TALKS PRESENTED April 1, 2004 – March 31, 2005

Giant Monopole Resonance in Cd and Sn Isotopes, Y.-W. Lui, D.H. Youngblood, H.L. Clark, Y. Tokimoto and B. John, Invited Talk, International Symposium on Atomic Nuclei at Extreme Values of Temperature, Spin and Isospin, Zakopane, Poland, (August 2004).

Report on BigSol Operations, **R.E. Tribble**, **Invited Talk**, Workshop on Measuring Transfer reactions with Radioactive Beams, Argonne national Laboratory, Argonne, Illinois, (June 2004).

Indirect Techniques in Nuclear Astrophysics: The ANC Method, **R.E. Tribble**, **Invited Talk**, CAARI 2004, Ft. Worth, Texas, (October 2004).

Quasi-New ANC Results and their Implications in Stellar Evolution, plus a Look to the Future at Texas A&M, R.E. Tribble, Invited Talk, Laboratory for Nuclear Studies, Catania, Sicily, Italy (March 2005).

High-p_T Results from STAR, <u>C.A. Gagliardi</u> (for the STAR Collaboration), <u>Invited Talk</u>, Workshop on Jet Corr. RHIC, Brookhaven, New York, (March 2005).

Recent High-p_T Results from STAR, <u>C.A. Gagliardi</u> (for the STAR Collaboration), <u>Invited Talk</u>, Int. Conf. on Hard Electromag. Probes High Energy Nucl. Coll., Ericeira, Portugal, (November 2004).

STAR Forward Detector Upgrades, <u>C.A. Gagliardi</u> (for the STAR Collaboration), <u>Invited Talk</u>, 18th Int. Conf. Appl. Accel. Res. Indus., Ft. Worth, Texas, (October 2004).

Recent Results from RHIC, <u>C.A. Gagliardi</u>, <u>Invited Talk</u>, Third Int. Conf. Quarks and Nucl. Phys., invited, Bloomington, Indiana, (May 2004).

Measuring the Space-Time Structure of Muon Decay with TWIST, **C.A. Gagliardi**, Physics Division, Brookhaven National Laboratory, Upton, New York, (March 2005).

Jet Quenching at RHIC, **C.A. Gagliardi**, Physics Department, University of Texas, Austin, Texas, (April 2004).

Recent Results from RHIC, <u>C.A. Gagliardi</u>, Abilene Christian University, Abilene, Texas, (September 2004).

TWIST Measurement of the Decay Parameters ρ and δ of Normal Muon Decay, **J.R. Musser**, Pennsylvania State University Altoona, Altoona, Pennsylvania, (February 2005).

TWIST Measurement of the Decay Parameters ρ and δ of Normal Muon Decay, **J.R. Musser**, Arkansas Technological University, Russellville, Arkansas, (February 2005).

TWIST Measurement of the Decay Parameters ρ *and* δ *of Normal Muon Decay*, **J.R. Musser**, Valparaiso University, Valparaiso, Indiana, (January 2005).

TWIST Measurement of the Decay Parameters ρ and δ of Normal Muon Decay, **J.R. Musser**, Indiana University Cyclotron Facility, Bloomington, Indiana, (January 2005).

TWIST Measurement of the Michel Parameter ρ , <u>J.R. Musser</u> (for the TWIST Collaboration), TRIUMF, Vancouver, British Columbia, Canada, (October 2004).

Extracting the ANCs for $^{23}Al \rightarrow ^{22}Mg + p$ from Its Mirror System $^{23}Ne \rightarrow ^{22}Ne + n$ Reaction, **T. Al-Abdullah**, X. Chen, H. Clark, C. Fu, C.A. Gagliardi, Y.-W. Lui, G. Tabacaru, Y. Tokimoto, L. Trache, R.E. Tribble, and S. Piskor, 2004 Annual Meeting of the Division of Nuclear Physics of the APS, Chicago, Illinois, (October 2004).

TRIUMF Weak Interaction Symmetry Test, <u>J.R. Musser</u> (for the TWIST Collaboration), 2004 Spring Meeting of the APS, Denver, Colorado, (May 2004).

Precision Mass Measurements in Weak Interaction Studies, <u>J.C. Hardy</u>, <u>Invited Talk</u>, NIPNET International Workshop on High-Precision Mass Measurements, Saariselka, Finland, (April 2004).

 V_{ud} Overview, <u>J.C. Hardy</u>, <u>Invited Talk</u>, From Zero to Z^0 : a Workshop on Precision Electroweak Physics, Fermilab, Illinois, (May 2004).

