



# Congresso del Dipartimento di Fisica

28-29 June 2017

*The congress aims at presenting a snapshot of the research done in our Department to the academic community, the media, and the public at large. Policy-makers and authorities are also invited.*

*The Congress will host invited talks and posters, and aims to provide an opportunity to strengthen interdisciplinary collaborations among the members of the Department and the members of other communities. All the researchers working in the Milan area are invited to participate and the invitation is extended to all interested scholars.*

## Speakers

- Paolo Arosio, *Magnetic nanoparticles: recent advances in biomedical applications*
- Vera Bernardoni, *Optical properties of atmospheric aerosol: development of innovative instrumentation and modelling applications*
- Francesca Borghi, *Investigation of the early stages of growth of zirconia nanostructures produced by supersonic cluster beam deposition: from the sub-monolayer to the thin film regime*
- Davide D'Angelo, *Complementary approaches to Dark Matter search*
- Marcel Di Vece, *Charge effects in thin a-Si films with embedded gold particles*
- Marcello Fanti, *Discovery of the Higgs boson and most recent measurements at LHC*
- Giancarlo Ferrera, *Precise theoretical predictions for LHC physics*
- Guido Fratesi, *Spectroscopy of adsorbates and the role of interfacial interactions*
- Marco G. Genoni, *Quantum Control for Advanced Quantum Metrology*
- Flavia Groppi, *Optimization of the production of non-conventional high specific activity radionuclides for medicine, toxicology and nanotoxicology*
- Luigi Guzzo, *DARKLIGHT: Illuminating dark energy with galaxy redshift surveys*
- Silvia Leoni, *Recent developments and perspectives in nuclear structures by gamma and particle spectroscopy*
- Giuseppe Lodato, *Planet Formation in the ALMA Era*
- Giancarlo Maero, *Generation and active control of coherent structures in partially neutralized magnetized plasmas*
- Luca G. Molinari, *Jack on a Devil's staircase (on the ground states of the fractional quantum Hall effect)*
- Vittoria Petrillo, *Compton sources with angular momentum*
- Federico Pezzotta, *Applications and control of 3D printing FDM processes in the domain of scientific research inside the Department of Physics*
- Alessandra C. Re, *The Neutrino: looking through its experimental world*
- Xavier Roca Maza, *Towards a universal nuclear structure model*
- Giorgio Rossi and Luca Serafini, *Development of a user analytical facility at the EXPO Science Campus of Unimi based on an advanced Compton/FEL EM radiation source*
- Massimo Sorbi, *Recent developments in accelerators physics*
- Alberto Stabile, *R&D on electronic devices and circuits for the HL-LHC*
- Guido Tiana, *Maximum-entropy modeling of biomolecules*
- Maurizio Tomasi, *Beyond Planck: a new generation of CMB polarization experiments*
- Alberto Vailati, *The NEUF-DIX Space Project: understanding diffusion in complex fluids*
- Ivan Veronese, *Recent progresses in scintillating optical fiber dosimeters*

## Chairperson

Laura Perini

## Scientific Committee

Pier Francesco Bortignon  
Giuseppe Lodato  
Emanuela Meroni  
Matteo G. A. Paris  
Alessandro Vicini

*The Department of Physics is located in via Celoria 16, Milano.*

*It hosts research activities in various domains of fundamental and applied Physics as well as a research unit of the INFN (National Institute of Nuclear Physics). Research is also performed in collaboration with other national research agencies as the INAF (National Institute of Astrophysics) and the CNR (National Research Council). The Department also hosts the activity of the CIMAINA (Interdisciplinary Center of Nanotechnologies) and performs basic and applied research in collaboration with private companies and government agencies.*

*The Department employs about 80 research staff members, and 40 administrative and technical staff units. Several Italian and foreign students of the PhD School and Post-Docs contribute to the research activities of the Department.*

*As you explore the Department site [www.fisica.unimi.it](http://www.fisica.unimi.it) you will find a wealth of information about us: who we are, what research we do, what academic programs we offer, what talks and seminars are scheduled, employment opportunities, and much more.*

*We especially welcome to our workshop and webpages prospective students of all kinds: high school students thinking of studying in Milan and prospective graduate students of our PhD School (infos about applications at [phd.fisica.unimi.it](http://phd.fisica.unimi.it)).*

Further info at the congress webpage: [www.fisicamilano.it](http://www.fisicamilano.it)

