

The Abdus Salam International Centre for Theoretical Physics



# SUMMER SCHOOL in COSMOLOGY

Miramare, Trieste, Italy

19 - 30 July 2010



- INTRODUCTION TO COSMOLOGY
- LENSING
- GRAVITATIONAL WAVES
- DARK ENERGY
- LARGE SCALE STRUCTURE
- DARK MATTER
- COSMIC MICROWAVE BACKGROUND
- ASTROPARTICLE PHYSICS
- GALAXY FORMATION
- INFLATION

The purpose of this School is to provide an introduction to the current state of research in cosmology and astroparticle physics. It is intended for beginning graduate students, as well as more senior non-expert researchers that are interested in these fields.

#### **PARTICIPATION**

Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend the School. As it will be conducted in English, participants should have an adequate working knowledge of this language. Although the main purpose of the Centre is to help research workers from developing countries, through a programme of training activities within a framework of international cooperation, students and post-doctoral scientists from advanced countries are also welcome to attend.



#### IN COLLABORATION WITH



#### THE ITALIAN INSTITUTE FOR NUCLEAR PHYSICS

#### **ORGANIZERS**:

P. Creminelli (ICTP)

U. Seljak (UC & LBNL Berkeley & Zürich U.)

M. Viel (INAF, OATS)

#### LECTURERS:

- **D. Baumann** (IAS, Princeton)
- G. Bertone (IAP Paris & Zürich U.)
- H.J. Mo (UMass, Amherst)
- J. Peacock (Univ. of Edinburgh)
- **F. Pretorius** (Princeton University)
- G. Raffelt (Max Planck, Munich)
- A. Refregier (SAp, CEA Saclay)
- A. Tolley (Perimeter Institute)
- M. White (UC Berkeley)
- -----

As a rule, travel and subsistence expenses of the participants should be borne by the home institution. Every effort should be made by candidates to secure support for their fare (or at least half-fare). However, limited funds are available for some participants who are nationals of, and working in, a developing country, and who are not more than 45 years old. Such support is available only for those who attend the entire activity. There is no registration fee to be paid.

The **Application Form** can be accessed at the activity website: <u>http://agenda.ictp.it/smr.php?2156</u>. Once in the website, comprehensive instructions will guide you step-by-step, on how to fill out and submit the application form.

#### **ACTIVITY SECRETARIAT:**

Summer School in Cosmology (smr2156) the Abdus Salam International Centre for Theoretical Physics Strada Costiera 11, 34151 Trieste, Italy. Telephone: +39 040 2240 363 - Telefax: +39 040 2240 7363 - E-mail: smr2156@ictp.it Activity Web Page: http://agenda.ictp.it/smr.php?2156 ICTP Home Page: http://www.ictp.it/

#### M. Zaldarriaga (IAS, Princeton)

#### **SCIENTIFIC SECRETARIES:**

M. Musso (ICTP)

A. Paranjape (ICTP)

### DEADLINE

for requesting participation

## 10 April 2010

Trieste, January 2010