

**SECTION II**  
**PUBLICATIONS, CONFERENCE PROCEEDINGS,**  
**INVITED TALKS AND THESIS TITLES**

## PUBLICATIONS

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Production of  $^7\text{Be}$  from a Heavy Ion Cyclotron: A New Tool for Wear Studies; M.L. Mallory

Commissioning Experience with the NSCL K1200 Superconducting Cyclotron; J. Nolen, T.A. Antaya, T.S. Kuo, F. Marti, B.M. Sherrill, A.F. Zeller and H.G. Blosser

Magnetic Channel Design for a 250 MeV Superconducting Synchrocyclotron; X.Y. Wu and M.M. Gordon

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Results Obtained for Heavy-Ion Reactions at Saturne; W. Trautmann, E. Berdermann, B. Berthier, C. Cerruti, C.K. Gelbke, J. Hubele, P. Kreutz, G.J. Kunde, S. Leray, R. Lucas, U. Lynen, U. Milkau, C. Ngt, C.H. Pinkenburg, J. Pochodzalla, G. Raciti, and H. Sann

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Epoxy Impregnated Solenoid Coil Training Dependency on Boundary Forces and Peak Field; T.A. Antaya, A.F. Zeller, J. DeKamp and K.A. Harrison

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Impact-parameter Dependence of Fragment Mass and Energy Distributions from Heavy-Ion Collisions; D. Horn, G.C. Ball, D. Cebra, T.E. Drake, A. Galindo-Uribarri, E. Hagberg, St. Howden, J. Karn, C. Ogilvie, L. Potvin, C. Pruneau, C. Rioux, C. St.-Pierre, A. Vander Molen, G.D. Westfall, J. Winfield, W.K. Wilson and G. Zwartz

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M3 Quenching in  $^{26}\text{Mg}$ ; K.K. Seth, R. Soundranayagam, A. Saha, C.W. de Jager, H. de Vries, H. Blok, G. van der Steenhoven, B.A. Brown and B.H. Wildenthal,

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Tests and Predictions of New Effective Interactions for the Of1p and Op Shells; W.A. Richter, M.G. van der Merwe, B.A. Brown and R.E. Julies

Octupole Deformation in the spdf Interacting Boson Model; D. Kusnezov.

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The Projectile Fragment Separator FRS at GSI; H. Geissel, P. Armbruster, K.-H. Behr, B. Blank, A. Brunle, H.G. Burkard, G.-G. Clerc, M. Chen, J.P. Dufour, B. Franczak, Y. Fujita, J.J. Gaimard, E. Hanelt, R. Kirchner, O. Klepper, B. Langenbeck, F. Nickel, K. Poppensieker, M.S. Pravikoff, E. Roeckl, D. Schardt, K.-H. Schmidt, Th. Schwab, H.J. Schott, B. Sherrill, K. Summerer, H. Wollnik, G. Munzenberg

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The NSCL Radioactive Beam Facility; B.M. Sherrill, W. Benenson, D. Mikolas, D.J. Morrissey, J.A. Nolen, J.A. Winger

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Study of Emission Patterns of Charged Particles Using a  $4\pi$  Detector; Y.D. Kim, M.B. Tsang, C.K. Gelbke, W.G. Lynch, N. Carlin, Z. Chen, R. Fox, W.G. Gong, T. Murakami, T.K. Nayak, T.M. Ronningen, H.M. Xu and F. Zhu, BAPS 34(1989)1826.

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Impact Parameter and Energy Dependence of Observables in Intermediate Energy Heavy Ion Reactions; M.B. Tsang, G.F. Bertsch, W.G. Lynch, M. Tohyama

Study of Reaction Filters and Multi-Fragmentation using a  $4\pi$  Detector; M.B. Tsang, Y.D. Kim, C.K. Gelbke, W.G. Lynch, N. Carlin, Z. Chen, R. Fox, W.G. Gong, T. Murakami, T.K. Nayak, R.M. Ronningen, H.M. Xu, L.G. Sobotka, D. Stracener, D.G. Sarantites, Z. Majka, V. Abenante, S.H. Griffin

Doubly-Decoupled Rotational Bands in Deformed Odd-Odd Nuclei; Wm.C. McHarris, W.-T. Chou and W.A. Olivier

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International Conference on Nuclear Reaction Mechanism, Calcutta, January 3-9, 1989

Heavy-Ion Charge-Exchange Reactions as Spin Probes; N. Anantaraman

International Symposium on Heavy Ion Research with Magnetic Spectrographs East Lansing, MI, January 4-8, 1989

Sensitivity of Intermediate-Energy Heavy-Ion Reactions to Optical Model Ambiguities; J.S. Winfield  
Plans for a Superconducting Spectrograph at the NSCL; A.Zeller

Heavy Ions as Isovector Spin Probes; S.M. Austin

Coulomb Excitation of Giant Resonances; G.F. Bertsch

Use of Spectrographs in Studying Exotic Products from Heavy Ion Reactions; W. Benenson

Les Houches Winter School, February 1989

Fragmentation and Nuclear Freezeout; W.G. Lynch

Workshop on the Next Generation of Detection Systems for Intermediate Energy Heavy Ion Collisions, Berkeley, CA, March 1989

The MSU  $4\pi$  Array and New Results; G. Westfall

The MSU Miniball; R. de Souza

Canadian Association of Physicists, Eastern Regional Nuclear Physics Division Meeting, Mont Sauter-Anne, Quebec, Canada March 17-19, 1989

