INSTITUTE COLLOQUIA AND SEMINARS

April 1, 2023 - March 31, 2024

<u>2023</u>

April 5	Professor Alexander Volya, Department of Physics Florida State University Tallahassee, Florida 32306	Order and Chaos in Mesoscopic Nuclear Physics
April 27	Dr. Siegfried S. Hecker, Professor of the Practice in Nuclear Engineering and Distinguished Faculty Fellow in the Center for Nuclear Security Science and Policy Initiatives (NSSPI), Texas A&M University, College Station, Texas 77843	Nuclear Solutions Institute Colloquium: North Korea's Sixty-Year Odyssey to a Nuclear Arsenal
June 7	Professor Jorge A. Munoz, Jr. Department of Physics, The University of Texas at El Paso (UTEP), El Paso, Texas 79968	Computational Thinking and Close Mentoring in Nuclear Physics Education and Training
June 20	Dr. Eric Aboud Critical Engineer and Postdoctoral Researcher, Lawrence Livermore National laboratory, Livermore, California 94550-9234	Integral Experiments for Nuclear Criticality at Lawrence Livermore National Laboratory
July 13	Dr. Kiana Setoodehnia, Research Staff Scientist, Duke University/Triangle Universities, Nuclear Laboratory Durham, North Carolina 27708	Current Status of SECAR: A Recoil Separator for Nuclear Astrophysics Experiments at FRIB
August 10	Dr. Patrick Steinegger, Assistant Professor of Radiochemistry, Laboratory of Inorganic Chemistry, Department of Chemistry and Applied Biosciences, ETH Zuich, Switzerland	The chemical characterization of superheavy elements ($Z > 103$)
August 15	Dr. Robert Eichler, Joint professorship PSI/UniBern University of Bern, Bern, Switzerland	Recent and future Swiss radionuclide production for science

August 31 David Kahl, Investigation of Nuclear Reactions with Magnetic Spectrometers September 5 Dr. Sylvie Hudan,, Impact of neutron excess on near-barrier fusion in $^{16-20}O + ^{12}C$ Senior Scientist, Indian University, Bloomington, Indiana 47405 September 11 Michael Story, Ph.D. The return of carbon ion radiotherapy to the Vice-Chair, Department of Radiation United States: Will this \$233M bet pay off? Oncology, Chief, Division of Molecular Radiation Biology, Director, Pre-clinical Radiation Core David A. Pistenmaa, M.D., Ph.D. Distinguished Chair in Radiation Oncology, University of Texas, Southwestern Medical Center, Dallas, Texas 75390 October 10 Dr. George Zimba, Isospin breaking in the upper fp-shell nuclei: Post Doc, *In-beam spectroscopy of A* = 78 T = 1 nucleiFacility for Rare Isotope Beams *via recoil-double-β and recoil-β tagging* (FRIB) methods Michigan State University, East Lansing, Michigan 48824 October 12 Mr. Rahul Jain, Heating and cooling of accreting neutron star Graduate Research Assistant crusts Facility for Rare Isotope Beams Michigan State University, East Lansing, Michigan 48824 October 24 Janilee Benitez, Development of Electron Cyclotron Resonance Ion Sources at LBNL's 88-Inch Principal Engineering Associate, MARS-D Project Manager ECR Cyclotron Group, 88-Inch Cyclotron, Lawrence Berkeley National Laboratory,

