

TALKS PRESENTED
April 1, 2016 – March 31, 2017

Testing CVC and CKM unitarity via superallowed nuclear β decay, **J.C. Hardy**, **Invited Talk**, XIIth Rencontres du Vietnam, on High Sensitivity Experiments Beyond the Standard Model, Quy Nhon, Vietnam (July 2016).

Testing the standard model via superallowed nuclear beta decay, **J.C. Hardy**, **Invited Talk**, 24th International Conference on the Application of Accelerators in Research and Industry, CAARI 2016, Fort Worth, Texas (October 2016).

$|V_{ud}|$ from nuclear beta decays, **J.C. Hardy**, **Invited Talk**, 9th International Workshop on the CKM Unitarity Triangle, CKM2016, Mumbai, India (November 2016).

Current status of superallowed 0^+ -to- 0^+ nuclear β decay and the value of V_{ud} , **J.C. Hardy**, **Requested Talk**, 2016 APS Division of Nuclear Physics Meeting, Vancouver, British Columbia, Canada (October 2016).

Precise test of the unitarity of the CKM matrix via superallowed nuclear beta decay, **H.I. Park**, **Invited Talk**, APS Meeting, Salt Lake City, Utah (April 2016).

Superallowed nuclear beta decay for V_{ud} and CKM unitarity, **H.I. Park**, **Invited Talk**, International Workshop on Future Potential of High Intensity Accelerators for Particle and Nuclear Physics, J-PARC, Tokai-village, Ibaraki, Japan (December 2016).

Precise test of the unitarity of the CKM matrix via superallowed nuclear beta decay, **H.I. Park**, **Invited Talk**, APCTP2016 Workshop on Frontiers of Physics: Dense Matter from Chiral Effective Theories, Pohang, Korea (December 2016).

Test of internal-conversion theory with a measurement in ^{111}Cd , **N. Nica**, **Invited Talk**, International Conference on Nuclear Data for Science and Technology, Bruges, Belgium (September 2016).

Test of internal-conversion theory with a measurement in ^{111}Cd , **N. Nica**, **Seminar**, Horia Hulubei National Institute of Physics and Nuclear Engineering, Bucharest, Romania (September 2016).

Test of internal-conversion theory with a measurement in ^{111}Cd , **H.I. Park**, U.S. Nuclear Data Week Annual Meeting, Brookhaven National Laboratory, Upton, New York (November 2016).

Branching ratio for the superallowed beta decay of ^{10}C , **T. Eronen**, M. Bencomo, L. Chen, J.C. Hardy, V. Horvat, V. Iacob, N. Nica, H.I. Park, B. Roeder and A. Saastamoinen, APS Meeting, Salt Lake City, Utah (April 2016).

Improving the precision of the half-life of ^{34}Ar , **V.E. Iacob**, J.C. Hardy, M. Bencomo, L. Chen, V. Horvat, N. Nica and H.I. Park, APS Meeting, Salt Lake City, Utah (April 2016).

What makes the proton spin?, **C.A. Gagliardi**, **Colloquium**, Rice University, Houston, Texas (March 2017).

Optimizing the Drell-Yan trigger for the STAR forward meson spectrometer, **J.R. Pybus**, Z. Chang, and C.A. Gagliardi (for the STAR Collaboration), 2016 APS Division of Nuclear Physics Meeting, Vancouver, British Columbia, Canada (October 2016).

Probing the Origin of the Proton Spin with Jets at STAR, **C.A. Gagliardi** (for the STAR Collaboration), Int. Nucl. Phys. Conf. 2016, refereed, Adelaide, Australia (September, 2016).

What do we learn from the giant monopole resonance measurement at Texas A&M University? **Y.-W. Lui, Seminar**, Henan Normal University, Xinxiang, Henan, China (April 2016).

Resonance Reactions Resulting in Neutron Decay as a New Field at Low Energy Heavy Ion Accelerators, **V.Z. Goldberg, Seminar**, Nazarbayev University, Astana, Kazakhstan, (July 2016).

Precision measurement of the positron asymmetry of laser-cooled, spin-polarized ^{37}K , **D. Melconian**, APS Meeting, Washington D.C. (January 2017).

