INSTITUTE COLLOQUIA AND SEMINARS

April 1, 2024 - March 31, 2025

<u>2024</u>

April 1	Dr. Xiao-Dong Tang, Institute of Modern Physics, Chinese Academy of Sciences Lanzhou, China	*The $^{12}C+^{12}C$ Fusion Reaction at Stellar Energies*
April 2	Professor Anatoli Afanasjev, Department of Physics and Astronomy, Mississippi State University Starkville, Mississippi 39759	*Nuclei at the Extremes of Charge and Isospin: Covariant Density Functional Theoretical Analysis*
April 9	Dr. Robin Smith, Senior Lecturer in Physics, Sheffield Hallam Univeristy, Howard St, Sheffield City Centre, Sheffield S1 1WB, United Kingdom	*Nuclear Structure and Astrophysics with an Optical TPC Detector and Gamma Beams*
April 16	Dr. Matt Gott, Group Leader, Stable Isotope Materials and Chemistry Enrichment Science and Engineering Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37830	*Enriched Isotopes of All Shapes and Sizes: A Look at the Stable Isotope Target Laboratories at Oak Ridge National Laboratory*
April 16	Dr. Smarajit Triambak, Professor of Physics, University of the Western Cape, Private Bag X17 Bellville 7535 Republic of South Africa	*Spectroscopic Investigations in the sd-shell and Beyond - Select Examples and Future Possibilities*
May 10	Dr. Jamie Karthein, NSF Asend Postdoctoral Fellow, Center for Theorectical Physics 77 Massachusetts Ave, Cambridge, Massachusetts 02139	*The Nature of Strongly-interacting Matter from QCD Thermodynamics*
May 28	Dr Tetsuya K. Sato, Advanced Science Research Center Japan Atomic Energy Agency (JAEA) 2-4 Shirakata, Tokai-mura, Naka-gun, Ibaraki 319-1195, Japan	*Current Status of Heavy and Transactinide Chemistry Research at JAEA*

July 9	Mr. Scott Carmichael, Graduate Student, University of Notre Dame, Notre Dame, Indiana	*^{58}Ni(^{3}He,t)^{58}Cu Measurements to Constrain the Astrophysical Rate of ^{57}Ni(p,γ)^{58}Cu*
July 12	Mr. Wilson Lin, Graduate Research Assistant, University of Wisconsin, Madison, Wisconsin 53706	*Applications of Irradiated Iron Targets: From Cross Sections to Redox chemistry*
July 23	Dr. Stefan Typel, Researcher, Technical University of Darmstadt, Institute for Nuclear Physics, Darmstadt, Hessen, Germany	*New Relativistic Energy Density Functional with Tensor Couplings for Nuclei and Compact Stars*
August 5	Dr. Mike Zach, Senior Materials Processing Researcher, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37831	*Stable Isotope Materials and Chemistry at Oak Ridge National Laboratory*
August 6	Rachel Shaffer Graduate Student, CENTAUR Postdoc Candidate, Louisiana State University, Baton Rouge, Louisiana 70803	*Reconstructing the Low-Lying Resonances of ^{9}B*
August 20	Dr. Ragnar Stroberg Assistant Professor, Department of Physics and Astronomy, University of Notre Dame Notre Dame, Indiana 46556	*The ab initio Revolution in Nuclear Physics*
August 29	Mr. Sam Porter, Ph. D. Student, University of Notre Dame, Notre Dame, Indiana 46556	*The St. Benedict facility: Precision Measurements of Nuclear Beta Decays*
September 3	Ms. Aeli Olson Graduate Research Assistant, University of Wisconsin - Madison Madison, Wisconsin 53706	*Antimony-119 for Radiopharmaceutical Therapy*

September 18	Dr. Jutta Escher Deputy Group Leader, Nuclear Data & Theory Group and the Nuclear Science Program, Lawrence Livermore National Laboratory, 7000 East Ave., Livermore, California 94550-9698	*Surrogate Nuclear Reactions: Advances and Opportunities for Indirect Measurements of Compound Reactions*
October 15	Dr. Henrik Roch, Post-Doctoral Research Fellow, Wayne State University 656 W Kirby St, Detroit, Michigan 48202	Applications of Gaussian Process Emulators in Nuclear Physics
October 22	Ellen O'Brien Ph.D. Staff Scientist Isotope Program, Los Alamos National Laboratory, Los Alamos, New Mexico 87545	*Engineering & Isotope Production: Navigating complex engineering challenges at the LANL Isotope Production Facility*
November 1	Professor David Jenkins Head of Nuclear Physics Group, University of York, Heslington, York YO10 5DD United Kingdom	*Carbon Burning in Massive Stars*
November 19	Dr. Rene Reifarth, Scientist, Los Alamos National Laboratory and Professor, Goethe University, Frankfurt, Germany	*Where Do We Come From – Ion Storage Rings for Nuclear Astrophysics*
December 10	Thanos Stamatopoulos Ph. D. Scientist, DICER Instrument Scientist P-3 Nuclear and Particle Physics and Applications Los Alamos National Laboratory, Los Alamos, New Mexico 87545	*A Story of Neutron Capture and Transmission: Constraining Neutron Capture Rates on Radionuclides with DICER at LANSCE*
December 12	Dr. Kevin Insik Hahn, Director, Center for Exotic Nuclear Study (CENS), Institute for Basic Science (IBS), Daejeon, Korea	*Research Activities at CENS and Status of RAON*

2025

January 14	Khang Pham, Graduate Student, Louisiana State University, Louisiana State University Baton Rouge, LA 70803	*Measurement of ^{19}Ne Excited States Relevant to the $^{18}F(p,\alpha)^{15}O$ Reaction in Classical Novae*
January 28	Andrew Sanchez Temporary Professional Aide, Facility for Rare Isotope Beams Michigan State University East Lansing, Michigan 48824	*Proton and Neutron Contributions for Cross-Shell Excitations Near Doubly Magic ^{40}Ca Studied by Lifetime Measurements of Mirror Transitions*
February 3	Daniel Lay, PH. D. Student, Facility for Rare Isotope Beams (FRIB), Michigan State University, East Lansing, Michigan	*Novel Computational Approaches for Nuclear Fission Theory*
February 6	Professor Su Houng Lee, 47, Donggyo-ro 17an-gil, Mapo-gu, Seoul, Republic of Korea	*The Inevitable Quark Three-Body Force and Its Implications for Exotic States*
February 6	Brooke Rickey, Doctoral Candidate, Facility for Rare Isotope Beams (FRIB) Michigan State University, East Lansing, Michigan 48824	*Investigating the Possible Halo Structure in ^{23}Al and ^{22}Al*
February 18	Andrew Voyles, Assistant Research Engineer, University of California, Berkeley Berkeley, California 94720	*Target Fabrication for Isotope Production in the Berkeley Nuclear Data Program*
February 25	Dr. Sudarsan Balakrishnan Post-Doctorate Associate, Department of Physics and Astronomy, Rutgers University, New Brunswick, New Jersey 08854-8054	*GODDESS at FRIB: Studying $^{75}Ga(d,p\gamma)^{76}Ga$ with Radioactive Ion Beams to Investigate the i-process*
March 3	Eric Flynn, Ph. D. Student, Michigan State University, East Lansing, Michigan 48824	*Nuclear Fission and Tunneling Phenomena*

March 11	Zarif Rahman, Graduate Research Assistant, Facility of Rare Isotope Beam, Michigan State University, East Lansing, Michigan	*Extracting Electron-Capture Rates with (d,^{2}He) Reaction in Inverse Kinematics for Neutron Star Crusts*