

TALKS PRESENTED
April 1, 2017 – March 31, 2018

*50 years of research at the Cyclotron Institute, **J.B. Natowitz, Invited Seminar**, 50 Years of Beam Seminar Series, Cyclotron Institute, Texas A&M University, College Station, Texas (December 2017).*

*50 years of research at the Cyclotron Institute, **D.H. Youngblood, Invited Seminar**, 50 Years of Beam Seminar Series, Cyclotron Institute, Texas A&M University, College Station, Texas (December 2017).*

*Precise test of internal-conversion theory: α_K measurements for transitions in nine nuclei spanning $45 \leq Z \leq 78$ **J.C. Hardy, Invited talk, ICRM2017**, the 21st International Conference on Radionuclide Metrology, Buenos Aires, Argentina (May 2017).*

*The current evaluation of $|V_{ud}|$ and the top-row test of CKM matrix unitarity **J.C. Hardy, Invited talk**, Solvay workshop on Beyond the Standard Model with Neutrinos and Nuclear Physics, Brussels, Belgium (November 2017).*

*The current evaluation of $|V_{ud}|$ and the role played by radiative corrections, **J.C. Hardy, Invited talk**, the Workshop on the Electroweak Box, Amherst Center for Fundamental Physics, Amherst, Massachusetts (September 2017).*

*Testing CVC and CKM unitarity via superallowed nuclear beta decay, **J.C. Hardy, Invited talk**, the XXXV Mazurian Lakes Conference on Physics, Piaski, Poland (September 2017).*

*Testing the Standard Model with superallowed nuclear beta decay, **J.C. Hardy, Invited talk**, 50 years of beam symposium, Texas A&M University, College Station, Texas (November 2017).*

*Superallowed beta decay of ^{26}Si : A sensitive test of isospin symmetry-breaking corrections, **Miguel Bencomo**, the International conference on Advances in Radioactive Isotope Science (ARIS), Keystone, Colorado (May 2017).*

*Progress report of precision internal conversion-coefficient measurements with transitions in ^{127}Te , ^{125}Te and ^{103}Rh , **N. Nica**, the 22nd Technical Meeting of the NSDD network, Lawrence Berkeley Nuclear Laboratory, Berkeley, California (May 2017).*

*Progress report of precision internal conversion-coefficient measurements with transition in ^{103}Rh , **N. Nica**, the US National Nuclear Data Week 2017, NDAC meeting, Brookhaven National Laboratory, Upton, New York (October 2017).*

*Study of astrophysical $\alpha + \text{Ne}$ reaction using alpha transfer with TIARA and MDM spectrometer, **Shuya Ota**, the 2017 Fall Meeting of the APS Division of Nuclear Physics, Pittsburgh, Pennsylvania (October 2017).*

*Constraining the astrophysical $^{23}\text{Mg}(p,\gamma)^{24}\text{Al}$ reaction rate using the $^{23}\text{Na}(d,p)^{24}\text{Na}$ reaction, **Emmes Bennett**, the 2017 Fall Meeting of the APS Division of Nuclear Physics, Pittsburgh, Pennsylvania (October 2017).*

*Spin and forward physics with STAR, **C.A. Gagliardi, Invited talk**, (for the STAR Collaboration), Workshop Forward Phys. High-Energy Scatt. Zero Degrees 2017, Nagoya, Japan (September 2017).*

Probing the origin of the proton spin at STAR, **C.A. Gagliardi**, **Invited talk**, (for the STAR Collaboration), 6th Int. Conf. New Front. Phys., Kolymbari, Crete, Greece (August 2017).

Neutron star core-crust boundaries from mean field model constrained by χ EFT, **Yeunhwan Lim**, 2017 International Collaboration of Nuclear Theory (ICNT), Michigan State University, East Lansing, Michigan (April 2017).

Quasiparticle interaction in nuclear matter from chiral effective field theory, **Jeremy W. Holt**, **Invited talk**, ECT* Workshop: Landau Fermi liquid theory in nuclear and many-body systems, Trento, Italy (May 2017).

