

SECTION II

PUBLICATIONS, CONFERENCE PROCEEDINGS

INVITED TALKS AND THESIS TITLES

PUBLICATIONS

Nuclear Instruments and Methods

Method for the Study of Neutron Emission from Light Fragments in $^{14}\text{N} + ^{165}\text{Ho}$ Collisions at 35 MeV/u; F. Deak, A. Kiss, Z. Seres, G. Caskey, A. Galonsky, and B. Remington, Nucl. Instr. and Meth. A258 (1987) 67.

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Statistical Models with Fragment-Fragment Interactions and the Nuclear EOS; L.P. Csernai, G. Fai and G. Westfall.

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Operation of Liquid Helium Level Sensors at Elevated Pressures; A.F. Zeller, H. Laumer, J.A. Nolen.

International Workshop on the Theory of Heavy Ion Reactions, Budapest, Hungary, June 14-17, 1987.

Fluid Dynamical Scaling in Heavy Ion Reactions; L.P. Csernai.

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Excitations of Projectile-Like Fragments in Intermediate Energy Heavy-Ion Collisions; Z. Seres, G. Caskey, F. Deak, A. Galonsky, A. Kiss, and B. Remington, FIZIKA 19 (1987) 59.

International School of Physics "Enrico Fermi" Course on Trends in Nuclear Physics, Varenna, Italy, June 23-July 3, 1987.

Experimental Observables and the Nuclear Equation of State; L.P. Csernai.

Nuclear Collective Motion; G.F. Bertsch.

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August, 1987

E1 Polarizability of ${}^7\text{Li}$ and its Application to Big Bang Nucleosynthesis; T. Kajino, H. Toki,
S.M. Austin

10th International Conference on Magnet Technology, Boston, Massachusetts, September 21-25, 1987.

An Adjustable Permanent Magnet Focussing System for Heavy Ion Beams; A.F. Zeller, J.A. Nolen, S.
Tanaka, R.T. Swanson, and R.D. Hay.

Sixth International Symposium on Capture Gamma-Ray Spectroscopy; Olevuven, Belgium, August 31-September
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The Level Spectrum of ${}^{51}\text{V}$ and the Application of a New Effective Interaction to the Of ${}_{7/2} 1p_{3/2}$
Model Space; W.A. Richter, M.G. van der Merwe, W.J. Naude, J.A. Stander and B.A. Brown.

Interactions and Structures in Nuclei; University of Sussex, September 7-9, 1987.

The ${}^{98}\text{Y}(0^-) \rightarrow {}^{98}\text{Zr}(0^+) \beta$ -decay; J.A. Becker, E.K. Warburton and B.A. Brown.

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Progress with the Superconducting Cyclotron Neutron Therapy Facility for Harper-Grace Hospitals;
R.L. Maughan, H.G. Blosser, W.E. Powers, E.B. Blosser, G.F. Blosser, J. Vincent, G.A. Ezzel, C.G.
Orton and D.P. Ragan.

29th Annual Scientific Meeting of the American Society for Therapeutic Radiology and Oncology, Boston,
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A Simple Multi-rod Collimator for Producing Irregular Fields; R.L. Maughan, G.F. Blosser, E.B.
Blosser, H.G. Blosser, W.E. Powers.

TPI Workshop on High Temperature QCD and Relativistic Many Body Theory, Minneapolis, Minnesota,
October 8-10, 1987.

Collective Transverse Flow in High Energy Heavy Ion Collisions; L.P. Csernai.

Particle Collision Effects on Fusion Window Anomaly; M. Tohyama; BAPS 32 (1987) 1567.

Beta Decay of ^{18}N to Alpha Decaying States in ^{18}O ; Z. Zhao, M. Gai, B.J. Lund, S.M. Rugari, D. Mikolas, B.A. Brown, J.A. Nolen Jr., M. Samuel, BAPS 32 (1987) 1579.

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Scaling Properties of the Collective Flow; L.P. Csernai.

Workshop on the Proposal for a National Gamma Ray Facility, Oak Ridge, Tennessee, November 19-21, 1987.

GT Strength; P. Arve.

