



The Galileo Galilei Institute for Theoretical Physics  
Arcetri, Florence

# Frontiers in Nuclear and Hadronic Physics School

Arcetri, Florence, February 16 – 27, 2015

The lectures are primarily addressed to Ph.D. students in Theoretical Hadronic and Nuclear Physics. However, in view of their pedagogical character, they are also well suited for experimentalists and post-docs, whose participation is strongly encouraged. The goal of the 2015 lecture series is to provide an introduction to the most significant and hot topics in hadronic and high energy nuclear physics, highlighting the striking features of "QCD at work". The main topics of the first week are hadron spectroscopy and the 3D description of the nucleon. The second week will be focussed on relativistic heavy ion physics.

## Lecturers and Topics

- **Jaume Carbonell (INP23-CNRS, Orsay, France)**  
Hadrons on the lattice
- **Massimo D'Elia (University of Pisa, Italy)**  
Lattice QCD at finite temperature and density
- **Ulrich Heinz (Ohio State University, USA)**  
Bulk dynamics and soft observables in relativistic heavy ion collisions
- **Piet Mulders (VU University of Amsterdam, The Netherlands)**  
Transverse-momentum distributions and generalized parton distributions: setting up the nucleon tomography
- **Michael R. Pennington (Th. Jefferson National Lab., Newport News, USA)**  
Understanding hadron spectroscopy
- **Urs A. Wiedemann (CERN, Geneva, Switzerland)**  
Hard probes in relativistic heavy ion collisions

## Organizing Committee

Francesco Becattini (University of Firenze)  
Ignazio Bombaci (University of Pisa)  
Angela Bonaccorso (INFN, Pisa)  
Maria Colonna (LNS, INFN, Catania)  
Giovanni Salmé (INFN, Roma)  
Elena Santopinto (INFN, Genova)  
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