Precise measurement of the positron asymmetry in the decay of spin-polarized ^{37}K , **B. Fenker**, 2016 APS Division of Nuclear Physics Meeting, Vancouver, British Columbia, Canada (October 2016).

Status of the TAMUTRAP facility at Texas A&M University, **D. Melconian**, 2016 APS Division of Nuclear Physics Meeting, Vancouver, British Columbia, Canada (October 2016).

Status of the Cyclotron Institute Upgrade (and current research), **D. Melconian, Invited Talk**, 2016 APS Division of Nuclear Physics Meeting, Vancouver, British Columbia, Canada (October 2016).

Single event effect microchip testing at the Texas A&M University Cyclotron Institute, **D. Melconian, Invited Talk**, Radiation Technologies Event – New Developments and Current Challenges with Radiation Technologies, NASA Johnson Space Center, Houston, Texas (September 2016).

Probing fundamental symmetries via precision correlation measurements of β decay, **D. Melconian, Invited Talk**, High Sensitivity Experiments Beyond the Standard Model, Quy Nhon, Vietnam (August 2016).

Study of resonances in $^{23}\text{Mg}(p,\gamma)^{24}\text{Al}$ via neutron transfer to analog states in ^{24}Na , **G. Christian**, 2016 APS Division of Nuclear Physics Meeting, Vancouver, British Columbia, Canada (October 2016).

Toward a gamma-jet measurement at the STAR experiment, **S. Mioduszewski, Invited Talk**, (for the STAR Collaboration), 11th International Workshop on High p_T Physics in the RHIC-LHC Era, Brookhaven National Laboratory, Upton, New York (April 2016).

Gamma-jet studies at RHIC, **Nihar R. Sahoo, Invited Talk**, Jets Workshop of the 2016 RHIC/AGS Users' Meeting, Brookhaven National Laboratory, Upton, New York (May 2016).

Jets and high- p_T probes measured in the STAR experiment, **Nihar R. Sahoo**, (for the STAR Collaboration), 38th International Conference on High Energy Physics, Chicago, Illinois (August 2016).

Direct photon-hadron correlation measurement at RHIC, **Nihar R. Sahoo, Plenary Talk**, (for the STAR Collaboration), 7th Workshop for young scientists on the physics of ultrarelativistic nucleus-nucleus collisions (Hot Quarks), South Padre Island, Texas (September 2016).

Photon-triggered jet reconstruction at the STAR experiment, **D. Anderson**, (for the STAR Collaboration), 2016 APS Division of Nuclear Physics Meeting, Vancouver, British Columbia, Canada (October 2016).

Jet measurements with neutral and di-jet triggers in central Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV with STAR, **Nihar R. Sahoo**, XXVI international conference on ultrarelativistic heavy-ion collisions (Quark Matter), Chicago, Illinois (February 2017).

Recent advances in understanding of shell evolution in $N=7$ isotones and nitrogen isotopes, **G. Rogachev**, **Invited Talk**, Workshop on Predictive Theories of Nuclear Reactions Across the Isotopic Chart, Institute for Nuclear Theory, Seattle, Washington (March 2017).

Stable and radioactive ion beams at Texas A&M University, **G. Rogachev**, **Invited Talk**, Low Energy Nuclear Physics community workshop, August 2016, Notre Dame, Indiana (August 2016).

Quantifying clustering near alpha-threshold, **G. Rogachev**, **Invited Talk**, 11th International Conference on Clustering Aspects of Nuclear Structure and Dynamics, Naples, Italy (May 2016).

Structure of light exotic nuclei and nuclear astrophysics through the lens of nuclear reactions, **G. Rogachev**, **Seminar**, Ohio University, Athens, Ohio (November 2016).

Structure of light exotic nuclei and nuclear astrophysics through the lens of nuclear reactions, **G. Rogachev**, **Seminar**, University of Notre Dame, South Bend, Indiana (October 2016).

Structure of light exotic nuclei and nuclear astrophysics through the lens of nuclear reactions, **G. Rogachev**, **Seminar**, Argonne National Laboratory, Argonne, Illinois (September 2016).

Texas Active Target (TexAT), **G. Rogachev**, Low Energy Nuclear Physics community workshop, South Bend, Indiana (August 2016).