Toward supernova equations of state from chiral effective field theory, **Jeremy W. Holt**, **Invited Talk**, Microphysics in Computational Relativistic Astrophysics 2017 (MICRA2017), Michigan State University, East Lansing, Michigan (July 2017).

Hot and dense neutron-rich matter from chiral effective field theory, **Jeremy W. Holt**, **Invited Seminar**, Institute for Nuclear and Particle Physics seminar, Ohio University, Athens, Ohio (November 2017).

Hot and dense neutron-rich matter from chiral effective field theory, **Jeremy W. Holt**, **Invited Seminar**, Beihang University, Beijing, China (March 2018).

Structure of unbound 10-N and 9-He , **G. Rogachev**, 3rd International Conference on Advances in Rare Isotope Science, ARIS2017, Keystone, Colorado (June 2017).

Overview of ARUNA facilities, **G. Rogachev**, **Invited Plenary Talk**, Low Energy community meeting, Argonne National Laboratory, Argonne, Illinois (August 2017).

Alpha-cluster structure populated in the resonance reactions induced by rare beams, **V.Z. Goldberg**, **Invited Talk**, Int. Conf. Nuclear Physics in Astrophysics VIII (NPA8), Catania, Italy (June 2017).

Alpha-capture reaction rates for $22\text{-Ne}(\alpha, n)$ via sub-Coulomb alpha-transfer, **Heshani Jayatissa**, Gordon Research Seminar on Nuclear Chemistry (GRS), New London, New Hampshire (June 2017).

Probing the cluster structure in 10-Be using resonant $6\text{-He} + \alpha$ scattering, **Sriteja Upadhyayula**, Gordon Research Conference on Nuclear Chemistry, New London, New Hampshire (June 2017).

The study of the $22\text{-Ne}(\alpha, n)25\text{-Mg}$ reaction rate via indirect sub-coulomb alpha-transfer techniques, **Heshani Jayatissa**, The 9th European Summer School on Nuclear Astrophysics, Santa Tecla, Catania, Italy (September 2017).

Commissioning of the new Texas Active Target Detector (TexAT), **J. Hooker**, The 9th European Summer School on Experimental Nuclear Astrophysics, Santa Tecla, Sicily, Italy (September 2017).

Search for the $6+$ state of 10-Be , **Sriteja Upadhyayula**, The 9th European Summer School on Experimental Nuclear Astrophysics, Santa Tecla, Sicily, Italy (September 2017).

Studying light exotic nuclei through isobaric analogues, **Curtis Hunt**, the 2017 Fall Meeting of the APS Division of Nuclear Physics, Pittsburgh, Pennsylvania (October 2017).

Alpha-capture reaction rates for $^{22}\text{Ne}(\alpha,n)$ via sub-Coulomb alpha-transfer and its effect on final abundances of s-process isotopes, **Heshani Jayatissa**, the 2017 Fall Meeting of the APS Division of Nuclear Physics, Pittsburgh, Pennsylvania (October 2017).

Structure of ^{10}N via $^9\text{C}+p$ resonance scattering, **J. Hooker**, the 2017 Fall Meeting of the APS Division of Nuclear Physics, Pittsburgh, Pennsylvania (October 2017).

T=5 states in ^{48}Ca , **Sriteja Upadhyayula**, the 2017 Fall Meeting of the APS Division of Nuclear Physics, Pittsburgh, Pennsylvania (October 2017).

New studies at new ACCULINNA mass separator, **V.Z. Goldberg**, **Invited Seminar**, Joint Institute for Nuclear Research, Dubna, Russian Federation (July 2017).

New approach to study resonance (α,n) reactions, **V.Z. Goldberg**, **Invited Seminar**, Nazyrbayev University, Astana, Kazakhstan (July 2017).