#From Peripheral to Central Collisions at Intermediate Energy; C. Pruneau

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Medical Accelerator Projects at Michigan State University; H.G. Blosser

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Techniques for the Study of Short-Lived Nuclei : From the He Jet to Radioactive Beams; Wm.C. McHarris

Symposium in Nuclear Dynamics and Nuclear Disassembly, Dallas Texas, April 1989

Nonequilibrium Processes in Intermediate Energy Heavy Ion Reaction; W.G. Lynch

Directed collective Motion in Intermediate-Energy Heavy-Ion Collisions; C.A. Ogilvie

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Nucleus-Nucleus Collisions in the 1990's; W.G. Lynch

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New Results Using the MSU  $4\pi$  Array; G. Westfall

12th International Conference on Cyclotrons and Their Applications, Berlin, May 1989

Applications of Superconducting Cyclotrons; J. Nolen

Beam Diagnostic Developments at NSCL; F. Marti

NATO Advanced Study Institute Programme on the Nuclear Equation of State, Pefiscola, Spain, May 1989

High Energy Photons and Pions in Intermediate Energy Heavy Ion Reactions; W. Bauer

$4\pi$  Fragment Production at MSU and the Nuclear Equation of State; G. Westfall

Subthreshold Pion Production; W. Benenson

High-Energy Gamma-Ray and Electron-Positron Production in Heavy-Ion Collisions; J. Stevenson

Symposium on the occasion of the 40th Anniversary of the Nuclear Shell Model, Argonne National Laboratory, 25-27 May, 1989

Status and Future Directions of the Shell Model; B.A. Brown

Nuclear Chemistry Gordon Conference, New London, NH, May 1989

Large Amplitude Collective Motion; G.F. Bertsch

Telluride Workshop on Cluster Physics and Chemistry, May 1989

Alkali Metal Clusters; G.F. Bertsch

The XXIII Yamada Conference on Nuclear and Weak Process and Nuclear Structure, Osaka, Japan, 12-15 May, 1989

Comparison of Exact and QRPA Calculations for Double-Beta Decay; B.A. Brown

Nuclear Physics Gordon Conference, Tilton, New Hampshire, July 1989

Collective Flow and Entropy Production; G. Westfall

6th Nordic Meeting on Nuclear Physics, Kopervik, Norway, August 10-15, 1989

Collective Flow and Multi-fragment Emission in Intermediate Energy Nucleus-Nucleus Collisions; G. Westfall

Fragmentation Experiments at Intermediate Energies; C.K. Gelbke

International Nuclear Physics Conference, São Paulo, Brazil, August 20-26, 1989

Superconducting Cyclotrons for Nuclear Physics; J. Nolen

XII Workshop on Nuclear Physics Iguazu Falls, Argentina, August 28 - September 1, 1989

Doubly Decoupled Bands in Odd-Odd Nuclei : Experiment and IAFFA Calculations; Wm.C. McHarris

Semiclassical Quantization and the Classical Actions for Lie Algebras; A. Bulgac and D. Kusnezov

198th American Chemical Society National Meeting; Symposium on Exotic Nuclear Spectroscopy, Division of Nuclear Chemistry and Technology, American Chemical Society, Miami Beach, Florida, September 10-15, 1989

Theoretical Models for the Properties of Nuclei Far From Stability; B.A. Brown

Proton-Drip Line Studies via Fusion-Evaporation Reactions; M.F. Mohar

IBFFA Calculations for Odd-Odd Nuclei; W.T. Chou

Rotational Band Structure in Odd-Odd Re Nuclei; W.A. Olivier

Exotic Nuclear Spectroscopy -- Remembrance of Past, Future; Wm.C. McHarris

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Hot Nuclear Systems; W.G. Lynch

Information on the Nuclear Equation of State from Heavy Ion Collisions; W. Bauer

International School/Seminar on Heavy Ion Physics Joing Institutes for Nuclear Physics, Dubna, USSR, October 3-12, 1989

Heavy Ion Physics at NSCL: Progress and Prospects; J. Nolen

Workshop on Nuclear Structure of Light Nuclei Far From Stability-Experiment and Theory, Obernai, France, Nov. 27-29, 1989

Shell-Model Calculations for Exotic Nuclei; B.A. Brown

Symposium on the 10th Anniversary of Projectile Fragmentation, Dourdan, France, Dec. 1-4, 1989

Shell-Model Calculations for Exotic Nuclei; B.A. Brown

Momentum Distributions of Fragmentation Products; D.J. Morrissey

A Radioactive Beam Facility at the NSCL; B.M. Sherrill

Reports by non-MSU scientists of work done at NSCL is preceded by #.

THESIS TITLES

#Seung Yeong Cho (Purdue University); Target Residues from the Interaction of Copper with 15-45 MeV/u  $^{12}\text{C}$  Ions

Wen-Tsae Chou; Rotational Bands in  $^{176}\text{Re}$  and IBA Calculations for Odd-Odd Re Isotopes

Min-Zhuan Gong; Time-Dependent Density-Matrix Theory

David Mikolas; Studies of the Beta Decay of Light Projectile Fragments far from Stability

#Salem Shaheen (University of Michigan); The Production of Very-High-Energy Light Particles in Heavy Ion Reactions, E/A Less Than or Equal to 40 MeV/u

Chui Ling Tam; High Energy Photon Productions in Nuclear Reactions

Zu Qi Xie; The Effect of Space Charge Force on Beams Extracted from ECR Ion Sources