Recent experience with ReA3 beam time structure, **G. Rogachev**, Low Energy Nuclear Physics community workshop, South Bend, Indiana.

Nuclear structure beyond the drip-line: ${}^9\text{He}$ and ${}^{10}\text{N}$, **G. Rogachev**, Workshop on Direct Reactions with Exotic Beams 2016, Halifax, Canada (July 2016).

Alpha-capture reaction rates via sub-Coulomb alpha-transfer, **H. Jayatissa**, Nuclei in the Cosmos XIV (NIC XIV), Toki Messe, Niigata, Japan (June 2016).

Alpha-capture reaction rates for ${}^{22}\text{Ne}(\alpha, n)$ via sub-Coulomb alpha-transfer, **H. Jayatissa**, 2016 APS Division of Nuclear Physics Meeting, Vancouver, British Columbia, Canada (October 2016).

Probing the cluster structure in ${}^{10}\text{Be}$ using resonant ${}^6\text{He} + \alpha$ scattering, **S. Upadhyayula**, 2016 APS Division of Nuclear Physics Meeting, Vancouver, British Columbia, Canada (October 2016).

Probing the role of alpha clustering in collisions of alpha-conjugate nuclei, **J.B. Natowitz**, **Invited Talk**, International Workshop on Multi facets of EoS and Clustering 2016, Caen, France (May 2016).

Low density nuclear matter, **J.B. Natowitz**, **Invited Talk**, France-U.S. Theory Institute for Physics with Exotic Nuclei Workshop-2016, Caen, France (May 2016).

Deep inelastic multinucleon transfer for creation of super-heavy and hyper-heavy elements, **J.B. Natowitz, Invited Talk**, Shanghai Institute for Nuclear and Applied Physics, Shanghai, China (December 2016).

Alpha conjugate neck structures in the collisions of 35 MeV/nucleon ^{40}Ca with ^{40}Ca , **J.B. Natowitz, Invited Talk**, France-U.S. Theory Institute for Physics with Exotic Nuclei Woprkshop-2016, Huizhou, China (December, 2016).

In and Tl extraction from HCl media into ionic liquids and deep eutectic solvents for a future investigation of Nh (E113) chemistry, **M.F. Voia**, 3rd International Conference on Ionic Liquids in Separation and Purification Technology, Kuala Lumpur, Malaysia (January 2017).

Experimental and computational assessment of fission product residue in plutonium from low-burn-up thermal reactor fuel and inverse analysis for nuclear forensics, **C.M. Folden III, Invited Talk**, (with Sunil S. Chirayath), DNDO ARI Grantees Program Review, Atlanta, Georgia (July 2016).

Metal extraction by green solvents: ionic liquids and hydrophobic deep eutectic mixtures, **E.E. Tereshatov**, 18th International Conference on Green Chemistry, San Francisco, California (June 2016).

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**, San Jose State University, San Jose, California (July 2016).

Supporting undergraduate researchers, **S.J. Yennello, Invited Talk**, REU site director's workshop, Houston, Texas (October 2016).

Accelerated learning: undergraduate research experiences at the Texas A&M Cyclotron Institute, **S.J. Yennello, Invited Talk**, International Conference on the Application of Accelerators in Research and Industry (CAARI – 2016), Fort Worth, Texas (November 2016).

ARUNA facilities overview, **S.J. Yennello, Invited Talk**, Low energy community meeting, South Bend Indiana (August 2016).

LCP correlations with improved resolution, **L. Heilborn**, 2016 APS Division of Nuclear Physics Meeting, Vancouver, British Columbia, Canada (October 2016).

Studying correlations in $^{40}\text{Ca}+^{58}\text{Fe}$ with FAUST, **L. Heilborn**, International Workshop on Multifragmentation, Equation of State, and Clusterization, Caen, France (May 2016).

Equilibration chronometry, **A.B. McIntosh, Invited Talk**, Transport 2017, East Lansing, Michigan (March 2017).

Equilibration chronometry: characterizing neutron-proton equilibration with sub-zeptosecond resolution, **A.B. McIntosh**, 6th International Symposium on the Nuclear Symmetry Energy (NuSym16), Beijing, China (June 2016).

