

**Program of the ASY-EOS 2015**  
**International Workshop on Nuclear Symmetry Energy and Reaction Mechanisms**  
**(Venue: Palazzo Trigona, Museo Archeologico della Villa Romana del Casale,**  
**Piazza Duomo 2, Piazza Armerina)**

**Tuesday 3rd March, 2015**

9.00-9.45 **Registration**

9.45-10:00 **Welcome**

**Morning session (10:00-13:00)**

Chair: A. Pagano (INFN-Sez. di Catania)

10:00-10:40: W.G. Lynch (NSCL, Michigan State University, East Lansing, MI, USA): **Probing the nuclear symmetry energy with heavy ion collisions** (35'+5')

10.40-11.15: Q. Fable (GANIL, Caen, France): **Study of the asymmetric equation of state with heavy-ions collisions at the INDRA-VAMOS experiment** (30'+5')

11.15-11.40: **Coffee Break**

11:40-12:00: E. De Filippo (INFN-Sez. di Catania, Italy): **Sensitivity of N/Z ratio to dynamical fission: a new probe for symmetry energy ?** (17'+3')

12.00-12.20: A. Sochocka (Jagiellonian University, Cracow, Poland): **Investigation of the freeze-out configuration in the  $^{197}\text{Au}+^{197}\text{Au}$  reaction at 23 AMeV** (17'+3')

12.20-13.00: M. Papa (INFN-Sez. di Catania, Italy): **Dipolar degree freedom in heavy ion collision and CoMD-II Calculations** (35'+5')

**13.00-14.45: Lunch**

**Evening session (14:45–18:45)**

Chair: W. Trautmann (GSI, Darmstadt, Germany)

14.45-15.25: P. Danielewicz (NSCL, Michigan State University, East Lansing, MI, USA) (35'+5'): **Pion productions in Heavy-Ion collisions**

15.25-16.00: M.D. Cozma (Magurele/Bucharest, Romania) **Influence of the Symmetry Energy on the pi-/pi+ Multiplicity Ratio in Heavy-Ion Collisions** (30'+5')

16.00-16.20: K. Morawetz (FH Münster, Germany): **Nonlocal quantum kinetic theory and dynamical constraints on phase transitions** (17'+3')

16.20-16.40: S.K. Singh (Institute of Physics, Bhubaneswar, India) **The effect of isovector-scalar  $\delta$ -meson in infinite nuclear matter** (17'+3')

16.40-17.10: **Coffee Break**

Chair: S. Pirrone (INFN-Sez. di Catania, Italy)

17.10-17.50: M. Colonna (INFN-LNS, Catania, Italy): **Symmetry energy and reaction mechanisms at Spiral/Spes beam energy** (35'+5')

17.50-18.25: I. Stefan (IPN Orsay, France): **Deep-inelastic at 0° at new generation facility as Spiral2** (30'+5')

18.25-18.45: B. Gnoffo (INFN-Sez. di Catania, Italy) **Isospin influence on the decay modes of systems produced in the  $^{78,86}\text{Kr}+^{40,48}\text{Ca}$  at 10AMeV** (17'+3')

**Wednesday 04<sup>th</sup> March, 2015**

**Morning session (9:00-12:50)**

Chair: A. Chbihi (Ganil, Caen, France)

9.00-9.35: A. Le Fevre (GSI Helmholtzzentrum, Darmstadt, Germany) **Constraining the nuclear matter equation of state around twice the saturation density** (30'+5')

9.35-10.10: O. Lopez (LPC Caen, France) **Status of the FAZIA project** (30'+5')

10.10-10.30: A. Trifirò (INFN and Univ. of Messina, Italy) **FARCOS: a new telescope array for correlations and spectroscopy** (17'+3')

10.30-11.00 *talk by our sponsor*: M. Corbo (CAEN SpA, Viareggio, Italy) **Digital Pulse Processing for Nuclear Research Applications**

11.00-11.30: Coffee Break

11.30-12.10 A. Bonanno (INAF Astrophysical Observatory, Catania, Italy) **The equation of state and a minimum spin period of accreting pulsars** (35'+5')

12.10-12.30: E. Lanza (INFN-Sez. di Catania, Italy) **Microscopic nuclear form factors for the pygmy dipole resonance** (17'+3')

12.30-12.50: G. Giuliani (Department of Physics University of Catania, Catania, Italy) **Iso-Vector Giant Dipole Resonance modes in the Constrained Molecular Dynamics framework** (17'+3')

13.00-15.00: Lunch

15.00-19.00: Visit to Villa Romana del Casale

20.30: Social Dinner

**Thursday 05<sup>th</sup> March, 2015**

### Morning session (9:00-12:55)

Chair: F. Rizzo (INFN-LNS, Italy and Univ. di Catania)

9.00-9.50: C. Horowitz (Indiana University, USA): **Introduction to Supernovae for Heavy Ion Physicists** (40'+10').

9.50-10.30: K. Hagel (Texas A&M University, College Station, USA): **Heavy Ion Collisions and the Supernova Equation of State** (35'+5')

10.30-11.10: P. Napolitani (IPN Orsay): **Clusters in transport models** (35'+5')

11.10-11.40: Coffee Break

11.40-12.20: J. Roca-Maza (Università degli Studi di Milano, Italy), **Parity violating asymmetry, giant resonances, and the neutron skin thickness of a heavy nucleus** (35'+5')

12.20-12.55: M. Vanderbrouck (Ganil, Caen, France): **First measurement of the isoscalar giant resonances in a neutron rich exotic nucleus:  $^{68}\text{Ni}$  with the active target MAYA** (30'+5')

13.00-14.30: Lunch

14.30-15.30: Visit to Municipal Art Gallery (Pinacoteca)

### Evening session (15.30–18.00)

Chair: G. Verde (INFN-Sez. di Catania, Italy)

15.30-16.05 E. Bonnet (GANIL - CNRS/IN2P3, Caen, France) **Vaporization event properties to constrain low-density warm matter** (30'+5')

16.05-16.45 E. Khan (IPN Orsay) **Recent progress on the understanding of nuclear clustering** (35'+5')

16.45-17.15: H. Wolter (University of Munich, Garching, Germany) **Comments on light cluster emission and summary remarks** (25'+5')

17.15-18.00: Open Discussion

**Friday 06<sup>th</sup> March, 2015**

**9:30-12:30 Asy-Eos Collaboration meeting**