Resonance reactions of ^{21}st century, **V.Z. Goldberg**, **Invited Talk**, the 39th Symposium on Nuclear Physics, Morelos Mexico (January 2018).

Design and commissioning of Texas Active Target (TexAT) detector system, **G. Rogachev**, **Invited Talk**, Workshop on Active Targets and Time Projection Chambers for High-intensity and Heavy-ion Beams in Nuclear Physics, Santiago de Compostela, Spain (January 2018).

From nucleon-nucleon interaction to stars and physics beyond the standard model, **G. Rogachev**, **Invited Colloquium**, Texas A&M University at Commerce, Commerce, Texas (January 2018).

Recent jet measurements in heavy-ion collisions at STAR in a nutshell, **Nihar Sahoo**, **Invited talk**, RHIC & AGS Users' Meeting 2017, Upton, New York (June 2017).

Towards the full reconstruction of neutral-triggered recoil jets in Au+Au Collisions, **Derek Anderson**, the Texas Heavy-Ion & Spin physics symposium, Houston, Texas (November 2017).

Hot vs. cold nuclear matter suppression of the J/Psi, **Yanfeng Liu**, the Texas Heavy-Ion & Spin physics symposium, Houston, Texas (November 2017).

Short-range correlations effect on the single proton $3s_{1/2}$ wave function in ^{206}Pb , **S. Shlomo**, **Invited Talk**, I. Talmi, M.R. Anders, and G. Bonasera, the 12th International Spring Seminar on Nuclear Physics, Current Problems and Prospects for Nuclear Structure, Sant'Angelo d'Ischia, Napoli, Italy (May 2017).

Fundamentally cool physics with trapped atoms and ions. **D. Melconian**, **Invited Talk**, Tel Aviv University, Tel Aviv, Israel (Apr 2017).

Nuclear β decay: using the atomic nucleus to probe symmetries of the weak interaction, **D. Melconian**, **Invited Talk**, Joint APS/AAPT/SPS meeting, Tarleton University, Stephenville, Texas (March 2018).

Using trapped atoms and ions for fundamentally cool physics, **D. Melconian**, Talk for students of the Research Experience for Undergraduates (REU) program, Cyclotron Institute, Texas A&M, College Station, Texas (July 2017).

Stellar secrets: earth bound insights into elements through heavy-ion reactions, **S.J. Yennello**, **Invited Talk**, University of Dallas, Irving, Texas (October 2017).

NZ equilibration in Fermi-energy heavy ion collisions: what can we learn about the EOS? **S.J. Yennello, Invited Talk**, 7th International Symposium on Nuclear Symmetry Energy (NUSYM17), Ganil, Caen, France (September 2017).

Studying the stars here on earth: how the equation of state of nuclear matter impacts the formation of the elements, **S.J. Yennello, Invited Talk**, ACS-DNCT summer school, San Jose State University, San Jose, California (June 2017).

Imagine a universe with 85% down quarks: mentoring for inclusive excellence in nuclear science, **S.J. Yennello, Invited Talk**, the 2017 Fall Meeting of the APS Division of Nuclear Physics, Pittsburgh, Pennsylvania (October 2017).

Effective negotiation, **S.J. Yennello, Invited Talk**, Women in Astronomy, Austin, Texas (June 2017).

Toward inclusive excellence in nuclear science, **S.J. Yennello, Invited Talk**, NSCL, Michigan State University, East Lansing, Michigan (January 2018).

Effective negotiation, **S.J. Yennello, Invited Talk**, Michigan State University, East Lansing, Michigan (January 2018).

Equilibration chronometry, **Alan McIntosh, Invited Talk**, Department of Physics and Center for the Exploration of Energy and Matter, Indiana University, Bloomington, Indiana (January 2018).

Equilibration chronometry probes neutron-proton equilibration with sub-zeptosecond time resolution, **Alan McIntosh, Invited Talk**, GANIL Seminar Series, GANIL, Caen, France (September 2017).

