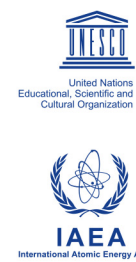




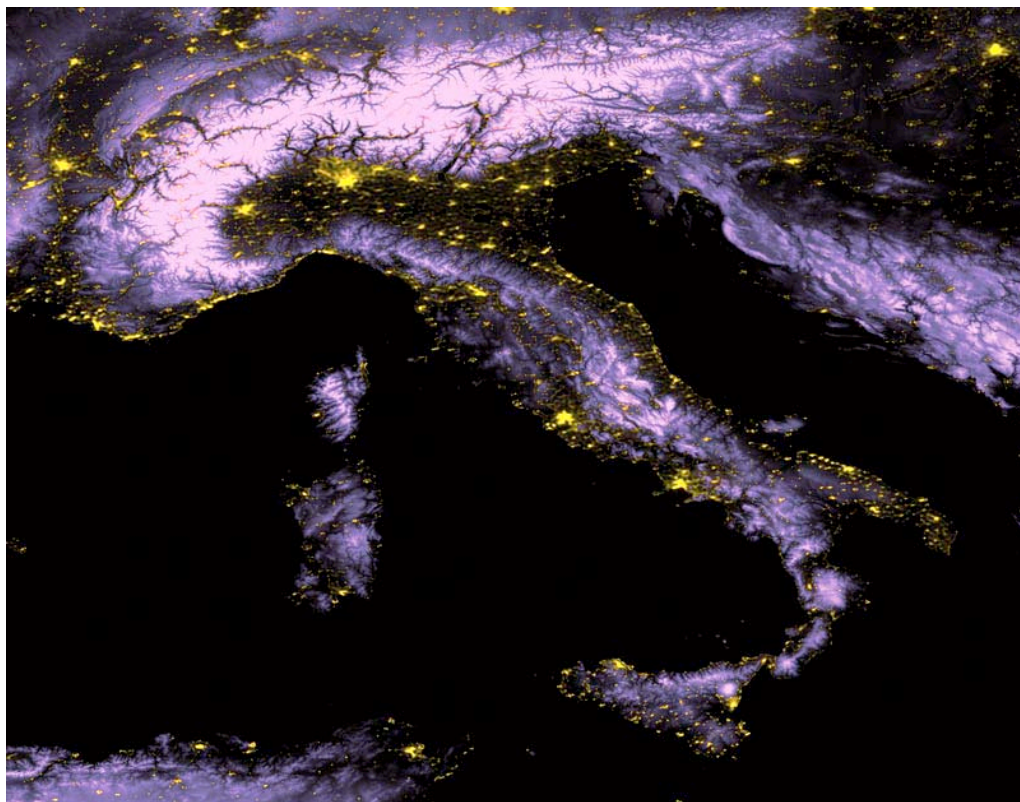
The Abdus Salam  
**International Centre  
for Theoretical Physics**  
[www.ictp.it](http://www.ictp.it)



# WORKSHOP on GALAXY BIAS: Non-linear, Non-local and Non-Gaussian

**8 - 11 October 2013**

**Miramare, Trieste, Italy**



To place tighter constraints on the physics of the early Universe, its expansion history and the nature of gravity, a better understanding of the nature of the bias between observable and dark matter will be needed. The workshop will be an occasion to present and discuss the most recent developments in the understanding of this bias, along with insights from recent observations. These include:

- predictions from the peaks and excursion set approaches
- nonlinearity, non-locality and assembly bias
- scale and angular dependence of bias
- implications for the Halo Model
- the impact of baryons and beyond CDM scenarios
- non-local bias from primordial non-Gaussianity
- constraints from observations of galaxies and gas

## **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 form can be accessed at the Workshop website: <http://agenda.ictp.it/smr.php?249>! Once in the website, comprehensive instructions will guide you step-by-step, on how to fill out and submit the application form.

### **WORKSHOP SECRETARIAT:**

Telephone: +39 040 2240 363 - Telefax: +39 040 2240 7363

E-mail: [smr2491@ictp.it](mailto:smr2491@ictp.it)

ICTP Home Page: <http://www.ictp.it/>

IN COLLABORATION WITH



**THE ITALIAN INSTITUTE FOR  
NUCLEAR PHYSICS**

## **ORGANIZERS:**

**R. Scoccimarro** (NYU)

**E. Sefusatti** (OA Brera & ICTP)

**R. Sheth** (ICTP & UPenn)

## **SPEAKERS include:**

**S. Cole** (Durham U)

**A. Faltenbacher** (Wits U Johannesburg)

**E. Gaztañaga** (ICE Barcelona)

**Y. Hoffman** (Hebrew U Jerusalem)

**T. Matsubara** (Nagoya U)

**B. Ménard** (Johns Hopkins U)

**H. Mo** (UMass Amherst)

**M. Musso** (U Catholique de Louvain)

**N. Padilla** (Pontificia U Católica de Chile)

**A. Paranjape** (ETH Zurich)

**C. Porciani** (Bonn U)

**J. Schaye** (Leiden U)

**R. Smith** (MPA Garching)

**R. van de Weygaert** (U of Groningen)

**DEADLINE**  
**for requesting participation**

**15 July 2013**