Tsang, G. Verde, A. Wagner, H.F. Xi, C.K. Gelbke, R.J. Charity, and L.G. Sobotka, p. 161.
- Measurement of parity violating γ -ray asymmetries of polarized neutron capture in ^{35}Cl and ^{139}La , Christopher Blessinger, for the NPDG Collaboration, p. 71.
- * Nuclear temperature of 8 GeV/c negative pion and anti-proton on gold reactions, A. Ruangma, R. Laforest, E. Martin, E. Ramakrishnan, D.J. Rowland, E.M. Winchester, S.J. Yennello, L. Beaulieu, W.-C. Hsi, K. Kwiatkowski, T. Lafort, V.E. Viola, L. Pienkowski, R.G. Korteling, H. Breuer, S. Gushue, L.P. Remsberg, and B. Back, p. 161.
- Observation of higher-order snake depolarizing resonances in the IUCF Cooler Ring, B.B. Blinov, T. Kageya, A.D. Krisch, A.M.T. Lin, V.S. Morozov, D.W. Sivers, K. Yonehara, V.A. Anferov, P. Schwandt, and B. von Przewoski, p. 165.
- * A precision measurement of the n-D coherent scattering length, K. Schoen, T. Black, W.M. Snow, P. Huffman, M. Arif, H. Kaiser, D. Jacobson, and S. Werner, p. 70.
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- Deuteron polarimetry in the dedicated muon EDM experiment, E.J. Stephenson.

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- Non-oscillation neutrino physics on the booster, R. Tayloe.

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- Few-Nucleon Physics at IUCF: Past, Present and Not Too Much Future, J. Sowinski.

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- ¶ Design of a magnet system for a muon cooling ring experiment, S. Kahn, G. Hanson, P. Schwandt, V. Balbekov, R. Raja, and Z. Usubov.
- ¶ Dispersion suppression in the MPRI achromat beam line, V.A. Anferov, M. Ball, D.L. Friesel, and W.P. Jones.
- ¶ Feasibility study of storage ring based high gain FEL, K.M. Fung, S.Y. Lee, and K.Y. Ng.
- ¶ The Indiana University Midwest Proton Radiation Institute, V. Anferov, M. Ball, G.P. Berg, B. Broderick, J. Collins, G. East, D. Friesel, D. Jenner, W.P. Jones, J. Katuin, S. Klein, C. Nelson, N. Schreuder, Wm. Starks, and J. Self.
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- ¶ * A new relative proton polarimeter for RHIC, H. Huang, I. Alekseev, G. Bunce, N. Bruner, A. Deshpande, Y. Goto, D. Fields, K. Imai, M. Ishihara, V. Kanavets, K. Kurita, Z. Li, B. Lozowski, W. MacKay, G. Mahler, Y. Makdisi, S. Rescia, T. Roser, N. Saito, H. Spinka, D. Svirida, J. Tojo, D. Underwood, H. Wang, W. Zhang, and L. Zhao.
- Progress on the Midwest Proton Radiation Institute at Indiana University, D. Friesel.
- ¶ Resonance strength for the synchrotron Hamiltonian with RF phase modulation, Yunkai Zhang and S.Y. Lee.

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- † Search for a Three-Nucleon Force, H.O. Meyer.

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- A Measurement of the strange quark contribution to the nucleon spin via neutrino nucleon elastic scattering, R. Tayloe.

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- ¶ † An experiment to transfer angular momentum from a helical low energy proton beam to a trapped electron plasma, D.S. Todd and R.E. Pollock.

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- Antiprotons, Meson Resonances, and the Crystal Ball: A Possible Future Physics Program, C. Allgower.

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- Simultaneous polarization analysis of Zeeman splitting in polarized neutron reflectometry using a polarized ^3He neutron spin filter, D. Hussey, S. Fan, B. Neff, W.M. Snow, D. Rich, A.K. Thompson, T.R. Gentile, S.G.E. te Velthuis and G.P. Felcher.

Colloquia

E.J. Stephenson

- Charge Symmetry Breaking and the Search for the $d + d \rightarrow ^4\text{He} + \pi^0$ Reactions, University of Idaho, August 27, 2001.

Seminars

V.D. Derenchuk

- Polarized Beam for the IUCF Cooler Synchrotron, INR, Moscow, March 16, 2001.
- Polarized Beam for the IUCF Cooler Synchrotron, JINR, Dubna Russia, March 22, 2001.

W.W. Jacobs:

- Endcap EMC Project and Spin Physics at STAR/RHIC, JINR Laboratory for High Energy, Dubna, December 6, 2000.

R.E. Pollock

- Spinning Plasmas and Beams, IUCF REU, July 16, 2001.

R. Tayloe

- Investigating the spin structure of the nucleon with neutrino-nucleon elastic scattering, Indiana University, April 16, 2001.
- Nuclear and particle physics, Lebanon High School, Lebanon, Indiana, May 8, 2001.