

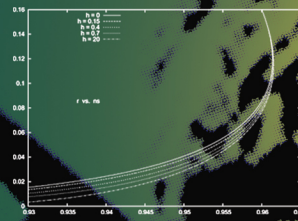


10th Paris Cosmology Colloquium 2006

PHYSICS OF THE EARLY UNIVERSE CONFRONTS OBSERVATIONS: WMAP 2006

OBSERVATOIRE DE PARIS, PARIS CAMPUS

Thursday 26, Friday 27, Saturday 28 OCTOBER 2006



PURPOSE AND TOPICS

The Colloquium is within the astrophysical physics spirit of the Chalonge School, this time focalized on CMB WMAP and the theory (models) of the early universe with power of prediction. There will be talks by WMAP team members on their results plus a number of selected talks on the Early Universe and Inflation in connection with the CMB, Primordial Magnetic Fields and Large Scale Structure. Topics: WMAP results, Inflation, effective theory of inflation and quantum effects, quadrupole suppression and low multipoles, initial conditions of inflation, primordial spectrum of density and tensor perturbations, CMB polarization, primordial magnetic fields effects on CMB, large scale structure, neutrinos in cosmology. In summary, the aim of the meeting is to put together real cosmological data and hard theory predictive approach connected to them. The Meeting is open to all scientists interested in the subject. Registration information can be found at <http://chalonge.obspm.fr>. The format of the Meeting is intended to allow easy and fruitful mutual contact and communication. Sessions last for three full days in the beautiful parisian campus of Observatoire de Paris (built on orders from Colbert and to plans by Claude Perrault from 1667 to 1672). All sessions take place at the "Salle du Conseil" (Council Room) in the historic Perrault building ("Bâtiment Perrault") of Observatoire de Paris HQ, under the portraits of Laplace, Le Verrier, Lalande, Arago, Delambre and Louis XIV.

PROGRAMME and LECTURERS INCLUDE

- Kevork ABAZJIAN** (Univ. of Maryland, USA) Neutrino Physics in Cosmology and Dark Matter
- Daniel BOYANOVSKY** (Univ. of Pittsburgh, USA) Effective field theory of Inflation and its Initial Conditions
- Hector J. DE VEGA** (LPTHE, Univ de Paris VI, France) Inflation models at the GUT scale confronted to the WMAP data
- Carlos S. FRENK** (Institute for Computational Cosmology, Durham, UK) The Large Scale Structure of the Universe
- Bryan GAENSLER** (Univ. of Sydney/SKA, Australia) Cosmic Magnetism Revealed with the Square Kilometre Array
- Massimo GIOVANNINI** (CERN-TH, Switzerland) Cosmic Magnetic Fields and scalar CMB anisotropies.
- Steen HANNESTAD** (Univ. of Aarhus, Denmark) Probing Neutrino Physics with Precision Cosmology
- Anthony N. LASENBY** (Cavendish Laboratory, Cambridge, UK) CMB Observations. Anisotropies and Polarization.
- Rafael REBOLO** (Instituto Astrofisico de Canarias, Spain) CMB experiments other than WMAP. The Tenerife experiment.
- Bernard SADOULET** (Univ. of California, Berkeley, USA) Present and Future Dark Matter Searches
- Ariel G. SANCHEZ** (Univ and Observatorio de Cordoba, Argentina) "Cosmological parameters from CMB and the final 2dFGRS power spectrum"
- Norma G. SANCHEZ** (LERMA, Observatoire de Paris, France) Early Fast Roll Inflation: the CMB quadrupole suppression
- George SMOOT** (LBL, Univ. of California, Berkeley, USA) CMB Observations. Anisotropies and Polarization.
- David SPERGEL** (Univ. of Princeton/WMAP, USA) WMAP Three Year Results: Implications for Cosmology
- Bruce WINSTEIN** (Univ. of Chicago, USA) The QUIET Project on CMB Polarization
- And other LECTURERS : Richard EASTHER, Richard HOLMAN, Pavel NASELSKY, Francesco SYLOS LABINI, A tour of Perrault building guided by **Suzanne DEBARBAT** (SYRTE-Observatoire de Paris) will take place around the subject: "The Instrumental Patrimony of Observatoire de Paris".

<http://www.obspm.fr/chalonge> Chalonge.Ecole@obspm.fr

