TALKS PRESENTED April 1, 2022 – March 31, 2023

*The development of TexNeut and Spectroscopy of*¹⁰*Li using Isobaric Analogue States*, **D. Scriven**, **Talk**, Lawrence-Livermore National Lab, Livermore, California (March 2023).

Data Needs & Capabilities for TAMU: Capabilities for ¹⁴⁹Tb production, <u>A. McIntosh</u>, <u>Talk</u>, Workshop for Applied Nuclear Data Activities (WANDA), Washington D.C. (March 2023).

Exploring sub-barrier fusion reaction, <u>A. Bonasera</u>, <u>Talk</u>, Frontiers, http://imp.fudan.edu.cn/1002xshd/list.htm, zoom meeting, Shanghai, China (February 2023).

Photon Production in Fermi-Energy Heavy-Ion Collisions, <u>**T. Onyango**</u>, <u>**Talk**</u>, Stewardships Science Academic Programs Symposium , Santa Fe, New Mexico (February 2023).

Photon Strength Function of ⁵⁸*Fe Using DAPPER and The Oslo Method*, <u>A. Abbott</u>, <u>Talk</u>, 2023 Stewardship Science Academic Programs Symposium, Santa Fe, New Mexico (February 2023).

 β decay as a probe of new physics: an overview of the fundamental symmetries research at the CI, <u>**D**</u>. <u>**Melconian**</u>, <u>**Invited Seminar**</u>, UT Knoxville Physics Seminar, University of Tennessee Knoxville, Knoxville, Tennessee (February 2023).

Astatine and bismuth behavior in the presence of ionic liquids, <u>E. Tereshatov</u>, <u>Talk</u>, 5th International Conference on Ionic Liquids in Separation and Purification Technology, Scottsdale, Arizona (February 2023).

Neutron-upscattering enhancement of the triple-alpha process, **J. Bishop**, IReNA **Online Seminar Series**, Online (February 2023).

Photon strength function of ⁵⁸*Fe using DAPPER and the Oslo method*, <u>A. Abbott</u>, <u>Talk</u>, 2023 DOE Review Visit, Texas A&M University, College Station, Texas (January 2023).

Neutron-upscattering enhancement of the triple-alpha process, <u>J. Bishop</u>, <u>Talk</u>, ECT* Workshop on "Key Reactions in Nuclear Astrophysics", ECT*, Trento, Italy (December 2022).

Precision β *decay: nuclei*, <u>**D. Melconian**</u>, <u>**Invited Talk**</u>, Fundamental symmetries LRP Town Hall Meeting, University of North Carolina, Chapel Hill, North Carolina (December 2022).

Calculation of light nuclei sub-barrier fusion cross section in an imaginary time-dependent mean field theory, **A. Bonasera**, **Invited Talk**, Key Reactions in Nuclear Astrophysics – KRINA22, ECT*, Trento, Italy (December 2022).

Signatures of short-range correlations in intermediate energy heavy ion collisions, <u>K. Hagel</u>, <u>Invited</u> <u>Talk</u>, 22nd Zimányi Winter Workshop on Heavy Ion Physics, Wigner Research Center for Physics, Budapest, Hungary (December 2022).

Precision internal conversion coefficients measurements for US nuclear data program, <u>N. Nica</u>, <u>Talk</u>, NSAC Long Range Plan Town Hall Meeting on Nuclear Structure, Reactions and Astrophysics, Argonne National Laboratory, Lemont, Illinois (November 2022).

Technical developments for fundamental symmetry measurements, **D. Melconian**, **Invited Talk**, Nuclear Structure Town Hall Meeting, Argonne National Laboratory, Argonne, Illinois (November 2022).

Future indirect approaches at Texas A&M, **J. Bishop**, **Talk**, NSAC Long Range Plan Town Hall Meeting on Nuclear Structure, Reactions, and Astrophysics, Virtual (November 2022).

Texas A&M University US nuclear data program Texas A&M evaluation center report 2022, <u>N. Nica</u>, <u>Talk</u>, National Nuclear Data Center, Brookhaven National Laboratory, Upton, New York (November 2022).

Overview of radiochemistry at Texas A&M University, <u>E. Tereshatov</u>, <u>Talk</u>, LRC Seminar, Virtual, Paul Scherrer Institute, Villigen, Switzerland (November 2022).

Progress in Research, J. Mildon, Talk, TAMU, College Station, Texas (November 2022).

Development of a methodology for the radiochronometric analysis of a radium pigment sample for *nuclear forensics*, **J. Garcia**, **Talk**, Progress in Research, Texas A&M University, College Station, Texas (November 2022).

Graduate Program at Texas A&M University Cyclotron Institute, <u>L. McIntosh</u>, <u>Talk</u>, CAARI-SNEAP 2022, Denton, Texas (November 2022).

Investigating low energy heavy-ion response of sCVD diamond detectors, <u>A. Abbott</u>, <u>Talk</u>, 2022 CAARI-SNEAP, Denton, Texas (November 2022).

