



INSTITUT D'ETUDES SCIENTIFIQUES DE CARGESE

Cargèse International School 2012

XIth School of Cosmology September 19–22, 2012

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One of the most active domain of cosmology aims to understand in details large-scale structure and galaxy formation. This school will cover the study and use of gravitational lenses at all scales (cosmological, that of galaxy clusters, and galaxies), so to highlight the shape and extent of dark matter halos around structures (clusters, galaxies of all types). It provides an opportunity for theorists and observers to discuss by confronting data with theories. We can also compare the properties of dark matter relative to those of baryons. The aims of this school is the training of researchers, a reciprocal upgrade of communities involved, and learning new analytical techniques

Main topics will include

- Weak gravitational lensing: a tool to find the equation of state of dark energy
- Lensing galaxy clusters, the distribution of dark matter
- Strong gravitational lensing by galaxy clusters, and study the first galaxies at high resolution
- Extragalactic gravitational microlensing: quasars and dark matter
- Galaxy-galaxy gravitational lensing

Eminent scientists in the field will animate the school.

These include:

David Bacon (Institute of Cosmology and Gravitation, University of Portsmouth UK), Henk Hoekstra (Leiden Observatory NL), Tom Kitching (Institute for Astronomy University of Edinburgh UK), Jean-Paul Kneib (Laboratoire d'Astrophysique de Marseille, AMU FR), Leon Koopmans (Kapteyn Astronomical Institute NL), Simona Mei (GEPI Observatoire de Paris-Meudon FR), Roser Pello (IRAP Observatoire Midi-Pyrénées FR), Céline Péroux (Laboratoire d'Astrophysique de Marseille, AMU FR), Cristiano Porciani (Argelander-Institut für Astronomie DE), Johan Richard (CRAL Université de Lyon FR), Graham P. Smith (University of Birmingham UK), Joachim Wambsganss (Zentrum für Astronomie der Universität Heidelberg DE)

This school is intended for researchers, postdocs and PhD students, primarily those working in or associated with CNRS units, but other participants are also welcomed and in particular those involved in these domains. This is a thematic school sponsored by CNRS

Organization Committee

Françoise Combes (LERMA - Paris) , Yannick Mellier(IAP – Paris),
Roland Triay (CPT – Marseille)

Scientific Committee

Monique Arnaud (SAp/CEA Saclay), David Bacon (ICG, Portsmouth), Stéphane Charlot (IAP Paris), Françoise Combes (LERMA Meudon), François Couchot (LAL Orsay), Henk Hoekstra (Leiden Observatory), Jean-Paul Kneib (LAM Marseille), Yannick Mellier (IAP Paris), Peter Schneider (Alfa, Bonn), Roland Triay (CPT Marseille)

Application and registration

http://www.cpt.univ-mrs.fr/~cosmo/EC2012/EcoleLuminy12_a.html

Dead line : September 3, 2012

No Registration fees



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