



# CORSO DI DOTTORATO IN FISICA, ASTROFISICA E FISICA APPLICATA

Presso la Sala Bertoni del Dipartimento di Informatica  
gli allievi del I° anno della Scuola di Dottorato  
terranno nelle giornate del 24 e 25 settembre 2019  
il seminario di fine anno nei seguenti orari:

## 24 SETTEMBRE

- 09:00 Welcome (M. Paris)**  
*Chairperson: Cristina Lenardi*
- 09:10** Mrunali Gaijan: Cosmology with gravitational waves from astrophysical sources: the impact of gravitational lensing.
- 09:30** Sara Ziliani: Study of neutron-rich light nuclei: a test to nuclear structure and clusterization phenomena.
- 09:50** Carlotta Porzio: Nuclear shape evolution in Ge isotopes.
- 10:10** Stefano Mandelli: Atmosphere characterization for ground-based CMB measurements.
- 10:30** Simone Paradiso: Probing the reionisation history of the Universe with CMB polarisation data.
- 10:50 Coffee break**  
*Chairperson: Marco Buscaglia*
- 11:20** Martina Toscani: Gravitational Waves from transient events: analytical and numerical approach.
- 11:40** Simone Iovenitti: Diagnostic of ASTRI-Horn optics: runtime pointing and alignment with the Cherenkov camera.
- 12:00** Simone Di Leo: Hybridization and selectivity of random-sequence DNA Oligomers.
- 12:20** Marco Piazzoni: 3D Bio-Hybrid Actuators: a New Frontier in Soft Robotics.
- 12:40** Edoardo Suerra: Development of a MegaWatt-class pulsed laser system for Compton source in the framework of MariX project.

## 25 SETTEMBRE

- Chairperson: Stefano Forte**
- 09:00** Eliana Masha: Cross section measurements of astrophysical interest: Study of  $^{22}\text{Ne}(\alpha, \gamma)^{26}\text{Mg}$  reaction at LUNA.
- 09:20** Davide Pietro Mungo: Machine learning meets the Higgs boson at the ATLAS detector.
- 09:40** Anita Previdi: Nano- and microscale fabrication and characterization of neuronal cell networks.
- 10:00** Claudia Ravasio: Optical characterization of mineral dust with digital in-line holography.
- 10:20** Linda Ravazzano: Unjamming of active rotators.
- 10:40 Coffee break**  
*Chairperson: Aniello Mennella*
- 11:10** Sara Moon Villa: Soft polymeric nanocomposites for electromechanical conversion: a tool for sensing and energy harvesting.
- 11:30** Vittorio Erba: Optimal transport theory: a disordered system point of view.
- 11:50** Tanjona Radonirina Rabemananjara: Generative Adversarial Neural Networks (GANs) for Parton Distribution Functions (PDFs).
- 12:10** Jesus Urtasun Elizari: Machine Learning for the precision determination of Parton Distribution Functions.
- 12:30 Conclusions (M. Paris)**

Dipartimento di Informatica - Sala Bertoni (Aula Magna)  
Università degli Studi di Milano  
Via Celoria, 18 - 20133 Milano

per ulteriori informazioni chiedere a [phd@fisica.unimi.it](mailto:phd@fisica.unimi.it)  
<http://phd.fisica.unimi.it>