SECTION II

PUBLICATIONS, CONFERENCE PROCEEDINGS, INVITED TALKS AND THESIS TITLES
Publications

Annals of Physics


Nuclear Instruments and Methods


Nuclear Physics


The First Excited State in $^{29}\text{Al}$ and its Influence on $^{22}\text{Mg}(p,\gamma)^{23}\text{Al}$; M. Wiescher, J. Gorres, B. Sherrill, M. Mohar, J.S. Winfield and B.A. Brown, Nucl. Phys. **A484**, 90 (1988).


Physical Review B


Physical Review C


Low- and High-Spin Excited States in $^{139}$Pd; R. Aryacinejad and B. McHarris, Phys. Rev. C37, 1855 (1988).


Low- and High-Spin Excited States in $^{139}$Pr; R. Aryacinejad and Wm.C. McHarris, Phys. Rev. C37, 2220 (1988).


High Energy $\gamma$-rays from the $^{12}$C+$^{12}$C and $^{40}$Ar+$^{48}$Ti Systems at 15 MeV/nucleon; K. Hanold and D.J. Morrissey, Phys. Rev. C38, 165 (1988).


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**Physical Review D**


**Physical Review Letters**


**Physics Letters**


**Miscellaneous**


Abstracts and/or Titles of Talks at American Physical Society Meetings and Other Meetings and Conferences (1988)

Proceedings of the XVI International Workshop on Gross Properties of Nuclei and Nuclear Excitations
_Hirschegg, Austria, January 18-22, 1988_


Proceedings of the Winter Workshop on Nuclear Dynamics V
_Sun Valley, Idaho February 22-26, 1988_

Light Particle Correlations in Heavy-Ion Reactions; W. Bauer

Conference on High-Spin Nuclear Structure and Novel Nuclear Shapes
_Argonne, Illinois, April 13-15, 1988_


Spring APS Meeting
_Baltimore, Maryland, April 18-21, 1988.


Third International Conference on Nucleus-Nucleus Collisions
Saint-Malo, France, June 6-11, 1988

Signals of a Phase Transition in Nuclear Fragmentation; W. Bauer.

12C-Induced Transfer Reactions at Intermediate Energies; J.S. Winfield, E. Adamides, S.M. Austin, G.M. Crawley, C.A. Ogilvie, B. Sherrill, M. Torres, and G. Yoo.

Study of $^{12}$C-$^{12}$N and $^{12}$C-$^{12}$B Reactions at E/A = 70 MeV; N. Anantaraman; J.S. Winfield, S.M. Austin, E. Adamides, C. Djalali, J.A. Nolen, Jr., A. Gillibert, Z.W. Long, and W. Mittig.


Interferometry Measurements in Heavy-Ion Reactions; W.G. Lynch.

Proceedings of the International Conference on Contemporary Topics in Nuclear Structure Physics
Cocoyoc, Mexico, June 9-14, 1988

Isospin Nonconservation in Light Nuclei; B.A. Brown, p. 395.

Beta Decay of $^{18}$N to Alpha-Emitting States in $^{18}$O and a Search for Parity Violation in $^{18}$O; Z. Zhao, M. Gai, B.J. Lund, S.M. Rugari, D. Mikolas, B.A. Brown, J.A. Nolen Jr. and M. Samuel.


International Symposium on Heavy Ion Physics and Nuclear Astrophysical Problems
July, 1988

Heavy Ion Physics at the NSCL; S.M. Austin.

Fifth International Conference on Clustering Aspects in Nuclear and Subnuclear Systems
Kyoto, Japan, July 25-29, 1988

Levels in $^{16}$O Relevant to $^{12}$C(α, γ) Helium Burning Studied with $^{12}$C(7Li,γ) at E(7Li) = 70 and 101 MeV; F.D. Becchetti, M.L. Dowell, P.M. Lister, J.W. Janecke, A. Nadasen, and J.S. Winfield.

Nuclear Reactions, Primordial Nucleosynthesis and the Solar Neutrino Problem; S.M. Austin.

Clustering and Beta Delayed Particle Emission in Mass 9; D. Mikolas, B.A. Brown and L. Zhao.

Beta Decay of $^{18}$N to Alpha-Emitting States in $^{18}$O and a Search for Parity Violation in $^{18}$O; Z. Zhao, M. Gai, B.J. Lund, S.M. Rugari, D. Mikolas, B.A. Brown, J.A. Nolen Jr. and M. Samuel.


1988 Applied Superconductivity Conference
San Francisco, CA, August 21-25, 1988


Complex Fragments Emitted in Excited States; C.K. Gelbke.
A Review of Studies for the Variable Frequency Superconducting ECR Ion Source Project at MSU; T.A. Antaya.

Fall 1988 APS Meeting
Santa Fe, New Mexico, October 13-15, 1988


Damping of Giant Resonances in Time-Dependent Density Matrix Theory; M. Tohyama and M. Gong.