CVC Tests and CKM Unitarit, <u>J.C. Hardy</u>, <u>Invited talk</u>, INPC04, International Nuclear Physics Conference, Goteborg, Sweden, (June 2004).

Superallowed 0^+ -to- 0^+ Beta Decay and CKM Unitarity: A New Overview Including More Exotic Nuclei, **J.C. Hardy**, **Invited talk**, ENAM04, Exotic Nuclei and Atomic Masses Conference, Pine Mountain, Georgia, (September 2004).

Standard Model Tests with Superallowed β Decay: Nuclear Data Applied to Fundamental Physics, <u>J.C.</u> <u>Hardy</u>, <u>Invited talk</u>, International Conference on Nuclear Data for Science and Technology, Santa Fe, New Mexico, (September 2004).

Superallowed Nuclear Beta Decay: Probing the Weak Force with Precision On-Line Measurements, <u>J.C. Hardy</u>, <u>Invited talk</u>, CAARI 2004, the 18th International Conference on the Application of Accelerators in Research and Industry, Fort Worth, Texas, (October 2004).

Precise Branching Ratios in the Superallowed β-Decay of ³⁴*Ar*, **V.E. Iacob**, J.C. Hardy, N. Nica, C.A. Gagliardi, G. Tabacaru, L. Trache and R.E. Tribble, APS meeting, Denver, Colorado, (May 2004).

Precise Measurement of the K-Conversion coefficient for the 80.2 KeV Transition from ^{193m}Ir, N. Nica, J.C. Hardy, V.E. Iacob, S. Raman, C.W. Nestor, Jr., M.B. Trzhaskovskaya, APS meeting, Denver, Colorado, (May 2004).

Efficiency Calibration for a β - γ Coincidence Set-Up: Source Measurements and Monte Carlo Calculations, **V.E. Iacob**, J.C. Hardy, N. Nica, APS meeting, Chicago, Illinois, (October 2004).

Resonance Scattering at Drip-Lines, **V.Z. Goldberg**, LIV International Conference on Nucleus Spectroscopy and Nuclear Structure, Belgorod, Russia, (June 2004).

Nuclear Structure of ⁹*He and* ⁷*He*, **V.Z. Goldberg**, EXON04 Symposium on Exotic Nuclei, St. Petersburg, Russia, (July 2004).

Surprising Structure Effects in Light Drip-Line Nuclei, <u>V.Z. Goldberg</u>, <u>Invited Talk</u>, Abo Akademii, Turku, Finland, (July 2004).

Synthesis of Heavy and Superheavy Nuclei with Radioactive Beams: Plans and Expectations, G.G. Chubaryan, International Symposium on Exotic Nuclei, Peterhof, Russia, (July 2004).

Forecast on Heavy and Superheavy Element Research with Radioactive Beams, **G.G. Chubaryan**, Department of Physics, University of Jyväskylä, Finland, (November 2004).

Towards the Critical Behavior for the Light Nuclei by NIMROD Detector, **Y.G. Ma**, R. Wada, K. Hagel, J.B. Natowitz and the NIMROD Collaboration, **Invited Talk**, SQM2004 conference, Capetown, South Africa, (September 2004).

Thermometry and Caloric Curves, **J.B. Natowitz**, **Invited Talk**, The World Consensus Initiative 3 (WCI3) Conference, Texas A&M University, College Station, Texas, (February 2005).

Reaction Dynamics and Equilibration in Fermi-Energy Heavy Ion Collisions, <u>J.B. Natowitz</u>, <u>Invited</u> <u>Talk</u>, ACS Meeting, San Diego, California, (March 2005).

Forward Rapidity Results with BRAHMS at RHIC, <u>K. Hagel</u> (for the BRAHMS Collaboration), <u>Invited</u> <u>Talk</u>, Symposium of Nuclear Physics 2005, Cocoyoc, Mexico, (January 2005).

Charged Hadron Ratios in p + p Collisions at $\sqrt{S_{nn}} = 200 GeV$, K. Hagel (for the BRAHMS Collaboration), Invited Talk, DNP Meeting, Chicago, Illinois, (October 2004).

Forward Physics at RHIC with BRAHMS, <u>K. Hagel</u> (for the BRAHMS Collaboration), <u>Invited Talk</u>, Chinese Center of Advanced Science and Technology Summer School and Workshop on QCD and RHIC Physics, Beijing, China, (August 2004).

Heavy Ion Reaction Studies and the Nuclear Equation of State, **S.J. Yennello**, ACS national meeting, Philadelphia, Pennsylvania (August 2004).

