

Azores School on Observational Cosmology

31 August – 6 September, 2011
Angra do Heroísmo, Azores
Portugal

Observational cosmology is going through a particularly exciting period. A range of ground and space experiments are gathering an unprecedented amount of high-quality data, which may allow us to tackle enigmas such as

- the nature of dark energy and dark matter
- the statistical properties of primordial fluctuations
- the possible existence of a stochastic gravitational wave background
- the fundamental constituents of nature

In order to fully exploit these datasets, one requires the interplay of a broad range of expertise, encompassing theory, phenomenology, high-performance computing, data analysis and instrumentation.

This school will provide PhD students and young postdocs with state-of-the art overviews of these key issues. In addition to this training element, they will have an opportunity to present their own work and discuss it with world experts in the field.

A PRELIMINARY LIST OF LECTURERS AND TOPICS IS:

COURSE LECTURES (3 lectures each)

Bruce Bassett / Cape Town: Dark energy theory & observations
Kris Gorski / JPL/Caltech: CMB Data analysis
Alessandro Melchiorri / Roma: CMB Theory and Fundamental Physics
Bernard Schutz / Max Planck Institute: Gravitational waves
Paul Shellard/James Fergusson / Cambridge: Non-gaussianity

REVIEW TALKS

Dragan Huterer / Michigan: Alternative models of gravity
Alex Kim / LBNL: Type Ia Supernovae (2 talks)
Carlos Martins / CAUP: Varying fundamental constants
Paolo Molaro / Trieste: Cosmology with ESPRESSO & CODEX

SOC

Kris Gorski / JPL/Caltech
Ruth Lazkoz / UPV
Carlos Martins / CAUP
Alessandro Melchiorri / Roma
Paul Shellard / Cambridge
George Smoot / Berkeley

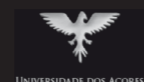
LOC

Marina Cortes / Berkeley
Miguel Ferreira / Açores
Katherine Mack / Cambridge
Carlos Martins / CAUP
Manuel Monteiro / CAUP, Sysadmin
Stefania Pandolfi / Roma
Graca Rocha / JPL/Caltech
Elsa Silva / CAUP, Admin
Jon Urrestilla / UPV



www.astro.up.pt/azores11

Organizers



With the support of