October 26 Deepa Thomas, Assistant Professor,

The University of Texas at Austin,

Berkeley, California 94720

Austin, Texas 78767

Exploring QCD in Extreme Conditions

November 7 Dr. Cheuk-Yin Wong, On the question of quark confinement in the Distinguished Senior Physicist, QED interaction Oak Ridge National Laboratory (ORNL), Oak Ridge, Tennessee 37830 November 14 Professor Dean Lee, Nuclear Lattice Simulations for Nuclear Department of Physics, Structure and Thermodynamics Facility for Rare Isotope Beams (FRIB) Michigan State University, East Lansing, Michigan 48824 November 15 Professor Filomena Nunes. BAR: Bayesian Analyses of Reactions Department of Physics and Astronomy, Facility for Rare Isotope Beams, Michigan State University, East Lansing, Michigan 48824 Development of [99mTc]Tc- and [186Re]Re-November 20 Rebecca (Becca) Hoerres, Ph.D. candidate, tricarbonyl metal complexes with TACNbased chelators for radiopharmaceutical Department of Chemistry, The University of Missouri, applications Columbia, Missouri 65211 November 21 Dr. Jonathan Morrell, Understanding Pre-Equilibrium Physics for Post-doctoral Research Associate, Isotope Production Los Alamos National Laboratory, Los Alamos, New Mexico 87545 2024 January 10 Dr. Armand Bahini, Study of the isoscalar giant monopole Post-doctoral researcher. resonance (ISGMR) at iThemba LABS iThemba laboratory for Accelerator based Sciences (LABS), Somerset West 7129, South Africa January 17 Nine things every faculty and staff should Rajkumar Santra, know about title IX (and civil rights!) at Texas Visiting Fellow, Variable Energy Cyclotron Center (VECC), India A&M University January 23 S. Shahina, Stellar neutron sources for the s-process Ph.D. Candidate. nucleosynthesis University of Notre Dame, Notre Dame, Indiana 46556

Measuring the $^{15}O(\alpha, \gamma)^{19}Ne$ Reaction Rate in January 31 Tyler Wheeler, *Type I X-ray Bursts using* 20 *Mg \beta-decay* Graduate Research Assistant, Facility for Rare Isotope Beams, Michigan State University Laboratory, East Lansing, Michigan 48824 Locating the first $p_{1/2}$ - state in ¹³Be February 6 Xinyi Wang, Graduate Student, Michigan State University, East lansing, Michigan 48824 February 6 James DeBoer, measurement Another (α,n) from the Associate Research Faculty, University of Notre Dame, the ${}^{13}C(\alpha,n){}^{16}O$ University of Notre Dame, reaction Notre Dame, Indiana 46556 February 27 Dr. Paul Ellison, Cyclotron production, radiochemical Assistant Professor of Medical synthesis, and biological evaluation of theranostic radiopharmaceuticals Physics. School of Medicine and Public Health. Health Sciences Learning Center, University of Wisconsin, Madison, WI 53705 February 29 Nathaniel Pogue, LIAs - The Powerful Accelerators you have Accelerator Physics Group Leader, never heard of, that are enabling US Science National Security Engineering and Security Division (NSED) Lawrence Livermore National Lab (LLNL), Livermore, California 94550 March 5 Ab initio prediction of $\alpha(d,\gamma)^6$ Li and impact of Chloe Hebborn, the ⁶Li properties onto α -induced reactions of Assistant Professor, Facility for Rare Isotope Beams, astrophysical interest Michigan State University, East Lansing, Michigan 48824 March 12 Understanding the nucleosynthesis flow in Dr. Heshani jayatissa, Postdoctoral Researcher, type-I x-ray bursts using a direct Los Alamos National laboratory, measurement of an a-capture reaction on Los Alamos, New Mexico 87545 ^{22}Mg March 18 Probing the Evolution in Nuclear Structure Rebeka Lubna, Facility for Rare Isotope Beams, around N = 20Michigan State University, East Lansing, Michigan 48824

The Optical Potential: From Structure to March 19 Dr. Gregory Potel, Staff Scientist, Reactions and Back Again Lawrence Livermore National Laboratory, Livermore, California 94550-9234 From R&D to large scale production of a new March 25 Veronika Mocko, PET radionuclide Ce-134 Research Scientist, Los Alamos National Laboratory, Los Alamos, New Mexico 87545 March 27 Jonas Karthein, Unknown Electroweak Nuclear Properties Massachusetts Institute of From Single Molecular Ions Technology Cambridge, Massachusetts 02139