

Workshop: First Announcement

**“STELLAR CLUSTER & ASSOCIATIONS”**

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

Gaia ESA space mission is going to be launched in August 2012. This galactic survey will provide the major census of stellar cluster ever known.

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

GREAT ESF Research Networking Programme is aimed to facilitate the interaction of European groups towards the fullest and successful exploitation of this unique space mission, enabling to provide answers to the key challenges in our understanding of the Galaxy and Universe. Stellar Clusters & Young Associations GREAT Working Group has accepted the challenge and has recently organized two workshops in Padova and Catania and as a natural continuation 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
  - 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>