

Rewriting Nuclear Physics textbooks: basic nuclear interactions and their link to nuclear processes in the cosmos and on earth

Pisa (Italy), July 24th – 28th, 2017



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The 2017 School follows the 2015 edition that was dedicated to the progress made by Low Energy Nuclear Physics with Radioactive Beams during the last thirty years. Similarly to the previous edition, the aim of the 2017 event is to attract and train the best possible students introducing them to the wonders of Nuclear Physics. We shall try to convey to such students a view of the rich variety of on-going activities in the field, both experimental and theoretical, as well as the progress we have made in the last years that can be developed further in the future.

Program

- ◆ Historical introduction, experiments: Yorick Blumenfeld (IPN, Orsay, France)
- ◆ Historical introduction, theory: Vittorio Somà (CEA, Saclay, France)
- ◆ Light and unbound nuclei: Sofia Quaglioni (LLNL, Livermore, USA)
- ◆ Theoretical approaches for medium-heavy nuclei: mean-field and beyond: Gianluca Colò (University of Milano, Italy)
- ◆ Heavy ion reactions: Dieter Ackermann (GANIL, Caen, France)
- ◆ Nuclear astrophysics: Alba Formicola (Laboratori Nazionali del Gran Sasso-INFN)
- ◆ A half and hour walk through the physics of neutron stars: Isaac Vidaña (University of Coimbra, Portugal)
- ◆ Phenomenological optical potential: Alessia Di Pietro (Laboratori Nazionali del Sud, INFN, Catania, Italy)
- ◆ Microscopic optical potentials, multi channel approaches: Carlo Barbieri (University of Surrey, UK)
- ◆ Direct reactions: Susumu Shimoura (University of Tokyo, Japan)
- ◆ Symmetries and fundamental interactions, experiments: Klaus Kirch (ETH Zürich and Paul Scherrer Institute)
- ◆ Symmetries and fundamental interactions, theory: Luca Girlanda (University of Salento, Lecce, Italy)
- ◆ Neutron-matter interaction, n_TOF for astrophysics: Rene Reifarth (Goethe University Frankfurt, Germany)
- ◆ Neutron-matter interaction, n_TOF for applications: Frank Gunsing (CEA/Saclay, DSM / IRFU / SPhN, France)
- ◆ Nuclear interactions for medicine: Vincenzo Patera (Università di Roma "La Sapienza", Italy)

Friday July 28th: Visit to the European Gravitational Observatory VIRGO (Cascina, PI)

Local Organizing Committee

Ignazio Bombaci, University of Pisa
Angela Bonaccorso, INFN - Pisa (co-chair)
Giovanni Casini, INFN - Firenze (co-chair)
Maria Agnese Ciocci, University of Pisa
Jérémy Dohet-Elary, INFN - Pisa
Alejandro Kievsky, INFN - Pisa
Domenico Logoteta, INFN - Pisa
Laura Elisa Marcucci, University of Pisa
Valeria Rosso, University of Pisa
Michele Viviani, INF - Pisa



Lucia Lilli and Claudia Tofani, INFN, Pisa (Secretaries): ni2017@pi.infn.it
<https://agenda.infn.it/conferenceDisplay.py?confId=12522>