Transition from Order to Chaos; P. Arve.

International Conference on ECR Ion Sources and their Applications, East Lansing, Michigan, November 16-18, 1987.

A High Temperature Oven Stage for ECR Ion Sources; D.P. Sanderson, T.A. Antaya, Z.Q. Xie.

NSCL ECR Facilities 1987 Status; T.A. Antaya, L. Gneiting, W. Nurnberger, D.P. Sanderson, Z.Q. Xie.

The Advanced Superconducting ECR Project at NSCL; T.A. Antaya, H.G. Blosser, J.M. Moskalik, J.A. Nolen and A.F. Zeller.

The Design of a Compact Two Stage (COMPACT PLUS) ECR Ion Source; D.K. Bose and T. Antaya.

Preliminary Report on a 3D Extraction Code for ECR Sources; Z.Q. Xie, and T.A. Antaya.

Optics of a 90° Analyzing Magnet; J.A. Nolen Jr., S. Tanaka, A. Zeller, and N. Bhattacharya.

7th Topical Conference on Application of Radiofrequency Power to Plasmas.

Highly Charged Ion Production in ECRH Plasma Sources for Heavy-Ion Accelerators and Other Applications; T. Antaya, AIP Conf. Proceedings 159 (1987) 37.

9th International Workshop on Rare-Earth Magnets, 1987.

Radiation and Temperature Effects of Sm-Co and NdFeB Magnets in Low Permeance Configurations; A.F. Zeller and J.A. Nolen, 157.

24th European Cyclotron Progress Meeting, Nice, France, 1987.

A Superconducting Cyclotron as an Economical and Reliable Neutron Source for Radiation Therapy; W.E. Powers, R.L. Maughan, C.G. Orton, D.P. Ragan, H.G. Blosser, E.B. Blosser, G.F. Blosser and R.J. Burleigh.

INVITED TALKS

Workshop on High Energy Heavy Ion Collisions and Quark Degrees of Freedom in Nuclei, Puri, India, January 2-15, 1987.

Nuclear Liquid Gas Phase Transition and Fragment Production in Heavy Ion Collisions; L.P. Csernai.

Reaction Mechanisms of the QCD Plasma Formation and Decay; L.P. Csernai.

International Symposium on Perspectives in Nuclear Physics, Madras, India, January 1987.

Temperature Measurements in Intermediate Energy Nucleus-Nucleus Collisions; N. Anantaraman.

Statistical Models of Fragment Production in Heavy Ion Collisions and the Effects of Microcanonical Statistics; L.P. Csernai and G. Fai

Conference on Changing Faces of Physics of Particles and Nuclei, Banaras, India, January 1987.

Gamow-Teller Excitations in Nuclei; N. Anantaraman.

Nuclear Physics Seminar, University of Illinois, January 1987.

High Energy Gamma Ray Production in Heavy Ion Collisions; J. Stevenson.

Nuclear Science Division Seminar, Lawrence Berkeley Laboratory, Berkeley, California, March 1987.

Two Particle Correlations in 40 MeV/nucleon C- and N-induced Reactions; G.D. Westfall.

High Energy Gamma Ray Production in Heavy Ion Collisions; J. Stevenson.

Symposium on Central Collisions and Fragmentation Processes, National Meeting of the American Chemical Society, Denver, Colorado, April 5-10, 1987.

Fragmentation and the Emission of Particle Unstable Complex Nuclei; W.G. Lynch.

The MSU 4π Array, G.D. Westfall.

Mean Field Dynamics for Non-Equilibrium Particles Emission; M.B. Tsang.

High Energy Gamma Ray Production in Heavy Ion Collisions; J. Stevenson.

Workshop on 4π Detection Systems, Toronto, Canada, April 1987.

The MSU 4π Array; G.D. Westfall.

Gull Lake Meeting, Gull Lake Michigan, May 1987.

High Energy Gamma Ray Production in Heavy Ion Collisions; J. Stevenson.

Colloque de Ganil, Ganil, France, May 1987.

Pion Production with Multiplicity Selection; W. Benenson.

