

Workshop: First Announcement

“STELLAR CLUSTER & ASSOCIATIONS”

Conference Center of Granada, Granada, Spain
23th – 27th May, 2011

The ESA Gaia mission is going to be launched in August 2012. This survey will provide the largest census of Galactic stellar clusters ever.

It is generally accepted that most stars are formed in clusters; thus, clusters are the basic pieces of the stellar population in galaxies. Therefore, the study of the formation of clusters in the Milky Way, their interaction with the ISM, and their spectral and dynamical evolution are crucial to understand the history of star formation and the structure of our Galaxy.

The GREAT ESF Research Networking Programme is aimed at facilitating the interaction of European groups towards the fullest and successful exploitation of this unique space mission to enable them to provide answers to the key questions in our understanding of the Galaxy and Universe. The Stellar Clusters & Young Associations GREAT Working Group has accepted the challenge and has recently organized two workshops in Padova and Catania. As a natural continuation it is now proposing a scientific Workshop in Granada.

List of Topics

1. Gaia Status & Performances (Invited speaker: **T. Prusti**)
2. Star Formation & Initial Mass Function
 - a. Cluster Formation (Invited speaker: **P. Kroupa**)
 - b. Embedded Clusters (Invited speaker: **J. Alves**)
 - c. Initial Mass Function (Invited speaker: **K. Covey**)
3. Dynamical Evolution of Stellar Clusters
 - a. Cluster Systems in other Galaxies (Invited speaker: **S. Larsen**)
 - b. Spatial and Kinematic Distributions of Stellar Clusters (Invited speaker: **S. Goodwin**)
 - c. Disruption and Destruction Mechanisms (Invited speaker: **N. Bastian**)
4. Stellar Populations in Clusters
 - a. Massive Stars (Invited speaker: **I. Negueruela**)
 - b. Low Mass Stars, Brown Dwarfs and Cluster Exoplanets
 - c. Stellar Structure & Evolution (Invited speaker: **F. van Leeuwen**)
5. Star Clusters as Probes of Galactic Structure
 - a. The Formation of the Milky Way (Invited speaker: **E. Grebel**)
 - b. Evolution of the Galactic Disk (Invited speaker: **G. Gilmore**)
 - c. Structure of the Halo (Invited speaker: **A. Sarajedini**)
6. Surveys Pre and Post Gaia
 - a. Spectroscopic & Photometric Surveys (Invited speaker: **S. Feltzing**)
 - b. Synergy with Other Space Missions (Invited speaker: **P. André**)

The workshop will be scheduled along five days, with four sessions per day, excepting Wednesday and Friday afternoon that will be allocated for social events. Two sessions, so called "Tertulias" have been also scheduled. These sessions attend to be open discussions on some selected topics. Tentatively these topics are "Birth, Evolution and Death of Stellar Clusters" and "Long Term Surveys preparing and following GAIA. What do we need?"

Preliminary registration will be done through:

<http://sca.iaa.es/content/workshop-preliminary-registration-form>

More information at the Workshop web page: <http://sca.iaa.es>