47th ESLAB Symposium:
The Universe as seen by *Planck*

An international conference dedicated to an in-depth look at the initial scientific results from the Planck mission.

ESA/ESTEC, Noordwijk (The Netherlands), 2-5 April 2013
http://congrexprojects.com/13a11

Second Announcement and Call for Contributed Papers (1 November 2012)

Aims and scope

The objective of the conference is to present and discuss the initial science results from *Planck,* ESA's mission to map the anisotropies of the Cosmic Microwave Background, and related science. It is the first scientific forum where these results will be addressed, following *Planck's* first major release of data products and scientific papers in early 2013. It will cover both cosmology (based on analysis of the Cosmic Microwave Background) and astrophysics (based on analysis of foreground emission sources).

Context

The *Planck* satellite was launched on 14 May 2009, and has been surveying the sky continuously since August 2009. The nominal duration of the mission was completed in November of 2010, but Planck still continues to gather data. Data processing has been progressing and a first set of cosmological-grade data products will be released to the astronomical community in early 2013. These products will consist mainly of temperature maps of the whole sky at nine frequencies between 30 GHz and 857 GHz, which allow us to extract a map of the temperature anisotropies of the Cosmic Microwave Background, as well as maps of many astrophysical foregrounds. The latter most importantly include synchrotron, free-free, anomalous and dust emission from the Milky Way, radio and far-infrared emission from external galaxies, the characteristic signatures due to the Sunyaev-Zeldovich effect in clusters of galaxies, and the Cosmic Infrared Background. The Planck data therefore provide material for an extremely broad range of cosmological and astrophysical science.

Format

Invited plenary presentations by members of the *Planck* Collaboration will describe all the major scientific results published in parallel with the release of the data products. Additional invited presentations will highlight areas of research related to *Planck* results. Contributed talks and posters are now being requested from the community. Part of the conference will be devoted to parallel sessions on specialised topics where details can be discussed at greater length. It is likely that three parallel sessions will be organised on the third day, devoted to CMB cosmology, clusters & extragalactic science, and Galactic science respectively; but please note that the exact scheme of the parallel sessions will depend on the contributions proposed. Posters will be displayed throughout the duration of the Symposium.

A helpdesk will be available to introduce participants to the Planck Legacy Archive and the use of the Planck data products.

Call for Papers

Contributed talks and posters on related topics are solicited from the community in the following topics:
- Advances in Cosmic Microwave Background and Fundamental physics
- Recent results from CMB experiments
- Recent results on related experiments with impacts on cosmology, e.g. Baryon Acoustic Oscillations, lensing, Cosmic Infrared Background, Sunyaev-Z'eldovich science, extragalactic number counts, etc
- Future experiments in the above areas
- Data reduction techniques for CMB experiments
- All-sky surveys at wavelengths relevant for CMB and Galactic Interstellar Medium science
- Foreground emission mechanisms and observations, especially polarised ones

The selection of talks will give preference to those which are most closely related to foreseen uses of the data products from *Planck* and related experiments.

Note: the abstract submission period opens on 1 November and ends on 10 January 2013. Proposers will be notified whether their contribution is accepted by 08 February 2013.

Confirmed speakers outside the *Planck* Collaboration

    G. Hinshaw
    A. Linde
    Y. Mellier
    L. Page
    J. Peebles
    M. Rees

Venue

The conference will be held on 2 – 5 April 2013 at the European Space Technology Centre (ESTEC) of the European Space Agency in Noordwijk (The Netherlands) – the site from which the Planck project was nurtured and developed into a successful satellite in orbit. The exact location can be found at http://www.esa.int/SPECIALS/ESTEC/SEMBAJ6K56G_0.html .

The conference poster can be downloaded from the conference web site.

Scientific Organising Committee

A. Banday
M. Bersanelli
R. Bond
F. R. Bouchet
C. Cesarsky
R. Davies
G. De Zotti
G. Efstathiou
K. Górski
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B. Partridge
S. Prunet
J.-L. Puget
R. Rebolo
R. Sunyaev
J. Tauber (Chair)
S. White
A. Zacchei

Local Organising Committee

C. Bingham
L. Fauvet
R. Leonardi
J. Tauber

Preliminary Schedule

Pre-registration: 15 October – 1 December
Early registration: 10 December 2012 - 1 March 2013
2nd Announcement and Call for papers: 1 November
Abstract submission period: 1 November - 10 January 2013
Notification of acceptance: 08 February 2013
Issue preliminary programme: 15 February 2013
Issue final programme: 15 March 2013.

Note: Considering the high interest foreseen and logistical limits on the total number of participants (~400), pre-registration is recommended. Pre-registration is voluntary; it serves as a help and guidance for the organisers, however it implies neither an obligation to attend nor does it constitute a "reservation" for attending. Registration will be limited once total capacity has been reached. To accommodate overflow, the plenary sessions will be telecast to a limited number of external sites (currently these are foreseen to be in Paris, Bologna, and Copenhagen – confirmation and details will be provided by 15 December 2013).

For any further information, please contact esa.conference.bureau@esa.int .