Detailed investigation of neutron-proton migration using equilibration chronometry, **Alan McIntosh, Invited Talk**, 7th International Symposium on the Nuclear Symmetry Energy (NuSym17), GANIL, Caen, France (September 2017).

Detailed investigation of neutron-proton migration using equilibration chronometry, **Alan McIntosh**, 50 Years of Beam Symposium, Cyclotron Institute, Texas A&M University, College Station, Texas (November 2017).

Equilibration Chronometry, **Andrea Jedgele**, the 2017 Fall Meeting of the APS Division of Nuclear Physics, Pittsburgh, Pennsylvania (October 2017).

Heavy element synthesis using multi-nucleon transfer reactions between heavy nuclei, **Kris Hagel**, 50 Years of Beam Symposium, Cyclotron Institute, Texas A&M University, College Station, Texas (November 2017).

Exploring clustering in alpha-conjugate nuclei using the thick target inverse kinematic technique for multiple alpha emission, **M. Barbui**, 50 Years of Beam Symposium, Cyclotron Institute, Texas A&M University, College Station, Texas (November 2017).

On the way to studying nihonium chemistry, **E.E. Tereshatov, Invited Talk**, 50 Years of Beam Symposium, College Station, Texas (November 15, 2017).

Chemistry at the Bottom of the Periodic Table, **C.M. Folden III, Invited Talk**, Texas A&M University Department of Chemistry Seminar, College Station, Texas, (October 2017).

*Optimization of indium and thallium separation with liquid-liquid extraction technique for a future study of nihonium chemistry, **M.F. Volia**, 9th Workshop on the Chemistry on the Heaviest Elements, Ascona, Switzerland (October 2017).*

*Research and lab engagement at Texas A&M University, nuclear science and security consortium, **C.M. Folden III**, September Workshop and Advisory Board Meeting, Berkeley, California (September 2017).*

*Extraction of Nh homologs using “designer” molecules, **C.M. Folden III**, **Invited Talk**, 16th h Workshop on a Recoil Separator for Superheavy Element Chemistry, Darmstadt, Germany (September 2017).*

*Heavy element chemistry research at Texas A&M University, **C.M. Folden III**, **Invited Talk**, 254th American Chemical Society National Meeting, Washington, District of Columbia (August 2017).*

*New chemical media for superheavy element study, **E.E. Tereshatov**, 254th American Chemical Society National Meeting, Washington, District of Columbia (August 2017).*

*Introduction to superheavy elements, **C.M. Folden III**, **Invited Talk**, Exotic Beam Summer School 2017, Argonne National Laboratory, Argonne, Illinois (July 2017).*

*Experimental and computational assessment of fission product residue in Pu from low-burnup thermal reactor fuel and inverse analysis for nuclear forensics, **C.M. Folden III**, (with Sunil S. Chirayath), Interagency Technical Nuclear Forensics Program Review, Oak Ridge, Tennessee (July 2017).*

*Influence of fission on the prospects for discovering the next new element, **C.M. Folden III**, **Invited Talk**, Advances in Radioactive Isotope Science 2017, Keystone, Colorado (May 2017).*

*Application of mass spectrometry in nuclear forensics for interdicted plutonium source attribution, **C.M. Folden III**, (with Sunil S. Chirayath), Geology Department Seminar, College Station, Texas (May 2017).*

*Liquid phase chemistry study of indium and thallium for a future investigation of nihonium, **M.F. Volia**, 253rd American Chemical Society National Meeting, San Francisco, California (April 2017).*

*Survival of Excited Nuclei Produced in Warm Fusion Reactions, **C.M. Folden III**, **Invited Talk**, 253rd American Chemical Society National Meeting, San Francisco, California (April 2017).*

*Jet Fragmentation via shower parton recombination, **C.M. Ko**, **Invited Talk**, Workshop on Precision Spectroscopy of QGP Properties with Jets and Heavy Quarks, Seattle, Washington (May 2017).*