Equilibration chronometry: characterizing neutron-proton equilibration with sub-zeptosecond resolution, **A.B. McIntosh**, International Workshop on the Multi-facets of the Equation-of-state and Clustering, Caen, France (May 2016).

The partial truncated icosahedron (ParTI) phosphor detector array: a light charged particle array for pionic fusion measurements, **A. Zarrella**, Conference on Application of Accelerators in Research and Industry (CAARI), Forth Worth, Texas (November 2016).

Pionic fusion at TAMU, **A. Zarrella**, Mini Workshop on Nuclear Reactions (CUSTIPEN) Commerce, Texas (November 2016).

Equilibration chronometry, **A. Jedele**, Int. Nucl. Phys. Conf. 2016, Adelaide, Australia (September, 2016).

Equilibration chronometry, **A. Jedele**, 2016 APS Division of Nuclear Physics Meeting, Vancouver, British Columbia, Canada (October 2016).

Equilibration chronometry, **A. Jedele**, CUSTIPEN Mini-Workshop, Commerce, Texas (November 2016).

Characterizing NZ equilibration in nuclear reactions with subzeptosecond resolution, **A. Rodriguez Manso**, CUSTIPEN Mini-Workshop, Commerce, Texas (November 2016).

Neutron-proton equilibration in dynamically-deformed nuclear systems (at 35 MeV/nucleon), **A. Rodriguez Manso**, APS Meeting, Washington D.C. (January 2017).

Status of the Texas A&M University Cyclotron Institute, **D.P. May**, J.E. Ärje, L.N. Gathings, B.T. Roeder, F.P. Abegglen, G. Chubaryan, H.L. Clark, G.J. Kim, G. Tabacaru, and A. Saastamoinen, the 21st International Cyclotron Conference, Zurich, Switzerland (September 2016).

Properties of nuclei and nuclear matter within the mean-field approximation, **S. Shlomo**, **Seminar**, Department of Physics, Costa Rica, National University, Heredia, Costa Rica (June 2016).

A novel method for determining the mean-field directly from the single particle matter density: Application to the measured charge density difference between the Isotones $^{206}\text{Pb} - ^{205}\text{Tl}$, **S. Shlomo**, **Invited Talk**, Carpathian Summer School of Physics-2016 (CSSP16), Sinaia, Romania, (June 2016).

The charge density difference between the isotones $^{206}\text{Pb} - ^{205}\text{Tl}$ and the effect of short-range correlations, **S. Shlomo**, **Invited Talk**, The Israel Physical Society, Tel-Aviv, Israel (December 2016).

On the unitarity of the particle-hole dispersive optical model, **M.L. Gorelik**, S. Shlomo, B.A. Tulupov, and M.H. Urin, MEPHI Conference, Moscow, Russia (January 2017).

Generalized R-matrix and Trojan horse method, **A.M. Mukhamedzhanov**, **Invited Talk**, R-matrix methods workshop, Santa Fe, New Mexico (June 2016).

Heavy-flavor transport in QCD matter, **R. Rapp**, **Invited Talk**, 11th International workshop on “High- p_T Physics in the RHIC and LHC Era”, Brookhaven National Laboratory, Upton, New York (April 2016).

Heavy-Flavor Probes of QCD Phase Structure, **R. Rapp**, **Invited Talk**, Int. Workshop on QCD Phase Structure III, Wuhan, China (June 2016).

Theory of heavy flavor in matter, **R. Rapp**, **Invited Plenary Talk**, 2016 RHIC & AGS Users’ Meeting on “RHIC Upgrades in the Era of 1/fb Precision”, Brookhaven National Laboratory, Upton, New York (June 2016).

*An in-medium potential and its applications to heavy-quark diffusion and QCD equation of state, **S.Y.F. Liu***, Int. Conference on Strangeness in Quark Matter (SQM2016), Berkeley California (June 2016).

*Sequential regeneration of charmonia in heavy-ion collisions, **X. Du***, Int. Conference on Strangeness in Quark Matter (SQM2016), Berkeley, California (June 2016).

*Calculation of the electric conductivity of hot hadronic matter, **J. Atchison***, Hot Quarks 2016 conference, South Padre Island, Texas (September 2016).