Undergraduate research at the Cyclotron Institute at Texas A&M, <u>L. McIntosh</u>, <u>Talk</u>, CAARI-SNEAP 2022, Denton, Texas (October 2022).

Radiation effects facility at the Texas A&M University Cyclotron Institute, <u>C. Parker</u>, <u>Talk</u>, CAARI-SNEAP 2022, Denton, Texas (October 2022).

Coarse graining of heavy-ion collisions at Fermi energy, **<u>T. Onyango</u>**, <u>**Talk**</u>, Division of Nuclear Physics American Physical Society, New Orleans, Louisiana (October 2022).

Investigating resonant state modification with a Coulomb trajectory model, <u>**T. Hankins**</u>, <u>**Talk**</u>, Division of Nuclear Physics (DNP), New Orleans, Louisiana (October 2022).

Toward the future: Upgrading the 6He-CRES experiment with an ion trap, **D. McClain**, **Talk**, 2022 Fall Meeting of the APS Division of Nuclear Physics, New Orleans, Louisiana (October 2022).

Neutron-upscattering enhancement of the triple-alpha process, **J. Bishop**, **Talk**. Fall 2022 Meeting of the APS Division of Nuclear Physics, New Orleans, Louisiana (October 2022).

Understanding globular cluster pollution through nuclear reactions, <u>**P. Adsley**</u>, <u>**Talk**</u>, APS DNP Meeting, New Orleans, Louisiana (October 2022).

Expanding RIB capabilities at the Cyclotron Institute: 3He-LIG production with an Isobar Separator LSTAR, **D. Melconian**, **Talk**, APS DNP, New Orleans, Louisiana (October 2022).

Apparent temperatures of neutron-poor and neutron-rich compound nuclei, <u>A. McIntosh</u>, <u>Talk</u>, Annual Meeting of the Division of Nuclear Physics of the American Physical Society, New Orleans, Louisiana (October 2022).

Horizon-broadening isotope production pipeline opportunities (HIPPO) program, <u>L. McIntosh</u>, <u>Talk</u>, 2022 Fall Meeting of the APS Division of Nuclear Physics, New Orleans, Louisiana (October 2022).

Educational impact of ARUNA labs, <u>L. McIntosh</u>, <u>Talk</u>, ARUNA Town Hall Meeting, New Orleans, Louisiana (October 2022).

Studying structure of ¹⁰Li by ⁹Li(p,p)⁹Li of T=2 isobaric analogue states in ¹⁰Be, <u>**D. Scriven**</u>, <u>**Talk**</u>, American Physical Society Division of Nuclear Physics, New Orleans, Louisiana (October 2022).

Evaluation issues, <u>N. Nica, Talk</u>, Technical Meeting of the Nuclear Structure and Decay Data Network, Australia National University, Canberra, Australia (October 2022).

TAMU NSDD evaluation center report 2021-2022, <u>N. Nica</u>, <u>Talk</u>, Technical Meeting of the Nuclear Structure and Decay Data Network, Australia National University, Canberra, Australia (October 2022).

Automated purification and study of fundamental properties of medical radioisotope Astatine-211 by solvent extraction from nitric acid media, <u>E. Tereshatov</u>, <u>Talk</u>, International Solvent Extraction Conference, Chalmers University of Technology, Göteborg, Sweden (September 2022).

Signatures of short-range correlations in collisions of 47 MeV/u projectiles, <u>K. Hagel</u>, <u>Talk</u>, NuSym22, X International Symposium on Nuclear Symmetry Energy, INFN Catania, Catania, Italy (September 2022).

Chromatography study of fundamental properties of medical radioisotope Astatine-211, <u>E. Tereshatov</u>, <u>Talk</u>, 33rd International Symposium on Chromatography, Budapest, Hungary (September 2022).

Understanding globular cluster pollution through nuclear reactions, <u>P. Adsley</u>, Talk, International Nuclear Physics Conference 2022, Cape Town, WC, South Africa (September 2022).

Steps forward in Astatine-211 production and chemistry at Texas A&M University, <u>L. McIntosh</u>, <u>Talk</u>, DOE Isotope Program Astatine-211 Users' Meeting, Knoxville, Tennessee (September 2022).

Dynamics of fusion in laser produced non-equilibrated plasmas, <u>A. Bonasera</u>, <u>Talk</u>, 2nd International Workshop on Proton-Boron Fusion, Acicastello, Italy (September 2022).

Astatine interaction with ion exchange and extraction chromatography resins in nitric acid media, <u>E.</u> <u>Tereshatov</u>, <u>Talk</u>, ACS Fall 2022, Chicago (August 2022).

Targetry advancements for Isotope production at Texas A&M, <u>L. McCann</u>, <u>Talk</u>, WTTC18, Whistler, BC, Canada (August 2022).

