

# Observatoire de Paris

*École Internationale d'Astrophysique Daniel Chalonge*

**8<sup>th</sup> Paris Cosmology Colloquium 2004**

**WMAP AND THE EARLY UNIVERSE**

**Thursday 9<sup>th</sup> and Friday 10<sup>th</sup> December 2004**

**Observatoire de Paris, Paris campus**

## ***PURPOSE AND TOPICS***

The Conference is within the astro-fundamental physics spirit of the Chalonge School, this time focalized on CMB WMAP and the theory (models) of the early universe with power prediction.

Besides the WMAP talks, the main topics include: Inflation, quantum effects (inflaton decay, non gaussianity), primordial spectrum of density and tensor perturbations, CMB polarization, primordial magnetic fields effects on the CMB.

In summary, the aim of the meeting is to put together real CMB data and hard theory predictive approach connected to them.

The Meeting is open to all scientists  
interested in this domain

Information : <http://www.obspm.fr/chalonge>

## ***PROGRAMME and LECTURERS INCLUDE***

- ▶ Daniel BOYANOVSKY (Univ. of Pittsburgh, USA)  
*Inflaton Decay during Inflation and its Power Spectrum Implications*
- ▶ Asantha COORAY (CALTECH Astrophysics, USA)  
*The Quest for Inflationary Gravitational Waves. Reionization and its signatures in CMB.*
- ▶ Hector J. DE VEGA (LPTHE, Univ de Paris VI, France)  
*Inflationary models and Fundamental Physics from WMAP data*
- ▶ Alexander DOLGOV (Univ. di Ferrara, Italy)  
*Cosmological Magnetic Fields and CMB Polarization*
- ▶ Olivier DORE (Univ. of Princeton, USA)  
*Cosmology as enlightened by WMAP: one year after*
- ▶ Julien LESGOURGUES (LAPP, Annecy, France)  
*Isocurvature Perturbations after WMAP*
- ▶ Sabino MATARRESE (Univ. di Padova, Italy)  
*Surprises from second-order Cosmological Perturbation Theory*
- ▶ Alessandro MELCHIORRI (Univ of Rome "La Sapienza", Italy)  
*Cosmological constraints on Neutrino Physics*
- ▶ Hiranya PEIRIS (KICP, Univ of Chicago, USA)  
*Implications of WMAP for Early Universe Cosmology*
- ▶ Norma G. SANCHEZ (LERMA, Observatoire de Paris, France)  
*Inflation in Field and String Theory from the WMAP data*
- ▶ George SMOOT (LBL, Univ of California, Berkeley, USA)  
*CMB Observations. Anisotropies and Polarization*

and other Lecturers

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