TNPI2016 – XV Conference on Theoretical Nuclear Physics in Italy

Pisa, April 20 – 22, 2016

Scientific program

Wednesday, April 20

09:00 – 09:30	Registration
09:30 – 09:40	Opening
09:40 – 10:00	S. Rosati (Pisa Univ.): Remembering Adelchi Fabrocini (1951 – 2006).
10:00 – 10:20	W. Alberico (Torino Univ.): Remembering Alfredo Molinari (1936 – 2014).
10:20 – 10:50	P. Castorina (Catania Univ.): Universality of strange particle production in high energy proton-proton and heavy ion collisions.
10:50 – 11:10	E. Grossi (Firenze Univ.): Non-dissipative corrections to energy-momentum tensor for a relativistic fluid
11:10 – 11:40	Coffee break
11:40 – 12:10	A. Beraudo (INFN Torino): Medium effects on heavy-flavour observables in high-energy nuclear collisions.
12:10 – 12:30	I. Karpenko (INFN Firenze): Hydrodynamic modelling of QCD matter in heavy ion collisions at RHIC Beam Energy Scan.
12:30 – 12:50	G. De Gregorio (Napoli Univ.): A self-consistent equation of motion multiphonon method for even and odd mass nuclei.
12:50 – 15:00	Lunch
15:00 – 15:30	O. Benhar (INFN Roma): Bridging the gap: effective interactions from realistic nuclear hamiltonians
15:30 – 15:50	D. Logoteta (INFN Pisa): Nuclear matter calculations with new chiral interactions
15:50 – 16:10	V. Minissale (LNS INFN): Hadronization via Quark coalescence at RHIC and LHC.
16:10 – 16:30	S. Plumari (LNS INFN): Initial State fluctuations from mid-peripheral to ultra-central collisions in a transport approach.
16:30 – 17:00	Coffee break

17:00 – 17:30 L. Fortunato (Padova Univ.): Applications of nuclear physics to a wider context: from molecules to stars passing through hypernuclei.

17:30 – 18:00 X. Roca Maza (INFN Milano): The Nuclear Equation of State and the Symmetry Energy.

18:00 – 18:20 L. Moschini (Padova Univ.): Direct reactions of weakly-bound nuclei within a one dimensional model.

18:20 – 18:40 J. Singh (Padova Univ.): Electromagnetic continuum spectrum of the Borromean nucleus ^{6}He.

Thursday, April 21

09:10 – 09:40 G.F. Burgio (INFN Catania): A unified equation of state on a microscopic basis : implications for neutron stars' structure and cooling.

09:40 – 10:10 A. Drago (Ferrara Univ.): Short and long Gamma Ray Bursts in the proto-magnetar model with quark deconfinement.

10:10 – 10:30 A. Mammarella (LNGS INFN): Meson properties in asymmetric matter.

10:30 – 10:50 S. Carignano (LNGS INFN): Crystalline chiral condensates.

10:50 – 11:20 Coffee break

11:20 – 11:50 W. Leideman (Trento Univ.): Ab initio calculations for non-strange and strange few-baryon systems

11:50 – 12:20 L.E. Marcucci (Pisa Univ.): Recent progresses in ab-initio studies of low-energy few-nucleon reactions of astrophysical interest.

12:20 – 12:40 M. Viviani (INFN Pisa): Numerical studies of the Bethe-Salpeter Equation in Minkowski space

12:40 – 13:00 A. Kievsky (INFN Pisa): Efimov physics with 1/2 spin-isospin symmetry.

13:00 – 15:00 Lunch

15:00 – 15:30 P. Finelli (Bologna Univ.): Theoretical optical potential derived from nucleon-nucleon chiral potentials.

15:30 – 15:50 A. Idini (Surrey Univ.): Forbidden electron capture processes and intermediate mass stars.

15:50 – 16:05 A. Bonaccorso (INFN Pisa): Report on the GGI School "Frontiers in Nuclear and Hadronic Physics" and "Re-writing Nuclear Physics textbooks" (Pisa 2015).

16:05 – 16:30 Discussion on the status and future of the GGI and Pisa Schools.

16:30 – 17:00 Coffee break

17:00 – 18:30 Round Table on the status and future of Theoretical Nuclear Physics in Italy and on the TNPI conference series.

20:15 **Social Dinner**

Friday, April 22

09:10 – 09:40 S. Scopetta (Perugia Univ.): 3-D parton structure of light nuclei.

09:40 – 10:10 E. Santopinto (INFN Genova): Exotic spectroscopy.

10:10 – 10:30 E. Vigezzi (INFN Milano): A quantitative account of the variety of nuclear structure observables in superfluid nuclei.

10:30 – 10:50 F. Raimondi (Surrey Univ.): Deuteron-induced nucleon transfer reactions within an ab initio framework.

10:50 – 11:20 Coffee break

11:20 – 11:40 M. Rinaldi (Perugia Univ.): Nucleon 3D structure from double parton scattering: a Light-Front quark model analysis.

11:40 – 12:00 J. Ferretti (Roma 1 Univ.): Continuum-coupling effects in heavy meson spectroscopy

12:00 – 12:20 Yamaguchi (INFN Genova): Spin degeneracy of Hadronic molecules in the heavy quark region

12:20 – 12:30 Closing