Calibrating DAPPER to measure photon strength function of ⁵⁸Fe using $(d,p\gamma)$ in inverse kinematics, <u>A.</u> <u>Abbott</u>, <u>Talk</u>, 2022 CENTAUR SAC Meeting, Lawrence Livermore National Laboratory, Livermore, California, (August 2022). *Metal sorption on functionalized silicon detectors for the future study of meitnerium chemistry*, <u>V.</u> <u>Zakusilova</u>, <u>Talk</u>, CENTAUR Scientific Advisory Committee Meeting, Lawrence Livermore National Laboratory (In-person, poster), Livermore, California (August 2022).

CENTAUR neutron detector update: TexNeut, **D. Scriven**, **Talk**, CENTAUR Scientific Advisory Committee Meeting, Lawrence-Livermore National Lab, Livermore, California (August 2022).

Coarse graining of heavy-ion collisions at Fermi energies, <u>**T. Onyango**</u>, <u>**Talk**</u>, Scientific Advisory Committee meeting for CENTAUR, Lawrence Livermore National Lab, Livermore, California (August 2022).

¹⁵⁵Eu fission product analysis, <u>I. Haynes</u>, <u>Talk</u>, Keepin Nonproliferation Sciences Program, Los Alamos National Laboratory, Los Alamos, New Mexico (August 2022).

ARUNA 2022 update, <u>P. Adsley</u>, <u>Talk</u>, Low-Energy Community Meeting, Argonne National Laboratory, Chicago, Illinois (August 2022).

Current status and future plans of super heavy element study at Texas A&M University, <u>E. Tereshatov</u>, <u>Talk</u>, Low Energy Community Meeting 2022, Virtual, Lemont, Illinois (August 2022).

Fission product analysis of ¹⁵⁵*Eu*, <u>I. Haynes</u>, <u>Talk</u>, Los Alamos National Laboratory C-NR Team Meeting, Los Alamos National Laboratory, Chemistry Division, Los Alamos, New Mexico (July 2022).

Balance function as a unique probe of the quark gluon plasma: experimental overview and outlook, <u>J.</u> <u>Pan</u>, <u>Talk</u>, WPCF 2022 – 15th Workshop on Particle Correlations and Femtoscopy, Facility for Rare Isotope Beams, East Lansing, Michigan (July 2022).

Alpha-cluster structure of ¹⁸Ne, DREB2022, Direct Reactions with Exotic Beams, <u>M. Barbui</u>, <u>Talk</u>, Santiago de Compostela, Spain (July 2022).

Nuclear astrophysics with Lasers, <u>A. Bonasera</u>, <u>Invited Talk</u>, The 11th European Summer School on Experimental Nuclear Astrophysics, laboratori nazionali del sud, Catania, Italy (June 2022).

Transfer reactions in nuclear astrophysics, <u>P. Adsley</u>, <u>Invited Talk</u>, INFN-LNS, Catania, Italy (June 2022).

Automation of astatine recovery from nitric acid media, <u>E. Tereshatov</u>, <u>Talk</u>, Horizon-broadening Isotope Production Pipeline Opportunities (HIPPO), Texas A&M University, College Station, Texas (June 2022).

Introduction to superheavy elements, <u>C. Folden III</u>, <u>Invited Talk</u>, Exotic Beam Summer School 2022, Argonne National Laboratory, Argonne, Illinois (June 2022).

Inclusive excellence: You can make a difference, <u>S. Yennello</u>, <u>Invited Talk</u>, Exotic Beam Summer School, University of Notre Dame, South Bend, Indiana (June 2022).

Developing a methodology for the radiochronometric analysis of radium pigments and paints for nuclear forensics, <u>J. Garcia</u>, <u>Talk</u>, 2022 University Program Review (UPR), Michigan League, Ann Arbor, Michigan (June 2022).

Alpha-cluster structure of ¹⁸Ne, M. Barbui, Cyclotron colloquium, Texas A&M University, College Station, Texas (May 2022).

Fundamental behavior of metals in the presence of non-conventional solvents, **E. Tereshatov**, **Talk**, The 19th Radiochemical Conference - RadChem 2022, Mariánské Lázně, Czech Republic (May 2022).

Metal adsorption on functionalized silicon detectors for the future study of meitnerium chemistry, <u>V.</u> <u>Zakusilova</u>, <u>Talk</u>, TASCA 22, 19th Workshop on Recoil Separator for Superheavy Element Chemistry & Physics, GSI (Virtual), Darmstadt, Germany (May 2022).

Extracting photon strength function of ${}^{58}Fe$ from ${}^{57}Fe(d,p\gamma){}^{58}Fe$ reaction using DAPPER, <u>A. Abbott</u>, <u>Talk</u>, 8th Workshop on Level Density and Gamma Strength, University of Oslo, Oslo, Norway (May 2022).

Heavy element research at Texas A&M University, <u>C. Folden III</u>, <u>Invited Talk</u>, 19th Workshop on a Recoil Separator for Superheavy Element Chemistry & Physics, Darmstadt, Germany (May 2022).