Second Workshop on Numerical and Observational Astrophysics: From the First Structures to the Universe Today

November 14-18, 2011 Institute for Astronomy and Space Physics (CONICET-UBA) Ciudad Autónoma de Buenos Aires, Argentina

http://www.iafe.uba.ar/AstroNum/html/workshop2011/w2011.html

Our knowledge of how cosmic structures formed and evolved has improved in last decades as new and more precise observations are being gathered. Moreover, the development of more sophisticated theoretical models and the advent of high-resolution numerical simulations have contributed a great deal to the comprehension of the physical universe.

In this context, the confrontation of observations and theoretical models is a key route to improve our understanding of galaxy formation within the hierarchical clustering scenario. The goal of the workshop is to bring together scientists working in both areas to discuss about new results and future challenges. Discussions will be fostered among participants to obtain new insight into different open issues which include:

- The physical processes which might regulate the star formation activity over Hubble time.
- The role of metals in galaxy formation.
- The interplay between environmental effects and internal processes to shape a galaxy.
- The impact of galaxy formation on the properties of IGM/ICM.

The meeting will also include extended talks focused on providing students and researchers with new knowledge on the very high-redshift universe and on challenges posed by current state-of-arts numerical models. This is an exciting and promising field of research for the next years given the development of new observational instruments which will yield unprecedented results about the first stages of structure formation.

The workshop will consist of a number of invited talks offering an overview of the various topics, as well as contributed talks and posters. The list of confirmed invited speakers and lecturers will be available on the conference website soon.

We aim at fostering the interactions between students and senior scientists hence the number of participants is limited to a maximum of 60 persons.

Important DATES:

- Pre-registration: 1st June, 2011
- Abstract submission for oral presentations: 1st August, 2011
- Application for partial financial support (only students): 1st August, 2011
- Early fee and abstract submission for poster presentations: 1st September, 2011

Partial financial help would be available for PhD students and advanced undergraduates who register before 1st August and present their work at the conference.

\*\*\*The pre-registration is now open at the conference website until 1st June, 2011.

Looking forward to seeing you in Buenos Aires!

The Local and Scientific Organising Committees

Contact e-mail: fsut2011@iafe.uba.ar Web site: <u>http://www.iafe.uba.ar/AstroNum/html/workshop2011/w2011.html</u>