*What can we extract from thermal electromagnetic radiation in heavy-ion collisions? **R. Rapp**, **Invited Lecture***, 38th Int. School on Nuclear Physics on “Nuclear Matter under Extreme Conditions – Relativistic Heavy-Ion Collisions”, Erice, Italy (September 2016).

*What can we learn from heavy-flavor observables in heavy-ion collisions? **R. Rapp**, **Invited Talk***, Workshop on “Recent RHIC and LHC Results and their Implications for Heavy-ion Physics in the 2020’s”, MIT, Boston, Massachusetts (October 2016).

*Brownian motion in the quark-gluon plasma and in heavy-ion collisions, **R. Rapp**, **Invited Talk***, STAR analysis meeting pre-workshop on “Beam Energy Dependence of Strangeness and Heavy-Quark Production”, LBNL, Berkeley, California (November 2016).

*Perspectives on heavy flavor and EM probes with heavy ions at LHCb, **R. Rapp**, **Invited Talk***, Int. Workshop LHCb Heavy-Ion and Fixed-Target Physics, CERN, Geneva, Switzerland (January 2017).

*Theoretical perspective on quarkonia from SPS via RHIC to LHC, **R. Rapp**, **Invited Plenary Talk***, XXVI Int. Conf. on Ultra-Relativistic Heavy-Ion Collisions (Quark Matter 2017), Chicago, Illinois (February 2017).

*In-medium bottomonium production in heavy-ion collisions, **X. Du**, **Plenary Flash Talk***, XXVI Int. Conf. on Ultra-Relativistic Heavy-Ion Collisions (Quark Matter 2017), Chicago, Illinois (February 2017).

*Thermal dileptons from high to low energies, **R. Rapp**, **Invited Talk***, ISF research workshop on “Study of High-Density Matter with Hadron Beams”, Weizmann Institute, Rehovot, Israel (March 2017).

*Many-body T-matrix approach to strongly coupled quark-gluon plasma, Matter, **S.Y.F. Liu**, **Nuclear/Particle Theory Seminar***, Tsinghua University, Beijing, China (December 2016).

*Many-body T-matrix approach to strongly coupled quark-gluon plasma, Matter, **S.Y.F. Liu**, **Nuclear Theory Seminar***, Inst. for Modern Physics, Chinese Academy of Sciences, Lanzhou, China (December 2016).

*Density fluctuations in baryon-rich quark matter, **C.M. Ko**, **Invited Talk***, International Workshop on Nuclear Dynamics in Heavy-Ion Reactions", Xinxiang, Henan, China (May 2016).

*Effects of Medium Modification of Pion Production Threshold in Heavy Ion Collisions and the Nuclear Symmetry Energy, **C.M. Ko**, **Invited Talk***, The 6th International Symposium on Nuclear Symmetry, Beijing, China (June 2016).

*Theoretical Challenges at RHIC, **C.M. Ko**, **Invited Talk***, QCD Workshop, Shanghai, China (August 2016).

Chiral magnetic effect in the anomalous transport model, **Y. Sun**, Workshop for Young Scientists on the Physics of Ultrarelativistic Nucleus-Nucleus Collisions, Padre Island, Texas (September 2016).

Spinodal instability of baryon-rich quark matter, **F. Li**, Workshop for Young Scientists on the Physics of Ultrarelativistic Nucleus-Nucleus Collisions, Padre Island, Texas (September 2016).

Anomalous Transport Model Study of Chiral Magnetic Effects in Heavy Ion Collisions, **C.M. Ko**, **Invited Talk**, 5th International Symposium on Non-equilibrium Dynamics, Phuket, Thailand (October 2016).

Medium Effects on Pion Production in Heavy Ion Collisions, **Z. Zhang**, **Invited Talk**, CUSTIPEN Mini-Workshop on Nuclear Reactions, Commerce, Texas (November 2016).

Pion Production in Heavy Ion Collisions, **C.M. Ko**, **Invited Talk**, CUSTIPEN Mini-Workshop on Nuclear Reactions, Commerce, Texas (November 16, 2016).

