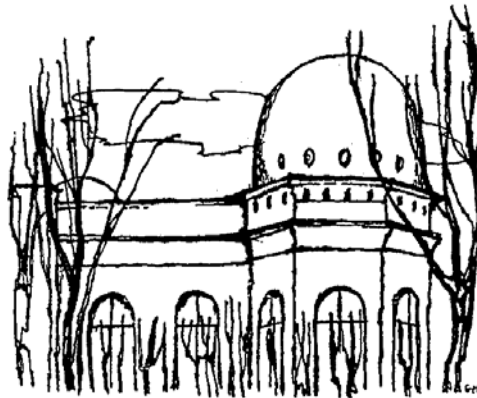




## 11th Paris Cosmology Colloquium

**"DARK MATTER, DARK ENERGY, CMB AND LSS :  
UNDERSTANDING THE PHYSICS OF THE UNIVERSE"**

**OBSERVATOIRE DE PARIS 16, 17, 18 AUGUST 2007**



**ALL SESSIONS take place at  
"SALLE DU CONSEIL" (COUNCIL ROOM) in the historic  
PERRAULT building ("Bâtiment PERRAULT").**

**Observatoire de Paris ENTRY :  
77, Avenue Denfert Rochereau, 75014 Paris**

**Sessions start at the indicated times sharp**

**1 HOUR = 50 minutes lecture + 10 minutes discussions**

## THURSDAY 16 AUGUST MORNING

8.00 - 9.10 GRANDE GALERIE (in Perrault building just aside Salle du Conseil) : *Registration, and sale of lunch tickets for the Observatoire Restaurant.*

### « SALLE DU CONSEIL »

9.15 - 9.30 Welcome Address

9.30 - 10.30 Anthony N. LASENBY (Cavendish Lab. Cambridge, UK) *CMB Anisotropies and Polarisation: Status Report and Future Perspectives*

10.30 - 11.30 Alan KOGUT (NASA-Goddard SFC, Greenbelt, MD): *A New Look at Reionization and Structure Formation*

11.30 - 12.00 COFFEE-TEA-MATE BREAK at SALLE CASSINI, *in Perrault building, upstairs of Salle du Conseil. Lunch tickets for the Observatoire Restaurant will be on sale during this break.*

12.00 - 13.00 Héctor J. DE VEGA (LPTHE Univ Paris VI, CNRS): *The Effective Theory of Inflation and the Dark Energy in the Standard Model of the Universe*

13.00 - 14.00 LUNCH *at the Observatoire Restaurant (Building B, ground floor)*

## THURSDAY 16 AUGUST AFTERNOON

### « SALLE DU CONSEIL »

14.00 - 15.00 Douglas CLOWE (Ohio Univ):  
*A Direct Observational Proof of the Existence of Dark Matter*

15.00 - 15.30 Nader MIRABOLFATHI (Univ. of California, Berkeley) *Dark Matter Experiments*

15.30 - 16.00 David O. CALDWELL (Univ. of California, Santa Barbara): *Evidence for Sterile Neutrino Hot Dark Matter and Implications for Cold Dark Matter*

16.00 - 16.30 Alexander KUSENKO (Univ. of California, Los Angeles): *Dark Matter in the Neutrino Sector*

16.30 - 17.00 COFFEE-TEA-MATE BREAK at SALLE CASSINI, in Perrault building, upstairs of Salle du Conseil.

17.00 - 18.00 Mikhail SHAPOSHNIKOV (EPFL Lausanne):  
*Physics beyond the Standard Model: low energies versus high energies*

18.00 - 19.00 Peter BIERMANN (MPI-Bonn):  
*The Nature of Light Dark Matter*

## FRIDAY 17 AUGUST MORNING

### « SALLE DU CONSEIL »

9.30 - 10.30 Carlos FRENK (ICC, Univ Durham):  
*The Large Scale Structure of the Universe*

10.30 - 11.30 Reno MANDOLESI (IASF Bologna):  
*The PLANCK Mission and its Science Objectives*

11.30 - 12.00 COFFEE-TEA-MATE BREAK at SALLE  
CASSINI in Perrault building, upstairs of Salle du Conseil.

