TALKS PRESENTED April 1, 2021 – March 31, 2022

Status of ¹²C+¹²C fusion and Trojan horse as invaluable tool to advance it, <u>A. Zhanov</u>, <u>Invited talk</u>, IReNA/ChETEC meeting on nuclear reaction measurements underground, Rome Global Gateway, Roma Italia (April 2021).

Chiral kinetic model study of chiral magnetic and vortical effects, <u>C.M. Ko</u>, <u>Invited talk</u>, Fudan University, Shanghai, China (February 2022).

Development of a methodology for the radiochronometric analysis of ²²⁶Ra-containing radiological samples for nuclear forensics, <u>J. Garcia</u>, <u>Talk</u>, ACS Spring 2022 National Meeting & Exposition, San Diego, California (March 2022).

Automation of astatine recovery from nitric acid media, <u>E. Tereshatov</u>, <u>Talk</u>, ACS Spring 2022 National Meeting & Exposition, San Diego, California (March 2022).

Metal adsorption on functionalized silicon detectors for the future study of meitnerium chemistry, <u>V.</u> <u>Zakusilova</u>, <u>Talk</u>, American Chemical Society Spring 2022, Bonding Through Chemistry, San Diego, California (March 2022).

Inclusive excellence: You can make a difference, <u>S.J. Yennello</u>, <u>Invited talk</u>, Argonne National Laboratory, Argonne, Illinois (March 2022).

Probing the equation-of-state with heavy ion collisions, **S.J. Yennello**, **Invited talk**, TRIUMF, Vancouver, Canada (March 2022).

Diving deep on the periodic table to find a treatment for cancer, **S.J. Yennello**, **Invited talk**, Simon Frasier University, Burnaby, Canada (March 2022).

Diving deep on the periodic table to find a treatment for cancer, **S.J. Yennello**, **Invited talk**, University of British Columbia, Vancouver, Canada (March 2022).

Diving deep on the periodic table to find a treatment for cancer, **S.J. Yennello**, **Invited talk**, University of Victoria, Victoria, Canada (February 2022).

Characterizing and correcting effects on measured excitation energies in DAPPER, <u>A. Abbott</u>, <u>Virtual</u> <u>Talk</u>, 2022 SSAP Symposium, College Station, Texas (February 2022).

Novel experiments with a TPC: beta-delayed charged-particle spectroscopy and neutron-induced reactions, <u>J. Bishop</u>, <u>Invited Talk</u>, IOP Nuclear Physics Group Colloquium, University of Birmingham (Remote), Birmingham, United Kingdom (February 2022).

Nuclear chemistry: Fundamental science serving society, **S.J. Yennello**, **Invited Talk**, International Atomic Energy Agency CUWiP, virtual (January 2022).

Neutron-upscattering enhancement of the triple-alpha process, **J. Bishop**, **Invited Talk**, Saint Mary's University (Remote), Halifax, Canada (January 2022) .

Status of ¹²C+¹²C fusion and Trojan horse as Invaluable tool to advance it, <u>A. Zhanov</u>, <u>Invited talk</u>, IReNA/ChETEC meeting on nuclear reaction measurements underground, Rome Global Gateway, Roma Italia (April 2021).

Probing the nuclear symmetry energy with rare isotope beams, <u>C.M. Ko</u>, <u>Invited talk</u>, Fudan University, Shanghai, China (September 2021).

Coalescence production of light nuclei in HIC, <u>C.M. Ko</u>, <u>Invited talk</u>, Fudan University, Fudan University, Shanghai, China (December 2021).

Developing isotope production capabilities with heavy-ion beams at Texas A&M University, <u>L.</u> <u>McIntosh</u>, <u>Talk</u>, The International Chemical Congress of Pacific Basin Societies 2021, Honolulu, Hawaii (December 2021).

Fast and efficient recovery of ²¹¹At at Texas A&M University: Gaining insight of at chemistry in the liquid phase, **E. Tereshatov**, **Talk**, Pacifichem 2021, College Station, Texas (December 2021).

Time-resolved equilibration: How to measure the motion of protons and neutrons on a subzeptosecond timeframe time-resolved equilibration: How to measure the motion of protons and neutrons on a subzeptosecond timeframe, <u>A. McIntosh</u>, <u>Invited Talk</u>, 21st Zimanyi School Winter Workshop on Heavy Ion Physics, Wigner Research Center for Physics (Zoom), Budapest, Hungary (December 2021).

