

**TALKS PRESENTED**  
**April 1, 2024 – March 31, 2025**

**2025**

*Measurement of photon-jet correlations in p+p and central Au+Au collisions at  $\sqrt{S_{NN}} = 200$  GeV by STAR, J. Tyler, Talk, American Physical Society Global Physics Conference, Anaheim, California (March 2025).*

*Modeling key reactions of light nuclei, A. Bonasera, Invited Talk, Key Reaction in Nuclear Astrophysics, ECT\*, Trento, Italy (February 2025).*

*How neutrons shape our universe and our civilization, A. McIntosh, Talk, Saturday Morning Physics, Texas A&M University, College Station, Texas (February 2025).*

*From Strosacker to Shipping Radionuclides: Producing At-211 for novel medical applications, L. McIntosh, Invited Talk, Hillsdale College, Hillsdale, Michigan (January 2025).*

*Clustering in atomic nuclei, G. Rogachev, Colloquium, GSI, Darmstadt, Germany (January 2025).*

**2024**

*Nuclear astrophysics with lasers, A. Bonasera, IQSE AMO QO seminar series, Physics Department, Texas A&M University, College Station, Texas (December 2024).*

*Progress on the Extraction of  $^{58}\text{Fe}$ 's Photon Strength Function with the DAPPER Array Using the Forward Method, M. Sorensen, Talk, APS DNP, Waikoloa, Hawaii (November 2024).*

*At-211 Production and Research at Texas A&M Cyclotron Institute, A. Pilot, Talk, Hippo Hullabaloo, College Station, Texas (November 2024).*

*Constraining neutron-induced fission cross sections using surrogate reactions with radioactive beams, A. Lestone, Talk LANL Fission FIESTA, Los Alamos National Laboratory, Los Alamos, New Mexico (November 2024).*

*Producing energy from fusion, A. Bonasera, Society for fusion science&engineering, Texas A&M University, College Station, Texas (November 2024).*

*Search for Toroidal Nuclear Resonances in the Cluster Disassembly of  $^{28}\text{Si}$ , A. McIntosh, Talk, Workshop on Particle Correlations and Femtoscopy, Toulouse, France (November 2024).*

*Nuclear Forensics of Americium-based Samples Using Intra-Elemental Isotopic Ratios, I. Haynes, Talk, Consortium for Nuclear Forensics 2024 Workshop, University of Florida, Gainesville, Florida (October 2024).*

*Nuclear Forensics Research at Texas A&M University, C. Folden III, Invited Talk, Consortium for Nuclear Forensics 2024 Annual Workshop, University of Florida, Gainesville, Florida (October 2024).*

*Searching For  $^{174}\text{Yb}$  and  $^{178}\text{Hf}$   $0^+$  states with two-neutron transfer reactions*, **J. Santucci**, [Talk](#), DNP 2024, Boston, Massachusetts (October 2024).

*Photoneutron Calibration Standard: extracting cross sections of GDR response in the heavy nucleus  $^{169}\text{Tm}$* , **B Wellons**, [Talk](#), DNP 2024, Boston, Massachusetts (October 2024).

*Experiments with the AGGIE Gas-Filled Separator at Texas A&M University*, **C. Folden III**, [Invited Talk](#), 2024 Fall Meeting of the APS Division of Nuclear Physics, Boston, Massachusetts (October 2024).

*Measuring the  $^{39}\text{K}(p,\gamma)^{40}\text{Ca}$  reaction with DRAGON*, **P. Adsley**, [Invited Talk](#), APS Division of Nuclear Physics, Boston, Massachusetts (October 2024).

*Direct low-energy measurement of the  $^{25}\text{Mg}(a,n)$  reaction via neutron spectroscopy*, **Shahina**, [Talk](#), APS Division of Nuclear Physics, Boston, Massachusetts (October 2024).