Improving Graduate Education in Nuclear Science, **S.J. Yennello**, 228th ACS national meeting, Philadelphia, Pennsylvania (August 2004).

We Need You: the Top 10 Reasons to Go to Graduate School: Graduate Studies in Science and Engineering an Exciting Beginning to a Great Future, **S.J. Yennello**, MAES Meeting, Austin, Texas, (November 2004).

We Need You: the Top 10 Reasons to Go to Graduate School: Graduate Studies in Science and Engineering an Exciting Beginning to a Great Future, **S.J. Yennello**, UTPan American Meeting, Edinburg, Texas, (November 2004).

Hot Nuclei, Multifragmentation and the Nuclear Liquid-Gas Phase Transition, **S.J. Yennello**, 228th ACS national meeting, ACS Meeting, San Diego, California, (March 2005).

Projectile Fragmentation: A Route to Exploring the N/Z Degree of Freedom, S.J. Yennello, ACS Meeting, San Diego, California, (March 2005).

Isospin and Kinematical Properties of Heavy Residues from the Multifragmentation of Neutron-Rich Systems, **G.A. Souliotis**, APS Meeting, Denver, Colorado, (May 2004).

Heavy Residues as Probes of Isospin Dynamics and Equilibration in Deep Inelastic Collisions Around the Fermi Energy, **G.A. Souliotis**, **Invited Talk**, Nuclear Chemistry Gordon Conference, Colby–Sawyer College, New London, New Hampshire, (June 2004).

Deep-Inelastic Collisions with Accelerated Fission Fragments from the ANL Californium Source Upgrade, G.A. Souliotis, ATLAS User Group Meeting, Physics Division, Argonne National Laboratory Argonne Illinois, (July 2004).

Probing the Density Dependence of the Nuclear Symmetry Energy via Heavy-Residue Isoscaling, **G.A. Souliotis**, DNP Meeting, Chicago, Illinois (October 2004).

Probing the Nuclear Symmetry Energy via Heavy-Residue Isoscaling, **G.A. Souliotis**, ACS Meeting, San Diego, California, (March 2005).

Energy and Isospin Dependence of the Fragments Produced in Multifragmentation, **D.V. Shetty**, APS Meeting, Denver, Colorado, (May 2004).

Symmetry Energy and the Isospin Dependent Equation of State, **D.V. Shetty**, DNP Meeting, Chicago, Illinois, (October 2004).

Density Dependence of the Symmetry Energy and the Equation of State of Asymmetric Nuclear Matter, **D.V. Shetty**, ACS Meeting, San Diego, California, (March 2005).

(N/Z) Equilibration Study: Results, Elizabeth Bell, APS Meeting, Denver, Colorado, (May 2004).

The N/Z Degree of Freedom and Nuclear Multifragmentation, **Elizabeth Bell**, Los Alamos National Laboratory, Los Alamos, New Mexico, (November 2004).

Quasiprojectile Fragmentation Around Mass 40, <u>August L. Keksis</u>, Third RIA Summer School on Exotic Beam Physics, ATLAS Facility, Argonne National Laboratory, Argonne, Illinois, (August 2004).

Quasiprojectile Fragmentation in the Mass 40 Region, <u>August L. Keksis</u>, ACS Meeting, Philadelphia, Pennsylvania, (August 2004).

Quasiprojectile Fragmentation Around Mass 40, <u>August L. Keksis</u>, DNP Meeting, Chicago, Illinois, (October 2004).

A Multiple Ionization in L-Shell Ionizing Collisions, **V. Horvat**, R.L. Watson, J.M. Blackadar, A.N. Perumal, and Yong Peng, 18th International Conference on the Application of Accelerators in Research and Industry, Ft Worth, Texas, (October 2004).

From Quark-Gluon Plasma to Pentaquark Baryons, <u>C.M. Ko</u>, <u>Invited Talk</u>, International Workshop on Pentaquarks, Heavy-Light Hadrons and Dense/Hot Matter, Seoul, South Korea, (May 2004).

Pentaquark Baryon Production in Nuclear Reactions, <u>C.M. Ko</u>, <u>Invited Talk</u>, Workshop on Strangeness and Exotica at RHIC, Brookhaven National Laboratory, New York, (May 2004).

Production Mechanisms for Pentaquark Baryons, <u>C.M. Ko</u>, <u>Invited Talk</u>, International Workshop PENTAQUARK04, SPring-8, Japan, (July 2004).

