COSPAR Capacity Building Workshop on the analysis of

Herschel and Spitzer Data

First Circular
April 2012

We are pleased to announce the ***COSPAR (Committee On SPAce Research) Capacity Building Workshop*** on the analysis of Herschel and Spitzer data.

The event will be held at the Miguelete Campus of the University of San Martín (UNSAM: http://www.unsam.edu.ar) in Buenos Aires, the academic partner of the Instituto de Tecnologías en Detección y Astropartículas (ITeDA: www.iteda.cnea.gov.ar), from October 15 to October 26, 2012.

The workshop will be the first COSPAR Capacity Building Workshop in the far infrared and sub-millimetre astronomy and represents a unique opportunity for the development of the research in the Latin American region within this observation window.

The outstanding results obtained from Herschel and Spitzer space telescopes cover an extremely rich variety of astronomical topics on all interesting cosmic scales: from objects in the Solar System, to star-forming regions throughout the Galaxy, and farther away to distant galaxies and the very earliest phases of star formation in the Universe .

Spitzer makes all of its science data available in the public domain and Herschel will have 1.5 years of public data by the time of the workshop. The analysis software from both missions is also public and readily available, providing the opportunity for new researchers to make use of their valuable scientific output.

The workshop will cover the practical usage of Spitzer and Herschel data analysis and will include reviews of general theoretical aspects related to sub-mm/IR radiation, highlighting the particular characteristics of the emission from different types of sub-mm/IR sources.

About half of the time of the workshop will consist of comprehensive lectures by international experts and talks on data processing and the preparation of observing proposals. The rest of the time will be devoted to projects on topics tailored to the needs and interests of each participant, possibly including their current research. Each participant will give a poster or verbal presentation of the results by the end of the workshop.

Computer classes will cover all stages of data reduction: from setting up systems and getting familiar with the practical applications, to imaging and analyzing real astronomical results. In general, talks about data processing and statistics will first review the basics, and then expand on explanations of available software tools attached to Spitzer and Herschel data.

Right after the meeting, students will be encouraged to complete and improve the initially research project done in the workshop, by resuming interaction with lecturers.

COSPAR offers grants for further expertise to selected students, and promote, in particular, developments related to the formation of research groups, to work on the workshop subject.

The working language of the workshop will be English.

Workshop Objectives:

- Introduce scientists to infrared and sub-mm opportunities to enhance their multi-wavelength astronomical perspective.

- Develope knowledge of the Herschel and Spitzer data archives.
- Train scientists in the use of specific software and techniques required to access and analyse data from the infrared and sub-mm archives.
- Introduce scientists to instrumentation applicable to actual and future infrared missions.
- Provide a general overview of possibilities of future space-based missions.

Target Participants:

The workshop is aimed at PhD students and advanced undergraduate students from Latin America. Applications from post-docs and young faculty members showing proven interest to moving into infrared astronomy, with emphasis on multi-wavelength opportunities, will be also welcomed. The minimum background required for participants is a degree in astronomy or physics. Participants will be accepted by the Organizing Committee mainly on the basis of their qualifications and the likely benefit to their research from participation.

Registration and financial support:

There is no registration fee for the workshop. All participants will be provided with accommodation and meals. Very limited funding is available on request for additional financial support.
The forms for registration and the request for additional financial support are available from http://cospar.iteda.org/

Important dates and deadlines:

April 30th to August 10th, 2012 : Registration Open

April 30th to August 10th, 2012: application for extra financial support

For further information see:

http://cospar.iteda.org/

Local Organizing Committee:

- Paula Benaglia, Instituto Argentino de Radioastronomía and FCAG (Universidad Nacional de La Plata)
- Guillermo Bosch, IALP-FCAG (Conicet & Universidad Nacional de La Plata)
- Silvina Cichowolski, Instituto de Astronomía y Física del Espacio
- Analía Cillis, Instituto de Astronomía y Física del Espacio
- Beatriz García, Instituto de Tecnologías en Detección y Astropartículas and Observatorio Pierre Auger
- Diego Ravignani, Instituto de Tecnologías en Detección y Astropartículas
- Jorge Sinderman, Universidad Nacional de San Martín

Scientific Organizing Committee:

- Prof. José Cernicharo, CAB, Spain (Chair).
- Dr. Carlos Gabriel, ESAC, ESA, Spain - COSPAR (Co-Chair).
- Prof. Franz Bauer, PUC, Santiago, Chile.
- Prof. Joao Braga, INPE, Brazil.
- Prof. Ian Corbett, IAU, France.
- Prof. Renato Dupke, ON, Rio de Janeiro, Brazil.
- Prof. Diego Garcia Lambas, UNC, Córdoba, Argentina.
- Dr. Neil Gehrels, Goddard Space Flight Center, NASA, USA.
- Dr. Hans Haubold, UN/OOSA.
- Dr. Martin Kessler, ESAC, ESA, Spain.
- Prof. Gastão Lima Neto - IAG, Universidade de São Paulo, Brazil.
- Prof. Marcos Machado, CNIE CONAE, Buenos Aires, Argentina.
- Prof. Mariano Méndez, University of Groningen, the Netherlands.
- Dr. Robert Missotten, UNESCO, Paris, France.
- Dr. Dany Page, UNAM, Mexico City, Mexico.
- Dr. Harvey Tananbaum, SAO, USA.
- Prof. Peter Willmore, University of Birmingham, UK

Lecturers:

- Alberto Noriega Crespo, Spitzer Data Center, NASA, USA.
- Amaya Moro, CAB, Spain.
- Bertrand Lefloch, LAOG, France.
- Bruno Altieri, Herschel SOC, ESAC, ESA, Spain.
- Carlos Gabriel, ESA, Spain.
- Christine Joblin, CNRS, France.
- David Teyssier, Herschel SOC, ESAC, ESA, Spain.
- Guillermo Bosch, FCAG-UNLP, Argentina.
- José Cernicharo, CAB, Spain.
- Lydia Cidale, FCAG-UNLP, Argentina.
- Mariano Mendez, Univ. of Groningen, the Netherlands.
- Mercedes Gómez, OAC, Argentina.
- Paula Benaglia, IAR, Argentina.
- Ranga-Ram Chary, California Institute of Technology, USA.
- Sergio Parón, IAFE, Argentina.