*New Visualization Technique of High-Spin Level Schemes: Double Helix Level Scheme of  $^{171}\text{Yb}$* , **N. Nica**, [Invited Talk](#), Division of Nuclear Physics, Boston, Massachusetts (October 2024).

*Development of The Detector Array for Photons, Protons, and Exotic Residues*, **A. McIntosh**, [Talk](#), Division of Nuclear Physics, Boston, Massachusetts (October 2024).

*Probing the origins of the chemical elements*, **P. Adsley**, [Invited Talk](#), Division of Nuclear Physics, Boston, Massachusetts (October 2024).

*Remembering Birger Back, Robert Vandenbosch and Victor Viola: pioneers in nuclear fission - Part 2*. **S. J. Yennello**, [Invited Talk](#), Division of Nuclear Physics, Boston, Massachusetts (October 2024).

*TAMU EVALUATION CENTER USNDP Report FY 2024*, **N. Nica**, [Invited Talk](#), US Nuclear Data Program Annual Meeting 2024, TUNL, Duke University, Durham, North Carolina (October 2024).

*Clustering in Nuclei - the present state of the art*, **G. Rogachev**, Colloquium, Mississippi State University, Mississippi Starkville, Mississippi (October 2024).

*Miscellanea on ENSDF Evaluation: Tools*, **N. Nica**, [Talk](#), US Nuclear Data Program Annual Meeting 2024, TUNL, Duke University, Durham, North Carolina (October 2024).

*Mesoscopic Phenomenological Model of Rotational Motion: Double Helix Level Scheme of  $^{171}\text{Yb}$* , **N. Nica**, [Talk](#), US Nuclear Data Program Annual Meeting 2024, TUNL, Duke University, Durham, North Carolina (October 2024).

*Radioisotopes production using lasers: from basic science to applications*, **M. Dias Rodrigues**, [Talk](#), 4<sup>th</sup> International Workshop on Proton-Boron Fusion, Frascati, Italy (October 2024).

*Medical Isotope Production with Cyclotrons*, **S.J. Yennello**, [Invited Talk](#), Joint IAEA-USA International School on Peaceful Uses of Nuclear Application: Advancing Human Health, Oak Ridge National Laboratory , Oak Ridge , TN (September 2024).

*Indirect experimental approaches to charged particle reactions in astrophysics*, **P. Adsley**, [Talk](#), NPA IX, TU Dresden, Dresden, Saxony, Germany (September 2024)

*Nuclear Data in CENTAUR 2, A. McIntosh, Talk, CENTAUR Site Review, Texas A&M University, College Station, Texas (September 2024).*

*Analyzing data acquired during the TexNeut commissioning experiment, A. Alafa, Talk, CENTAUR Site Review, Texas A&M University, College Station, Texas (September 2024).*

*Nuclear fusion reactions using lasers, A. Bonasera, Invited Talk, 37<sup>th</sup> European Conference on Laser Interaction with Matter (ECLIM 2024), Instituto Superior Técnico, Lisbon, Portugal (September 2024)*

*Signatures of Short-Range Correlations in Intermediate Energy Heavy Ion Collisions, K. Hagel, Invited Talk, XIIth International Symposium on Nuclear Symmetry Energy, GANIL, Caen, France (September 2024)*

*Using ChatGPT to Code in ROOT, Geant4, and More, A. Lestone, Talk, Brown Bag Luncheon, Cyclotron, College Station, Texas (August 2024).*

*Functionalized Detectors for Superheavy Element Homolog Chemistry Experiments, A. Kirkland, Talk, Nucleus-Nucleus 2024, Whistler, Canada (August 2024).*

*Heavy Element Research at Texas A&M University, C. Folden III, Invited Talk, 14<sup>th</sup> International Conference on Nucleus-Nucleus Collisions, Whistler, BC, Canada (August 2024).*

*Nuclear Forensics of Americium-based Samples Using Intra-Elemental Isotopic Ratios, I. Haynes, Talk, American Chemical Society Fall 2024 Meetings, 2024-08-21, Denver, Colorado (August 2024).*

