PROGRAM

3rd International Symposium on Nuclear Symmetry Energy

Lecture Hall, NSCL/FRIB, East Lansing, Michigan July 22-26, 2013

The allocated time in parenthesis includes 5 minutes for discussion.

Sat, 20-Jul

— *Canoe Excursion (9:30-)* — Meeting at the NSCL main entrance

Mon, 22-Jul

— Registration by Rms. 1221 A&B (8:00-) —

Chair: Bao-An Li

8:50 **Betty Tsang** (05 min)

Welcome

8:55 Chuck Horowitz & Alex Brown (15 min)

Short introduction to ICNT program

9:10 **Zach Kohley** (35 min)

RIB induced reactions at the NSCL and FRIB

9:45 **Hermann Wolter** (35 min)

Light Fragment Production in Heavy Ion Collisions and the Symmetry Energy

— Coffee Break (10:20-) —

10:50 **Yvonne Leifels** (35 min)

Relativistic heavy ion collisions at SIS energies - Constraining the symmetry energy at supra-normal densities

11:25 Massimo Papa (35 min)

Asymmetric nuclear matter calculations and many-body correlations in Semiclassical Molecular Dynamics

— Lunch Break (12:00-) —

Chair: Joe Natowitz

14:00 Takashi Nakamura (35 min)

Symmetry-energy Studies Using the SAMURAI facility at RIBF

14:35 Ivano Lombardo (35 min)

Isospin effects in medium mass nuclear systems at 25 MeV/nucleon

15:10 Akira Ohnishi (25 min)

Explicit three-body couplings in RMF and its effects on symmetry energy

— Coffee Break (15:35-) —

16:05 Jerzy Lukasik (35 min)

Current experimental status on density dependence of Symmetry energy at high energy 16:40 **Jirina Stone** (30 min)

Quark-Meson-Coupling model and nuclear matter constraints

17:05 **Dan Cozma** (25 min)

Towards a model-independent constraint of the high-density dependence of the symmetry energy

— Reception (18:30-) — Kellogg Center, Rooms Red Cedar A & B

Tue, 23-Jul

Chair: Bob Rutledge

8:50 **Jim Lattimer** (35 min)

Symmetry Energy and Neutron Star Structure

9:25 William Newton (30 min)

Constraining the High-Density Behavior of Nuclear Symmetry Energy with the Tidal Polarizability of Neutron Stars

— Coffee Break (9:55-) —

10:25 **Andrew Steiner** (35 min)

Recent Neutron Star Observations and the Nature of Matter Near and Above Saturation 11:00 **Hajime Sotani** (30 min)

Possible constraints on density dependence of symmetry energy from oscillations in Magnetar Giant Flares

11:30 **Stefano Gandolfi** (35 min)

Advances in the nuclear equation of state

- Symposium photo (12:05-) Garden space adjacent to NSCL
- Lunch Break/Poster Session (12:20-) —

Chair: Malgorzata Pfabe

14:30 **Joe Natowitz** (35 min)

Clusterization and the Symmetry Energy in Low Density Nuclear Matter

15:05 **Akira Ono** (25 min)

Handling of clusters in transport models

15:30 Luke Roberts (30 min)

Charged Current Interactions in Proto-Neutron Star Atmospheres and the Symmetry Energy

— Coffee Break (16:00-) —

16:30 **Zbigniew Chajecki** (30 min)

Using heavy ion collisions to determine asymmetry dependence of nuclear energy and of effective mass

17:00 **Justin Mabiala** (30 min)

Critical behavior of nuclear systems from quantum fluctuations

17:30 **Udo Schroeder** (30 min)

Symmetry energy: Mixed messages from nuclear fragmentation

Wed, 24-Jul

Chair: Vladimir Zelevinsky

8:50 **Umesh Garg** (35 min)

The Asymmetry Term in Nuclear Incompressibility from the Giant Monopole Resonances

9:25 Atsushi Tamii (35 min)

Electric Dipole Response of 208Pb and Constraints on the Symmetry Energy

— Coffee Break (10:00-) —

10:30 **Hiroyuki Sagawa** (35 min)

Giant Resonances, Mass Model and EoS

11:05 Angela Bracco (30 min)

On the nature of the Pygmy dipole resonance via inelastic scattering of 17O

11:35 **Xavier Roca-Maza** (30 min)

The Nuclear Symmetry Energy: Constraints from Giant Resonances

— Free time —

Sign-up sheets for suggested activities will be posted

Thu, 25-Jul

Chair: Alex Brown

8:50 **Alexander Gezerlis** (35 min)

Quantum Monte Carlo with Chiral Effective Field Theory Interactions

9:25 Isaac Vidana (30 min)

Effects of the tensor force and the rearrangement term on the nuclear symmetry energy