10th Conference on the Application of Accelerators in Research and Industry
Denton, Texas, November 7-9, 1988

Tribology Studies Implantation of $^7$Be in a Ceramic Test Sample; Wm. McHarris, M. Mallory, R. Ronningen, B. Sherrill, Y. Dardenne.

Compact Superconducting Synchrocyclotron Systems for Proton Therapy; H.G. Blosser.

Implanted $^7$Be for Wear Studies; M.L. Mallory.

Use of Multipole Magnetic Fields for Making Fields, for Making Uniform Irradiations with Charged Particles; B. Sherrill.

Commissioning Experience with the Largest Superconducting Cyclotron, the NSCL K800; J. Nolen.
Invited Talks

Workshop on Nuclear Structure at Finite Temperature, KVI
Groningen, January 13-15, 1988

Fluctuations at High Excitation Energy; G. Bertsch.

XVI International Workshop on Gross Properties of Nuclei and Nuclear Excitations
Hirschegg, Kleinwalsertal, Austria, January 18-22, 1988

Cascade Model; G. Bertsch.

Winter Workshop on Nuclear Dynamics V
February 22-26, 1988, Sun Valley, Idaho

Fluid Dynamical Model of Ultrarelativistic Heavy-Ion Collisions; L. Csernai, M. Gong, D.D. Strottman.
Pion Production at Intermediate Energies; W. Benenson.
High-Energy Gamma Ray Production in Heavy-Ion Collisions; J. Stevenson.

22nd Fysikans Palat
Jyvaskyla, Finland, March 1988

A Review of ECR Sources for Applications in Nuclear and Atomic Physics; T.A. Antaya.

Spring Meeting of the APS
Baltimore, Maryland, April 18-21, 1988

Superconducting Heavy Ion Cyclotrons -- Recent Achievements; H.G. Blosser.

Second International Spring Seminar on Nuclear Physics -- Shell Model and Nuclear Structure: Where Do We Stand?
May 16-20, 1988, Capri, Italy

Theoretical Implications of the Empirical Modifications to One- and Two-Body Operators in the sd-Shell Region; B.A. Brown.

Fifth Gull Lake Nuclear Physics Conference
Gull Lake, Michigan, May 23-28, 1988

Nuclear Stopping at 100 MeV/Nucleon -- A Multipole Analysis; W. Bauer.
Nuclear Fragmentation in Proton and Heavy-Ion Induced Reactions; W.G. Lynch.

Pion Production Below Threshold; W. Benenson.


Pre-Equilibrium Neutron Emission at Intermediate Energies; A. Galonsky.

Heavy Ion Physics at the NSCL; S.M. Austin.

Nuclear Reactions, Primordial Nucleosynthesis and the Solar Neutrino Problem; S.M. Austin.

Superconducting Cyclotron for Medical Application; H.G. Blosser.

A Review of Studies for the Variable-Frequency Superconducting ECR Ion Source Project at MSU; T.A. Antaya.

Heavy-Ion Charge Exchange as a Probe for Spin Strength; S.M. Austin.

Neutron Emission in Heavy-Ion Collisions; A. Galonsky.

Present Status and Prospects for Shell Model Calculations; B.A. Brown.

Subthreshold Pion Production; W. Benenson.
Pion Interferometry in Ultrarelativistic Collisions; G. Bertsch.
Complex Fragments Emitted in Excited States; C.K. Gelbke.

Superconducting Heavy-Ion Cyclotrons -- Recent Achievements; H. Blosser.

A Network Protocol for Data Acquisition at NSCL; R. Fox.

ECR Ion Source Status 1988; T.A. Antaya.

Operating Principles of Electron Cyclotron Resonance Ion Sources and a Survey of Current Areas of Development; T.A. Antaya.
ECR Ion Source Development for Super-Striped Positive Ions in Accelerator and Atomic Physics Applications; T.A. Antaya.
Commissioning Experience with the Largest Superconducting Cyclotron, the NSCL K800; J.A. Nolen Jr.
Tribology Studies: $^7$Be Implantation in a Ceramic Sample By Means of a Fragmented High-Energy $^{14}$N Beam; M.L. Mallory.

Use of Multipole Magnetic Fields for Making Uniform Irradiations; B. Sherrill.

**Symposium on Nuclear Physics**  
**Bombay, December 27-31, 1988**

Search for Exclusive Reaction Filters in Intermediate-Energy Heavy-Ion Collisions; N. Anantaraman.

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**Thesis Titles**

**Department of Physics (MSU)**

Two-Particle Correlations at Small Relative Momenta, Measured for the Reactions $^{14}$N+Au at E/A=35 MeV and $^{160}$+Au at E/A=94 MeV; Ziping Chen.

A Study of Statistical Equilibrium in a Nuclear System at Low Bombarding Energies; Jeong-Ho Lee.

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Theses granted by other institutions based on research performed at the NSCL

Target Fragmentation in the Interaction of 12-16 MeV/nucleon $^{32}$S with $^{165}$Ho; Coreen Casey.