







TOPICS of the School:

- INTRODUCTION TO COSMOLOGY
- DARK MATTER
- LARGE SCALE STRUCTURE
- INFLATION
- MODIFICATIONS OF GRAVITY
- COSMIC MICROWAVE BACKGROUND
- DATA ANALYSIS AND STATISTICS
- GRAVITATIONAL LENSING
- GALAXY CLUSTERS
- GALAXY FORMATION

The purpose of the School on Cosmology 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. After the School, there will be a more advanced Workshop on large scale structure for experts in the field.

PARTICIPATION

Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend the School and Workshop. 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.

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.

HOW TO APPLY FOR PARTICIPATION:

The **application forms** can be accessed at the **School** website http://agenda.ictp.it/smr.php?2354 and the **Workshop** website http://agenda.ictp.it/smr.php?2354

Once in the websites, comprehensive instructions will guide you step-by-step, on how to fill out and submit the application forms.

SCHOOL & WORKSHOP SECRETARIAT:

Telephone: +39 040 2240 363 - Telefax: +39 040 2240 7363 - E-mail: <u>smr2354@ictp.it</u> ICTP Home Page: <u>http://www.ictp.it/</u>



S. Borgani (INAF - OATS)

IN COLLABORATION WITH

THE ITALIAN INSTITUTE FOR NUCLEAR PHYSICS

- P. Creminelli (ICTP)
- **A. Paranjape** (ICTP)
- E. Sefusatti (ICTP)
- **U. Seljak** (UC & LBNL Berkeley & Zürich U.)
- R. Sheth (ICTP & UPenn)

LECTURERS:

- C. Baugh (ICC, Durham U.)
- M. Cirelli (CERN & CNRS Saclay)
- **S. Dodelson** (FNAL & U. Chicago)
- R. Durrer (Geneva U.)
- H. Hoekstra (Leiden Observatory)
- J. Mohr (LMU, Munich)
- A. Nicolis (Columbia, New York)
- W. Percival (ICG, Portsmouth)
- M. Sasaki (Yukawa Institute, Kyoto)
- R. Scoccimarro (NYU, New York)

DEADLINE

for requesting participation

15 April 2012