*The ab initio revolution in low-energy nuclear physics, P. Adsley, Invited Talk, Cyclotron Colloquium, Texas A&M University Cyclotron Institute, College Station, Texas 77843*

*Search for toroids in excited nuclear materia, S.J. Yennello, Invited Talk, NUCLEUS NUCLEUS COLLisions, Whistler, Canada (August 2024).*

*Radiochronometric analysis of a historical  $^{226}\text{Ra}$  pigment sample for nuclear forensics, J. Garcia, Talk, American Chemical Society Fall 2024 Meetings, 2024-08-21, Denver, Colorado (August 2024)*

*DAPPER: A high efficiency array for measuring full gamma energy with charged particle coincidence, A. McIntosh, Invited Talk, Nucleus-Nucleus 2024, Whistler, BC, Canada (August 2024).*

*The Horizon-broadening Isotope Production Pipeline Opportunities (HIPPO) Program, L. McIntosh, Invited Talk, HIPPOmoot, Brookhaven National Laboratory, Upton, New York (August 2024).*

*Racing the Clock to Beat Cancer:  $^{211}\text{At}$  at Texas A&M, S.J. Yennello, Invited Talk, Low Energy Community Meeting, Knoxville, Tennessee (August 2024).*

*Update from Texas A&M University, C. Folden III, Invited Talk, Low-Energy Community Meeting, University of Tennessee, Knoxville, Tennessee (August 2024).*

*Cross Section Measurements for  $^{149}\text{Tb}$  Production, A. McIntosh, Invited Talk, TAMU HIPPOcampus, Texas A&M University, College Station, Texas (August 2024).*

*“Hot Stuff”: Producing At-211 for novel medical applications, L. McIntosh, Invited Talk, TAMU HIPPOcampus, Texas A&M University, College Station, Texas (August 2024).*

*Nuclear Data*, A. McIntosh, Invited Talk, CENTAUR Science Advisory Committee Meeting, Lawrence Livermore National Laboratory, Livermore, California (July 2024).

*Calculating Multiple-Scattering Corrections by Exploiting MCNP Forced Collisions (My Time at LANL)*, A. Alafa, Talk, CENTAUR Science Advisory Committee Meeting, Lawrence Livermore National Laboratory, Livermore, California.

*“Hot Stuff”: Producing At- 211 for novel medical applications*, L. McIntosh, Invited Talk, 27<sup>th</sup> International Conference on the Application of Accelerators in Research and Industry (CAARI) and the 55<sup>th</sup> Symposium of Northeastern Accelerator Personnel (SNEAP), Fort Worth, Texas (July 2024).

*Multi-Nucleon-Transfer and the production of Heavy Elements*, K. Hagel, Invited Talk, Exploring the heavy exotic neutron-rich nuclides via multinucleon transfer reactions, RIKEN, Japan (July 2024).

*Nuclear Clusters and Their Role in Nucleosynthesis*, G. Rogachev, Invited Talk, International Nuclear Astrophysics Summer School, Aci Trezza, Sicily, Italy (June 2024).

*State of the Art in the Experimental Nuclear Cluster Physics*, G. Rogachev, Invited Talk, Conference on State of the Art in Nuclear Cluster Physics (SOTANCP5), Hvar, Croatia (June 2024).

*Getting Astatine to Researchers*, L. McIntosh, Invited Talk, Society of Nuclear Medicine & Medical Imaging, Toronto, Canada (June 2024).

*Nuclear Forensics of Americium-based Samples Using Intra-Elemental Isotopic Ratios*, I. Haynes, Talk, DOE University Program Review, Texas A&M University, College Station, Texas (June 2024).