*Chiral transport model study of chiral magnetic and vortical effects, **C.M. Ko**, **Invited Talk**, Symposium on the Intersection of Electro, Chromo, and Hydro-Dynamics in Nuclear Physics, Minneapolis, Minnesota (June 2017).*

*Pion properties in dense neutron-rich matter, **C.M. Ko**, **Invited Talk**, Huzhou-CUSTIPEN Workshop on Spectroscopy and Reactions of Exotic Nuclei, Huzhou, Zhejiang, China (July 2017).*

*Theoretical perspective on strangeness production, **C.M. Ko**, **Invited Talk**, 17th International Conference on Strangeness in Quark Matter, Utrecht, Netherlands, (July 2017).*

*Lambda polarization in the chiral kinetic approach, **C.M. Ko**, **Invited Talk**, The 12th Workshop on QCD Phase Transition and Relativistic Heavy-Ion Collisions, Xián, Hebei, China (July 2017).*

Reflections on AMPT, **C.M. Ko**, **Invited Talk**, Workshop on AMPT for Relativistic Heavy Ion Collisions, Chengdu, Sichuan, China, (July 24 - 27, 2017).

Chiral magnetic and vortical Effects in heavy ion collisions, **C.M. Ko**, **Invited Talk**, Workshop on Phases of Quantum Chromodynamics (QCD) and Beam Energy Scan Program with Heavy Ion Collisions, Shanghai, China (August 2017).

Pion production in transport model, **C.M. Ko**, **Invited Talk**, 7th International Symposium on Nuclear Symmetry Energy, Caen, France (September 4 - 7, 2017).

Light nuclei production in relativistic heavy ion production, **C.M. Ko**, **Invited Talk**, 2nd EMMI Workshop on Anti-Matter, Hyper-Matter and Exotic Production at the LHC, Turin, Italy (November 2017).

Chiral magnetic effects in HICs, **Y. Sun**, Texas Heavy-Ion and Spin Physics Symposium, Houston, Texas (November 2017).

50 years of theoretical nuclear physics research at the Cyclotron Institute, **C.M. Ko**, **Invited Seminar**, 50 Years of Beam Seminar Series, Cyclotron Institute, Texas A&M University, College Station, Texas (December 2017).

Using lasers for nuclear physics: measuring cross-sections in (non) equilibrium plasmas, **A. Bonasera**, **Invited Talk**, 4th Workshop on New Aspects and Perspectives in Nuclear Physics, Hellenic Institute of Nuclear Physics, Ioannina, Greece (May 2017).

Nuclear physics using lasers, **A. Bonasera**, **Invited Talk**, International School on Nuclear Astrophysics, Santa Tecla, Italy (September 2017).

Bose-Einstein condensation, fermionic quenching and Efimov states from heavy ion collisions, **A. Bonasera**, **Invited Colloquium**, Tongliao University, Tongliao, Inner Mongolia, China (October 2017).

Analysis of experiments performed at SG-II (up) with 8(+1) Lasers, **A. Bonasera**, **Invited Colloquium**, Shanghai Institute of Applied Physics (SINAP), Chinese Academy of Sciences, Shanghai, China (January 2018).

Jet hadronization in vacuum and in the medium, **R.J. Fries**, INT Program on Precision Spectroscopy of QGP Properties with Jets and Heavy Quarks, Institute of Nuclear Theory, University of Washington, Seattle, Washington (May 2017).

Hadronization, **R.J. Fries**, INT Program on Precision Spectroscopy of QGP Properties with Jets and Heavy Quarks, Institute of Nuclear Theory, University of Washington, Seattle, Washington (May 2017).

Let There Be Light, **R.J. Fries**, **Invited Talk**, Symposium on Light, Color and Dense Matter, University of Minnesota, Minneapolis, Minnesota (June 2017).

Angular momentum and early time gluon fields, **R.J. Fries**, 4th Int. Conference on the Initial Stages in High-Energy Nuclear Collisions 2017, Polish Academy of Arts and Sciences, Cracow, Poland (September 2017).