Quark Coalescence at RHIC, <u>C.M. Ko</u>, <u>Invited Talk</u>, STAR Collaboration Workshop, Beijing, China, (August 2004).

Theoretical Overview of Relativistic Heavy Ion Collisions, <u>C.M. Ko</u>, <u>Invited Talk</u>, 32nd International Conference on High Energy Physics, Beijing, China, (August 2004).

Quark Coalescence in Relativistic Heavy Ion Collisions, **C.M. Ko**, and V. Greco, **Invited Talk**, Proceedings of XLIII International Winter Meeting on Nuclear Physics, Bormio, Italy, (March 2005).

Complete Boundary Conditions for the Three-Body Coulomb Scattering Wave Function and New Approach to the Ionization/Breakup Processes, **A.M. Mukhamedzhanov**, APS meeting, Denver, Colorado, (May 2004).

A Relation Between Proton and Neutron Asymptotic Normalization Coefficients for Light Mirror Nuclei and its Relevance to Nuclear Astrophysics, **A.M. Mukhamedzhanov**, APS Meeting, Denver, Colorado, (May 2004).

Insight the Theory of Trojan Horse I, **A.M. Mukhamedzhanov**, **Invited talk**, INFN (National Institute of Nuclear Physics) and University of Catania, Catania, Italy, (May 2004).

Insight the Theory of Trojan Horse II, <u>A.M. Mukhamedzhanov</u>, <u>Invited talk</u>, INFN (National Institute of Nuclear Physics) and University of Catania, Catania, Italy, (June 2004).

Off-Shell Effects in $p+d \rightarrow p+p+n$ as a Way to Trojan Horse III, <u>A.M. Mukhamedzhanov</u>, <u>Invited talk</u>, INFN (National Institute of Nuclear Physics) and University of Catania, Catania, Italy, (June 2004).

Theory of Resonance Processes in Trojan Horse IV, <u>A.M. Mukhamedzhanov</u>, <u>Invited talk</u>, INFN (National Institute of Nuclear Physics) and University of Catania, Catania, Italy, (June 2004).

Few-Body Problems in Nuclear Astrophysics, <u>A.M. Mukhamedzhanov</u>, 19th European Conference on Few-body problems in Physics, Groningen, the Netherlands, (August 2004).

Indirect Techniques in Nuclear Astrophysics: Trojan Horse, **A.M. Mukhamedzhanov**, **Invited talk**, Mainz University, Mainz, Germany, (August 2004).

Asymptotic Normalization Coefficient and Interference of the Resonance and Direct Capture Terms in the Astrophysical Factor for the Hot CNO Process $^{13}N(p,\gamma)^{14}O$, **A.M. Mukhamedzhanov**, DNP APS Meeting, Chicago, Illinois, (October 2004).

Few-Body Problems in Nuclear Astrophysics, <u>A.M. Mukhamedzhanov</u>, International Conference: on Nuclear Structure, Astrophysics and Reactions, University of Surrey, Guilford, United Kingdom, (January 2005).

Subthreshold States in Nuclear Astrophysics and ANC, <u>A.M. Mukhamedzhanov</u>, <u>Invited talk</u>, INFN (National Institute of Nuclear Physics) and University of Catania, Catania, Italy, (January 2005).

New Method of Determination of the Spectroscopic Factors from (d,p) Reaction, <u>A.M.</u>

<u>Mukhamedzhanov</u>, <u>Invited talk</u>, Oak Ridge National Laboratory, Oak Ridge, Tennessee, (February 2005).

Physics of the Subthreshold States in Nuclear Astrophysics, <u>A.M. Mukhamedzhanov</u>, <u>Invited talk</u>, Oak Ridge National Laboratory, Oak Ridge, Tennessee, (February 2005).

Transfer Reactions: Spectroscopic Factors versus ANCs. Reaction Mechanisms for Rare Isotope Beams, **A.M. Mukhamedzhanov**, **Invited talk**, 2nd Argonne/MSU/JINA/INT RIA Workshop, East Lansing, Michigan, (March 2005).

Hadrons Below and Above T_c, **R. Rapp**, **Invited Talk**, International Workshop on Tracing Deconfinement in Nucleus-Nucleus Collisions, ECT* Trento, Italy, (April 2004).

Charm(onium) Re-Interactions in Nuclear Reactions, **R. Rapp**, **Invited Talk**, Workshop on Heavy–Quark Production at RHIC at the RHIC-AGS Users Meeting, Brookhaven National Laboratory, Upton, New York, (May 2004).