*Alpha Decaying Heavy Elements Produced in Multi-Nucleon Transfer Reactions of Heavy Nuclei*, K. Hagel, Invited Talk, FRIB Theory Alliance Topical Program The Path to Superheavy Isotopes, Michigan State University, FRIB, East Lansing, Michigan

*Could revisiting the principles of a level scheme bring new insight into high-spin physics?* N. Nica, Talk, 7<sup>th</sup> International Workshop of the Hellenic Institute of Nuclear Physics on Nuclear Structure, Astrophysics and Reaction Dynamics, University of Ioannina, Ioannina, Greece (June 2024)

*Dynamic production of electron-positron pairs in strong fields*, A. Bonasera, Invited Talk, 7<sup>th</sup> International Workshop of the Hellenic Institute of Nuclear Physics, Ioannina, Greece (May 2024).

*Recent Advances in Understanding of Clustering in Atomic Nuclei*, G. Rogachev, Invited Talk, Colloquium at Gumilev University, Gumilev University, Astana, Kazakhstan (May 2024).

*Recent Advances in Understanding of Clustering in Atomic Nuclei*, G. Rogachev, Invited Talk, Colloquium at Nazarbaev University, Nazarbaev University, Astana, Kazakhstan (May 2024)

*Experimental search for high-spin resonant states in collisions of  $^{28}\text{Si} + ^{12}\text{C}$  at 35 MeV/nucleon, using FAUST array*, R. Wada, Invited Talk, International workshop on Multi faces of Eos and Clustering, INFN-Catania, Catania, Italy (May 2024).

*Racing the Clock to Cure Cancer*, S.J. Yennello, Invited Talk, University of Oregon, Eugene, Oregon (May 2024).

*Search for toroids in excited nuclear material, S.J. Yennello, Invited Talk, Hellenic Institute of Nuclear Physics Workshop ( HINPw7), Ioannina, Greece (May 2024).*

*DOE Isotope Program Strategic Planning Meeting, S.J. Yennello, Invited Talk, Germantown, Maryland (April 2024).*

*Nuclear microphysics of neutron stars, core-collapse supernovae, and neutron star mergers, J. Holt, Invited Talk, Texas A&M Commerce Physics and Astronomy Colloquium, Commerce, Texas (April 2024).*

*Microscopic calculations of neutrino scattering and absorption in warm dense matter, J. Holt, Invited Talk, N3AS Seminar, College Station, Texas (April 2024).*

*Developing a New Visualization of High-Spin Level Schemes, N. Nica, Invited Seminar, Horia Hulubei National Institute of Physics and Nuclear Engineering, Bucharest, Romania (April 2024).*

*Data-Based Research Project: How to build a Level Scheme? N. Nica, Talk, 25<sup>th</sup> Technical Meeting of the International Network of Nuclear Structure and Decay Data Evaluators , International Atomic Energy Agency, Vienna, Austria (April 2024).*

*TAMU NSDD EVALUATION CENTER Report Oct 2022 - Apr 2024, N. Nica, Invited Talk, 25<sup>th</sup> Technical Meeting of the International Network of Nuclear Structure and Decay Data Evaluators, International Atomic Energy Agency, Vienna, Austria (April 2024).*

*Ion Trapping for CRES Events: A GOLIATH Upgrade to the He6-CRES Experiment, D. McClain, Talk, APS April Meeting 2024: Quarks to Cosmos, Sacramento, California (April 2024).*

*Plateau Correction in High Precision Half-Life Measurements, V. Iacob, Talk, APS April Meeting, April 3 - 6, 2024, Sacramento, California (April 2024).*

*Generative Modeling of Nucleon-Nucleon Interactions, J. Holt, Invited Talk, 2024 April APS Meeting, Sacramento (April 2024).*

*Exploring the structure of exotic nuclei and origin of the elements with advanced charged-particle and neutron detectors systems, G. Rogachev, Invited Talk, Eurica 2024 Nuclear Community Webinar, Schlumberger (SLB, a global multinational oilfield services company) (April 2024).*