International Symposium on Collective Phenomena in Nuclear and Subnuclear Long-Range Interactions in Nuclei, Bad Honnef, West Germany, May 4-7, 1987.

Collective Flow and Statistical Decays in Intermediate Energy Heavy Ion Collisions; C.K. Gelbke.

Workshop on Heavy Ion Reactions at the KVI, Groningen, The Netherlands, May 6-9, 1987.

Probing the Non-equilibrium Initial Stages of Nucleus-Nucleus Collisions; W.G. Lynch.

Adriatic Nuclear Physics Conference, June, 1987.

Energetic Emissions from Heavy Ion Reactions; W. Benenson.

International Topical Meeting on Intermediate Energy Nuclear Physics at Balatonfüred, Hungary, June 8-13, 1987.

Temperatures Determined from Neutron Emission in Nucleus-Nucleus Collisions; A. Galonsky.

Gordon Research Conference on Nuclear Structure, held at Tilton, New Hampshire, August 10-14, 1987.

Complex Particle Emission in Intermediate Energy Nucleus-Nucleus Collisions; C.K. Gelbke.

6th International Symposium on Capture Gamma-Ray Spectroscopy; Leuven, Belgium, August 31 - September 4, 1987.

Photoneutron Studies of the Giant Isovector Quadrupole Resonance in Calcium, Cadmium, and Lead; T. Murakami, C.A. Gossett, I. Halpern, D.P. Rosenzweig, D.W. Storm, D.R. Tieger, P.T. Debevec, A. Fretag, L.J. Morford, S.A. Wender, and D.H. Dowel.

19th Masurian Summer School of Nuclear Physics, Mikolayki, Poland, September 7, 1987.

ECR Ion Source Lectures; T. Antaya.

Europhysics Study Conference: "From Cold to Hot Nuclei", held at Varna, Bulgaria, September 13-18, 1987.

Dynamical and Statistical Aspects of Intermediate Energy Heavy Ion Collisions; C.K. Gelbke.

1st Topical Meeting on Giant Resonance Excitations in Heavy-Ion Collisions, Legnaro, Italy, September 21-25, 1987.

Heavy Ion Reactions as Probes for Spin Strength; N. Anantaraman.

Recent Developments in Subthreshold Pion Production; W. Benenson.

APS Fall Meeting of the Division of Nuclear Physics, New Brunswick, New Jersey, September 1987.

Probing Nuclear Systems under Extreme Conditions Through Collisions Between Complex Nuclei, W.G. Lynch, BAPS 32 (1987) 1540.

Collisional Dynamics and Non-Equilibrium Particle Emission in Heavy Ion Reactions; M.B. Tsang.

Physics Department Colloquium State University of New York at Stony Brook, October 21, 1987.

ECR Sources - The Wonder Source; T. Antaya.

8th High Energy Heavy Ion Study, Berkeley, California, November 16-20, 1987.

Experimental Overview of Temperature Measurements at Intermediate Energies; C.K. Gelbke.

Meeting of S.E. Section of the American Physical Society, Nashville, Tennessee, November 23-25, 1987.

New Facilities and New Directions in Heavy Ion Physics at MSU; S.M. Austin, BAPS 32 (1987) 2133.

Texas A&M Symposium on Hot Nuclei, College Station, Texas, December 7-10, 1987.

Hot or Cold Fragmentation?; C.K. Gelbke.

Production of Energetic Pions and Gammas in Heavy Ion Collisions; W. Benenson.

THESIS TITLES - (MSU)

Department of Physics

Ph.D. Theses

Neutrons in Coincidence with Intermediate Mass Fragments at Large Angles from $^{14}\text{N}+\text{Ag}$ Reactions at 20 and 35 MeV/Nucleon; Charles Bloch.

Angular Coorelation Near the Fermi Energy; Dan Fox.

Streamer Chamber Study of Intermediate-Energy Nuclear Collisions with CCD Cameras; Silvana Angius.

High-Energy Gamma Rays in Heavy Ion Collisions; Anna Lampis.

K500 Related Theses Granted by Other Institutions

Mechanismes de Reactions de Fragmentation aux Energies Intermediaires; Claude Pruneau.