The asymmetry dependence of temperatures measured in fusion-evaporation reactions and in multi-fragmentation reactions The asymmetry dependence of temperatures measured in fusion-evaporation reactions and in multi-fragmentation reactions, <u>A. McIntosh</u>, <u>Invited Talk</u>, 2021 International Workshop on the Multi-facets of EOS and Clustering (IWM-EC 2021), GANIL, Caen, France (November 2021).

High and low energy nucleon productions in intermediate heavy ion collisions, using AMD with Fermi boost and 3Body collision terms, **R. Wada**, **Invited Talk**, IWM-EC 2021: International workshop on Multi-facets of EOS and Clustering, GANIL, CAEN, France (November 2021).

 V_{ud} from superallowed nuclear β + decays: new high-precision experimental results, <u>V. Iacob</u>, <u>Talk</u>, 11th International Workshop on the CKM Unitarity Triangle (CKM 2021), (Virtual), Melbourne, Australia (November 2021).

TAMU NSDD CENTER report 2021, N. Nica, Talk, Nuclear Data Week(s) 2021 (CSEWG-USNDP-NDAG), Brookhaven National Laboratory, National Nuclear Data Center (NNDC) (Virtual), Upton, New York (November 2021).

Medical radioisotopes production studies: ⁶⁷Cu case, N. Nica, Talk, Nuclear Data Week(s) 2021 (CSEWG-USNDP-NDAG), Brookhaven National Institute, National Nuclear Data Center (NNDC) (Virtual), Upton, New York (November 2021).

Nuclear science serving society: Advances in ²¹¹At production at Texas A&M University, S.J. Yennello, Invited Talk, Massachusetts Institute of technology, Cambridge, Massachusetts (October 2021).

Evidence against the Efimov effect in ¹²C from spectroscopy and astrophysics, <u>J. Bishop</u>, <u>Talk</u>, 2021 Fall Meeting of the APS Division of Nuclear Physics, Virtual (October 2021).

Current capabilities in astatine-211 production at Texas A&M University, <u>L. McIntosh</u>, <u>Talk</u>, Division of Nuclear Physics, American Physical Society, Boston, Massachusetts (October 2021).

Probing the asymmetry dependence of the nuclear caloric curve in fusion-evaporation reactions, <u>A.</u> <u>McIntosh</u>, <u>Talk</u>, 2021 International Symposium on the Nuclear Symmetry Energy (NuSym21), Virtual (October 2021).

Evidence for the asymmetry dependence of the nuclear caloric curve in fusion reactions, <u>A. McIntosh</u>, <u>Talk</u>, Meeting of the Division of Nuclear Physics of the American Physical Society, Virtual (October 2021).

Probing a possible excited-state of tritium via the ⁶He(p,t) reaction with TexAT, <u>C. Parker</u>, <u>Talk</u>, 2021 Fall Meeting of the APS Division of Nuclear Physics, Virtual (October 2021).

Using DAPPER to measure ⁵⁸Fe Photon Strength Function via the Oslo method, <u>A. Abbott</u>, <u>Talk</u>, CENAUR LANL Visit, Los Alamos National Lab, Los Alamos, New Mexico (October 2021).

Development of the TexNeut array for basic science, <u>C. Parker</u>, <u>Talk</u>, CENTAUR-JINPA Neutron Detector Workshop, Virtual, College Station, Texas (September 2021).

From there and back again: perspectives of an Ohio graduate student and visitor, <u>C. Parker</u>, <u>Talk</u>, 50 Years of Discovery at the Edwards Accelerator Laboratory, Ohio University, Athens, Ohio (September 2021).

Impacts of neutron excess on equilibrating and equilibrated nuclear systems, <u>A. McIntosh</u>, <u>Talk</u>, Texas A&M University Cyclotron Institute, College Station, Texas (September 2021).

Characterization of thiolate self-assembled monolayers on gold-coated silicon chips for future detection of radioactive isotopes, <u>V. Zakusilova</u>, <u>Talk</u>, American Chemical Society Fall 2021, Resilience of Chemistry, Virtual, Atlanta, Georgia (August 2021).

