

## Astrophysical Probes of Fundamental Physics

A PhD School at University of Ferrara

Ferrara (Italy), 7-11 September 2015

<http://fst.unife.it/eventi/phd-school-astrophysics-1/>

As part of the PhD program in Physics ("Dottorato di Ricerca in Fisica") at University of Ferrara, the Department of Physics and Earth Science organises a series of Lectures on advanced topics in astrophysics and fundamental physics, designed for PhD and Master students in Physics and Astronomy, as well as researchers with multi-disciplinary interests in high-energy astrophysics, astro-particle physics and cosmology.

The aim of this school of Astrophysics, the first in a series, is to provide participants with advanced knowledge on outstanding questions in fundamental physics which can be addressed in the field of astrophysics and cosmology. Lectures will cover recent developments in cosmology and astro-particle physics, including dark matter and dark energy, high-density matter and extreme physics, which can be probed with compact objects and high-energy transient phenomena. Lectures will blend theoretical and observational aspects on these topics.

**Organization:** Department of Physics and Earth Science at University of Ferrara.  
Scientific Organising Committee: *Piero Rosati, Cristiano Guidorzi, Filippo Frontera*

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### Lectures:

<b>Lorenzo Amati</b> , INAF-IASF, Bologna	<b>Roberto Gilli</b> , INAF, Bologna
<b>Marco Baldi</b> , University of Bologna	<b>Cristiano Guidorzi</b> , University of Ferrara
<b>Carlo Burigana</b> , INAF-IASF, Bologna	<b>Paolo Natoli</b> , University of Ferrara
<b>Massimo Della Valle</b> , INAF, Napoli	<b>Mauro Orlandini</b> , INAF-IASF, Bologna
<b>Alessandro Drago</b> , University of Ferrara	<b>Piero Rosati</b> , University of Ferrara

### Format:

*Monday-Thursday:* Lectures in morning and afternoon sessions with ample time for questions

*Friday morning:* short presentations on PhD projects (plan, progress, or highlights) by students

**Program of Lectures:** [http://fst.unife.it/eventi/phd-school-astrophysics-1/Ferrara\\_PhD\\_School.pdf](http://fst.unife.it/eventi/phd-school-astrophysics-1/Ferrara_PhD_School.pdf)