— *Coffee Break (9:55-)* —

10:25 Krishna Kumar (35 min)

Measurements of Parity-Violating Electron Scattering Asymmetries off Neutron-Rich Nuclei at Jefferson Laboratory

11:00 Farrukh Fattoyev (30 min)

Correlating the density dependence of the symmetry energy to neutron skins and neutronstar properties

11:30 Francesca Sammarruca (30 min)

Recent theoretical advances: comparing different microscopic approaches to neutron-rich matter

— Lunch Break/Poster Session (12:00-) —

Chair: Sherry Yennello

14:20 Mannque Rho (35 min)

The origin of the proton mass and its implication on the EoS of dense matter

14:55 **Zhigang Xiao** (30 min)

Experimental effort to study Symmetry Energy with Lanzhou's Cooler Storage Ring

— *Coffee Break (15:25-)* —

15:55 **Lie-Wen Chen** (35 min)

Determination of the symmetry energy around rho = 0.11 fm^{-3}

16:30 **Pawel Danielewicz** (25 min)

IAS and skin constraints on density dependence of symmetry energy

16:55 **Ian Bentley** (25 min)

A Simple Pairing Approach on the Linear Symmetry Energy Near N=Z

— Banquet (18:00-) —

Bus departs from the front of NSCL. Companions need to be there too.

Fri, 26-Jul

Chair: Yvonne Leifels

8:50 **Tetsuya Murakami** (35 min)

Pilot Experiments for SAMURAI-TPC project and Current Status of TPC Construction

9:25 **Rebecca Shane** (25 min)

Construction of Time Projection Chambers to probe the symmetry energy at high density

— *Coffee Break (9:50-)* —

10:20 Alan McIntosh (35 min)

Asymmetry Dependence of the Nuclear Caloric Curve

10:55 **Byungsik Hong** (30 min)

Plan for the nuclear symmetry energy measurements at RAON, LAMPS facility

11:25 Feng-Shou Zhang (35 min)

Probing nuclear symmetry energy with heavy-ion collisions: overview of different transport models in China

— Lunch Break (12:00-) —

Chair: Ed Brown

14:00 Winner of poster competition (15 min)

14:15 **Bob Rutledge** (35 min)

Measuring radii of neutron stars in globular clusters

14:50 Irina Sagert (25 min)

Soft nuclear equation-of-state from heavy-ion data and implications for compact stars

15:15 **Yeunhwan Lim** (25 min)

Nuclear symmetry energy and Neutron star cooling

— Coffee Break (15:40-) —

16:10 Romualdo deSouza (35 min)

N/A equilibration in binary nuclear systems

16:45 **Brett Carlson** (25 min)

A theoretical study of the statistical properties of very hot nuclei

17:10 **Bao-An Li** (35 min)

Summary Talk

Sat, 27-Jul

— Greenfield Village & Ford Museum (9:00-) — Meeting at the NSCL main entrance

Poster Presentations

1. **Sebastien Guillot** (Tue&Thu)

Neutron star radii

2. **Kota Masuda** (Tue&Thu)

Quark-hadron crossover and massive hybrid stars

3. **Simon Gannon** (Tue&Thu)

The ASY-EOS experiment at GSI: investigating symmetry energy at supra-saturation densities

4.1. Noritsugu Nakatsuka (Tue)

Constraining the Symmetry energy at supra saturation density region

5.1. **Suwat Tangwancharoen** (Tue)

A Time project chamber to explore the Equation of State of asymmetric matter at high densities

6.1. **Heidi Schuldes** (Tue)

Rare Kaon Signals in Au+Au-Collisions measured with HADES

4.2. **Rachel Hodges** (Thu)

Measuring Isospin Diffusion with the ZeroDegree Spectrometer

5.2. **Jack Winkelbauer** (Thu)

Pairing and Odd-Even Staggering effects in projectile fragmentation

6.2. **Jon Barney** (Thu)

Experiments to explore the Symmetry Energy around twice nuclear density

7. **Andre Da Silva Schneider** (Tue&Thu)

Nuclear pasta formation

8. **Juzo Zehihiro** (Tue&Thu)

Proton elastic scattering with RI beams

9. **Jun Hong** (Tue&Thu)

Bulk nuclear properties from pion yields and other data

10. **Will Powell** (Tue&Thu)

The SAMURAI TPC: Constraining The EOS For Isospin Asymmetric Nuclear Matter at Supra-Saturation Densities

11. **Krysten Stiefel** (Tue&Thu)

Modeling Timescale of Equilibration in Dinuclear Systems

12. **Mike Youngs** (Tue&Thu)

Attempts to Constrain the Symmetry Energy Using Light Clusters

13. **Rensheng Wang** (Tue&Thu)

Testing Time Projection Chambers with 90Sr source and cosmic rays

Updated on Mon Jul 22 23:10:14 2013.