Thermal Photons in Strong Interactions, R. Rapp, Invited Talk, GSI Darmstadt, Germany, (June 2004).

Light and Heavy Hadrons in Medium, **R. Rapp**, **Invited Talk**, University of Frankfurt, Frankfurt, (June 2004).

The Vector Probe in Heavy-Ion Collisions, **R. Rapp**, **Invited Talk**, International Workshop for Young Scientists on the Physics of Ultrarelativistic Heavy-Ion Collisions (Hot Quarks '04), Taos Valley, New Mexico, (July 2004).

Dileptons at RHIC, **R. Rapp**, **Invited Talk**, International Chinese Center of Advanced Science and Technology (CCAST) workshop, Beijing, China, (August 2004).

What is the Origin of Mass?, **R. Rapp**, Physics Department Graduate Orientation, Texas A&M University, College Station, Texas, (August 2004).

Light and Heavy Hadronic Modes Below and Above T_c, **R. Rapp**, **Invited Talk**, Argonne National Laboratory, Argonne, Illinois, (October 2004).

Quark Coalescence and Charm(onium) in QGP, **R. Rapp**, **Invited Talk**, International Conference on Hard and Electromagnetic Probes of High Energy Nuclear Collisions, Ericeira, Portugal, (November 2004).

Electromagnetic Radiation and In-Medium Effects, **R. Rapp**, **Invited Talk**, European Graduate School workshop on Hadrons in Medium, Gieβen, Germany, (November 2004).

Perspectives on RHIC-II: Heavy Ions and Hot and Dense Matter, **R. Rapp**, **Invited Talk**, RHIC-II Science Workshop, Brookhaven National Laboratory, Upton, New York, (November 2004).

Light and Heavy Hadronic Modes in Medium, **R. Rapp**, **Invited Talk**, University of Bielefeld, Bielefeld, Germany, (November 2004).

Electromagnetic Probes of Medium Effects in Heavy-Ion Collisions, **R. Rapp**, **Invited Talk**, International Workshop XXXIII on Gross Properties of Nuclei and Nuclear Excitations on Probing QCD with High Energy Nuclear Collisions, Hirschegg, Austria, (January 2005).

Medium Modifications of the $\Delta(1232)$, <u>H. van Hees</u>, International Workshop for Young Scientists on the Physics of Ultrarelativistic Heavy-Ion Collisions (Hot Quarks '04), Taos Valley, New Mexico, (July 2004).

Medium Modifications of the $\Delta(1232)$, **H. van Hees,** DNP APS Meeting, Chicago, Illinois, (October 2004).

Thermalization of heavy quarks in the quark-gluon plasma, <u>H. van Hees</u>, <u>Invited Talk</u>, International Workshop XXXIII on Gross Properties of Nuclei and Nuclear Excitations on Probing QCD with High Energy Nuclear Collisions, Hirschegg, Austria, (January 2005).

Compression Modes and Nuclear Matter Incompressibility Coefficient within Relativistic and Non-relativistic Models, <u>S. Shlomo</u>, <u>Invited Talk</u>, International Nuclear Physics Conference (INPC-2004), Goteborg, Sweden, (June 2004).

The Nuclear Matter Equation Incompressibility Coefficient from Isoscalar Compression Modes, <u>S. Shlomo</u>, <u>Invited Talk</u>, The World Consensus Initiative 3 (WCI3) Conference, Texas A&M University, College Station, Texas, (February 2005).

The Nuclear Matter Equation of State from Compression Modes, S. Shlomo, Invited Talk, The 229th American Chemistry Society National Meeting, San Diego, California, (March 2005).

Hadronization via Coalescence, V. Greco, Conference on Hot Quarks 2004, Taos, New mexico, (July 2004).

The Search for the Quark-Gluon Plasma in Heavy-Ion Collision, **V. Greco**, INFN Italian Summer School, Otranto, Italy, (September 2004).

Signatures of Quark Recombination at RHIC, <u>V. Greco</u>, 1st ALICE Italian National Meeting, University of Catania, Catania, Italy, (January 2005).

Charm and Beauty in the Search for the Quark Gluon Plasma, <u>V. Greco</u>, University of Padova, Padova, Italy, (January 2005).

The Search for the Quark Gluon Plasma at the Relativistic Heavy Ion Collider, <u>V. Greco</u>, University of Florence, Florence, Italy, (January 2005).

Studying the Primordial Plasma after Big-Bang through Little Bang, <u>V. Greco</u>, Aerospace Engineering Department, Texas A&M University, College Station, Texas, (March 2005).