Investigation of signatures of short-range correlations in intermediate energy heavy ion collisions, <u>K.</u> **Hagel**, **Talk**, Sherry Yennello Glenn Seaborg Award Symposium, Atlanta, Georgia (August 2021).

Thermodynamics, dynamics and equilibration, <u>A. McIntosh</u>, <u>Talk</u>, Glenn Seaborg award symposium in honor of Sherry Yennello, ACS Fall Meeting, Atlanta, Georgia (August 2021).

Fundamental science impacting society, <u>S.J. Yennello</u>, <u>Invited talk</u>, ACS meeting, Atlanta, Georgia (August 2021).

Using DAPPER to measure Photon Strength Functions via the Oslo Method, <u>A. Abbott</u>, <u>Talk</u>, ACS Seaborg Symposium, Georgia World Congress Center, Atlanta, Georgia (August 2021).

Non-conventional solvents for astatine and bismuth separation, **E. Tereshatov**, **Talk**, ACS Fall 2021, Atlanta, Georgia (August 2021).

Advancing research in Texas through experiments in medical isotope science, <u>L. McIntosh</u>, <u>Talk</u>, ACS Fall Meeting, Atlanta, Georgia (August 2021).

Advances in nuclear spectroscopy with TPCs, <u>J. Bishop</u>, <u>Talk</u>, Low-Energy Community Meeting, Virtual (August 2021).

Steps forward in astatine-211 production and chemistry at Texas A&M University, L. McIntosh, Talk, DOE Isotope Program Astatine-211 User Meeting, Knoxville, Tennessee (August 2021). Search for Bose condensation in nuclei, G. Rogachev, Invited talk, From quasi-classics to Bose condensation and everything in between, College Station (Virtual) (August 2021).

Ongoing experiments with TexAT: Neutron-induced, transfer, and elastic scattering reactions, <u>J. Bishop</u>, <u>Talk</u>, Low-Energy Community Meeting, Virtual (August 2021).

Recent experimental progresses in balance function measurements from ALICE and STAR experiments, <u>J.</u> <u>Pan</u>, <u>Talk</u>, Balance Function Workshop, Michigan State University, East Lansing, Michigan (August 2021).

New class of chemical compounds for studying medical radioisotopes and superheavy elements, <u>E.</u> <u>Tereshatov</u>, <u>Talk</u>, Promotion Seminar, Texas A&M University, College Station, Texas (August 2021).

Astatine production toward targeted alpha therapy, <u>S.J. Yennello</u>, <u>Invited Talk</u>, NSCL - MSU, East Lansing, Michigan (July 2021).

Diversifying physics via a nuclear science summer camp, <u>L. McIntosh</u>, <u>Talk</u>, 7th IUPAP International Conference on Women in Physics, Virtual (July 2021).

Geant4 Masterclass: simulation of TPCs, <u>J. Bishop</u>, <u>Invited talk</u>, University of Connecticut, LNS Avery Point, Groton, Connecticut (July 2021).

Clustering in light nuclei, Hoyle state and Efimov effect, G. Rogachev, Invited talk, Nuclear Physics at the Edge of stability, Virtual, Trento, Italy (June 2021).

Using trapped atoms and ions for fundamentally cool physics, **D. Melconian**, **Invited Talk**, REU seminars at the CI, Cyclotron Institute, Texas A&M University, College Station, Texas (june 2021).

Functionalized surfaces and oxidation states of on-line produced thallium, <u>E. Tereshatov</u>, <u>Talk</u>, TASCA 21, Darmstadt, Germany (June 2021).

Development of a neutron detector array for basic science: TexNeut, <u>C. Parker</u>, <u>Invited Talk</u>, ISR-1 Seminar, LANL, virtual (June 2021).

Towards measuring the Fierz interference parameter in 6 He β decay from a Penning trap using the CRES technique, **D. Melconian**, **Invited talk**, 2021 CAP Congress, Virtual, Canada (June 2021).

Direct and indirect measurements of charged-particle capture reactions, **G. Christian**, **Invited talk**, Canadian Association of Physicists Annual Congress, Virtual, Canada (June 2021).

TAMU NSDD evaluation center report 2021, <u>N. Nica</u>, <u>Talk</u>, Technical Meeting of the NSDD network (Virtual), Nuclear Data Services, IAEA Vienna, Vienna, Austria (May 2021).