Nuclear matter in extreme conditions, **R.J. Fries**, **Invited Colloquium**, Texas A&M University, Texas College Station, Texas (September 2017).

A hybrid hadronization model, **R.J. Fries**, **Invited Seminar**, Central China Normal University, Wuhan, China (October 2017).

A hybrid hadronization Model, **R.J. Fries**, **Invited Talk**, JETSCAPE Workshop 2018, Lawrence Berkeley National Laboratory, Berkeley, California (January 2018).

Vector mesons and chiral restoration in hadronic matter, **R. Rapp**, **Invited Talk**, ECT* workshop on Space- and Timelike Electromagnetic Baryonic Transitions, ECT*, Trento, Italy (May 2017).

Enlightening insights into hot and dense matter, **R. Rapp**, **Invited Talk**, Symposium on the Intersections of Electro-, Chromo- and Hydrodynamics in Nuclear Physics, University of Minnesota, Minneapolis, Minnesota (June 2017).

Microscopic description of heavy-flavor diffusion in QCD matter, **R. Rapp**, **Invited Talk**, Institute for Nuclear Theory (INT) program on “Precision Spectroscopy of Quark-Gluon Plasma with Jets and Heavy Quarks”, Institute for Nuclear Theory, Seattle, Washington (May 2017).

Heavy-flavor theory for heavy-ion collisions, **R. Rapp**, **Invited Talk**, RHIC and AGS Annual Users’ Meeting, Brookhaven National Laboratory, Upton, New York (June 2017).

Nonperturbative approach to equation of state and collective modes of the QGP, **R. Rapp**, XLVII International Symposium on Multiparticle Dynamics (ISMD 2017), Tlaxcala, Mexico (September 2017).

Heavy-flavor probes of quark-gluon plasma: objectives and opportunities, **R. Rapp**, **Invited Opening Talk**, Workshop on Heavy-Flavor Production in High-Energy Collisions, Lawrence Berkeley National Laboratory, Berkeley, California (October 2017).

Quarkonium transport theory in heavy-ion collisions, **X. Du**, Texas Heavy-Ion and Spin Physics Symposium, Rice University, Houston, Texas (November 2017).

Nonperturbative approach to thermal, spectral and transport properties of QGP, **S. Liu**, Texas Heavy-Ion and Spin Physics Symposium, Rice University, Houston, Texas (November 2017).

Potential of heavy-flavor particles to probe strong-interaction matter, **R. Rapp**, **Invited Talk**, Santa Fe Jets and Heavy-Flavor Workshop, Santa Fe, New Mexico (January 2018).

Bottomonium production in heavy-ion collisions, **X. Du**, Santa Fe Jets and Heavy-Flavor Workshop, Santa Fe, New Mexico (January 2018).

Quantum many-body theory for heavy-quark transport, **S. Liu**, Santa Fe Jets and Heavy-Flavor Workshop”, Santa Fe, New Mexico (January 2018).

Quarkonia at high-luminosity LHC: Can we determine the in-Medium QCD force?, **R. Rapp**, **Invited video Presentation** (from College Station), General WG-5 Heavy-Ion Meeting, CERN, Geneva, Switzerland (March 2018).

Bottomonium production at RHIC and the LHC, **X. Du**, **Invited High-Energy Physics Seminar**, University of Illinois at Chicago, Chicago, Illinois (July 2017).

*Heavy-quarkonium production in heavy-ion collisions, **X. Du, Invited Nuclear Theory Seminar**, University of Science and Technology, Hefei, Anhui, China (December 2017).*

*Quarkonium production at RHIC and the LHC, **X. Du, Invited Nuclear Theory Seminar**, Nanjing University, Nanjing, China (December 2017).*

*Bottomonium and charmonium production in heavy-ion collisions, **X. Du, Invited Nuclear Theory Seminar**, Institute of Modern Physics, Chinese Academy of Sciences, Lanzhou, China (December 2017).*