RVUU description, **Z. Zhang**, **Invited Talk**, International Workshop on Transport Simulations for Heavy Ion Collisions under Controlled Conditions", FRIB-MSU, East Lansing, Michigan (March 2017).

Medium Effects on Pion Production in Heavy Ion Collisions, **C.M. Ko**, **Invited Talk**, International Workshop on Transport Simulations for Heavy Ion Collisions under Controlled Conditions", FRIB-MSU, East Lansing, Michigan (March 2017).

Anomalous transport model study of chiral magnetic effects in heavy ion collisions, **C.M. Ko**, **Seminar**, Shanghai Jiao Tong University, Shanghai, China (May 2016).

Anomalous transport model study of chiral magnetic effects in heavy ion collisions, **C.M. Ko**, **Seminar**, Shanghai Institute for Applied Physics, Shanghai, China (May 2016).

Overview on coalescence model: theoretical developments and applications, **C.M. Ko**, **Seminar**, Shanghai Institute for Applied Physics, Shanghai, China (May 2016).

Microscopic optical potentials in neutron-rich matter from chiral EFT, **J. Holt**, **Invited Talk**, ECT* Workshop: Towards consistent approaches for nuclear structure and reactions, Trento, Italy (June 2016).

Nuclear equation of state from chiral effective field theory, **J. Holt**, **Invited Talk**, INT workshop: The phases of dense matter, Institute for Nuclear Theory, University of Washington, Seattle, Washington (July 2016).

Structure and dynamics of neutron-rich matter on earth and in the stars, **J. Holt**, **Invited Physics Colloquium**, Texas A&M University-Commerce, Commerce, Texas (October 2016).

Single-particle potential for transport model simulations from two- and three-body chiral nuclear forces, **J. Holt**, **Invited Talk**, CUSTIPEN Mini workshop on nuclear reactions, Texas A&M Commerce, Commerce, Texas (November 2016).

Structure and dynamics of neutron-rich matter on earth and in the stars, **J. Holt**, **Invited Physics Colloquium**, Washington State University, Pullman, Washington (March 2017).

Microscopic optical potentials in neutron-rich matter from chiral EFT, **J. Holt**, **Invited Talk**, INT workshop: Toward predictive theories of nuclear reactions across the isotopic chart, Institute for Nuclear Theory, University of Washington, Seattle, Washington (March 2017).

*A hadronization model for jets based on quark recombination, **R.J. Fries**, **Invited Talk**, 11th Int. High-PT Workshop 2016, Upton, New York (April 2016).*

*Early time dynamics: Pressure and 3+1D flow from classical gluon fields, **R.J. Fries**, **Invited Plenary Talk**, 3rd International Conference on the Initial Stages in High-Energy Nuclear Collisions (Initial Stages 2016), Lisbon, Portugal (May 2016).*

*Early time dynamics in nuclear collisions: A semi-analytic approach, **R.J. Fries**, **Invited Talk**, Ultrarelativistic Heavy Ion Workshop, CERN, Geneva, Switzerland (July 2016).*

*A novel approach for event-by-event early gluon fields, **R.J. Fries**, 8th International Conference on Hard and Electromagnetic Probes of High-energy Nuclear Collisions (Hard Probes 2016), Wuhan, China (September, 2016).*

*The initial phase in high energy nuclear collisions: How far can we go with analytic solutions?, **R.J. Fries**, **Seminar**, McGill University, Montreal Quebec, Canada (November 2016).*

*Analytic results for CGC in space-time coordinates, **R.J. Fries**, **Seminar**, Brookhaven National Laboratory, Upton, New York (December 2016).*

*Deciphering high energy nuclear collisions, **R.J. Fries**, **Colloquium**, Bose Institute, Kolkata, India (January 2017).*

*Nuclear physics using lasers, **A. Bonasera**, **Invited Talk**, Carpathian Summer School of Physics 2016 (CSSP16), Sinaia, Romania, (June 2016).*

*Measuring fusion cross sections in deuterium plasmas created by few energetic nanosecond laser beams: The effect of ternary fusion reactions, **A. Bonasera**, **Invited Talk**, **Shanghai Institute of Optics and Fine Mechanics Chinese Academy of Science (SIOM)**, Shanghai, China (2016).*