Texas A&M US Nuclear DATA Program, N. Nica, Talk, HINPw6 – Hellenic Institute of Nuclear Physics; 6th International Workshop; Perspectives on Nuclear Physics; From Fundamentals to Applications, Hellenic Institute of Nuclear Physics, Athens, Greece (May 2021)

Precise branching ratio measurement for the superallowed β + decay of ³⁴Ar, <u>V. Iacob</u>, <u>Talk</u>, 6th Workshop of The Hellenic Institute of Nuclear Physics (HINPw6), (Virtual), Athens, Greece (May 2021).

Calculation of the ¹²C+¹²C sub-barrier fusion cross section in an imaginary time-dependent mean field theory, **A. Bonasera**, **Invited talk**, HINPw6 workshop, Athens, Greece (May 2021).

CENTAUR and LANSCE synergistic science, <u>S.J. Yennello</u>, <u>Invited talk</u>, LANSCE Futures Spring Workshop 2021: Nuclear Science, LANL, Virtual, Texas (May 2021).

Preparing DAPPER to measure Photon Strength Functions, <u>A. Abbott</u>, <u>Talk</u>, 2021 CENTAUR Review, Virtual, College Station, Texas (April 2021).

About difficult evaluation decisions: a case study, N. Nica, Talk, ENSDF 2021, National Nuclear Data Center, Brookhaven National Laboratory, Upton, New York (April 2021).

Normalizing flows for microscopic calculations of the equation of state, **J. Holt**, **Invited talk**, Nuclear forces for precision nuclear physics, Institute for Nuclear Theory, Seattle, Washington (April 2021).

Identification of multinucleon transfer products with short-lived daughter nuclei, <u>A. Hood</u>, <u>Talk</u>, American Physical Society, Online, Virtual (April 2021).

Constraining the nonanalytic terms in the isospin-asymmetry expansion of nuclear equation of state, <u>P.</u> <u>Wen</u>, <u>Talk</u>, APS April Meeting 2021, College Station, Texas (April 2021).

Influence of Z and N on fusion-evaporation cross sections for heavy element synthesis, <u>C. Folden III</u>, <u>Invited talk</u>, APS Virtual April Meeting, College Park, Maryland (April 2021).

Experimental tests of isospin symmetry breaking in superallowed beta decay, <u>V. Iacob</u>, <u>Talk</u>, APS Virtual April Meeting, College Park, Maryland (April 2021).

Isotope production capabilities at Texas A&M University, <u>L. McIntosh</u>, <u>Talk</u>, APS Virtual April Meeting, College Park, Maryland (April 2021).

Response functions for hot and dense nuclear nuclear matter from chiral nuclear forces, <u>E. Shin</u>, <u>Talk</u>, APS Virtual April Meeting, College Park, Maryland (April 2021).

Progress in the development and characterization of position- and n/γ-discriminating neutron detector modules, **C. Parker**, **Talk**, APS Virtual April Meeting, College Park, Maryland (April 2021).

Characterization of 1-(11-mercaptoundecyl)imidazole self-assembled monolayers on gold-coated silicon chips, <u>V. Zakusilova</u>, <u>Talk</u>, American Chemical Society Spring 2021, Macromolecular Chemistry: The Second Century, Virtual, San Antonio, Texas (April 2021).

Smashing gold on gold: producing and identifying trans-target multinucleon transfer products, <u>A. Hood</u>, **Talk**, Texas Section of the APS, Texas A&M University at Corpus Cristi, Virtual, Texas (April 2021).

Influence of Z and N on the synthesis of heavy elements in fusion-evaporation reactions, <u>C. Folden III</u>, <u>Invited talk</u>, ACS Spring 2021 Virtual Meeting & Expo, Washington, DC (April 2021).

Conventional solvents for a tatine and bismuth separation, <u>E. Tereshatov</u>, <u>Talk</u>, ACS Spring 2021, Virtual, College Station (April 2021).

Normalizing flows for microscopic calculations of the equation of state, <u>J. Holt</u>, <u>Invited talk</u>, Nuclear Physics Journal Club, University of Illinois Urbana Champaign, Urbana, Illinois (April 2021).