12.00 - 13.00 Daniel BOYANOVSKY (Pittsburgh Univ):  
*The Effective Field Theory of Inflation confronted to CMB and  
LSS observations*

13.00 - 14.00 LUNCH at the Observatoire Restaurant (Building  
B, ground floor)

## FRIDAY 17 AUGUST AFTERNOON

### « SALLE DU CONSEIL »

14.00 - 15.00 Ben MOORE (ITP Univ Zurich):  
*Small Scale Structure as a Constraint on the Nature of Dark Matter*

15.00 - 16.00 Sergio COLAFRANCESCO (Observatorio di Roma): *Beyond the standard Lore of the SZ effect*

16.00 - 16.30 Ariel G. SANCHEZ (Observatorio de Cordoba, Argentina): *The Galaxy Power Spectrum: 2dFGRS-SDSS Tension ?*

16.30 - 17.00 COFFEE-TEA-MATE BREAK at SALLE CASSINI in Perrault building, upstairs of Salle du Conseil.

17.00 - 18.00 Patrick MCDONALD (CITA, Toronto):  
*Dark Matter Clustering and Renormalization Group Methods*

18.00 - 19.00 Julio NAVARRO (Univ Victoria, Vancouver):  
*The Small Scale Structure of the Universe: Structure and Substructure of Cold Dark Matter Halos*

## SATURDAY 18 AUGUST MORNING

### « SALLE DU CONSEIL »

**9.30 - 10.30** Lawrence M. KRAUSS (CWRU, Cleveland Ohio):  
*Dark Matter and Dark Energy: Here today and gone tomorrow ?*

**10.30 - 11.30** Yoel REPHAELI (Tel Aviv Univ & UCSD San Diego):  
*The Sunayev-Zeldovich Effect in Cosmology*

**11.30 - 12.00** COFFEE-TEA-MATE BREAK at SALLE CASSINI,  
*in Perrault building, upstairs of Salle du Conseil.*

**12.00 - 13.00** Massimo GIOVANNINI (CERN & Milano Bicocca):  
*Magnetized CMB Anisotropies*

**13.00 - 14.00** LUNCH BREAK : BUFFET at SALLE CASSINI, *in Perrault building, upstairs of Salle du Conseil for all participants and accompanying persons*

**SATURDAY 18 AUGUST AFTERNOON**  
**« SALLE DU CONSEIL »**

**14.00 - 14.30 Alessandro MELCHIORRI (Univ di Roma 1):**  
*New Constraints on the Dark Side of the Universe*

**14.30 - 15.30 Sabino MATARRESE (INFN Univ Padova):**  
*Renormalization group approach to Density Fluctuations*

**15.30 - 16.30 George F. SMOOT (LBL, UCB Berkeley):**  
*CMB Observations and the Standard Model of the Universe*

**16.30 - 17.00 COFFEE-TEA-MATE BREAK at SALLE CASSINI,**  
*in Perrault building, upstairs of Salle du Conseil.*

**17.00 - 18.00 Norma G. SANCHEZ (Observatoire de Paris,**  
LERMA, CNRS): *Understanding Inflation and Dark Energy in the*  
*Standard Model of the Universe*

**18.00 - 19.00 Tour to the historic Perrault building guided by**  
**Prof. Suzanne DEBARBAT (SYRTE-Observatoire de Paris )**  
*around the subject: "From de Lalande (1732-1807) and Lœwy*  
*(1833-1907) to the XXI century Astronomy at Observatoire de*  
*Paris"*

**19.00 - 20.30 APERITIF/COCKTAIL at SALLE CASSINI in**  
*Perrault building, upstairs of Salle du Conseil, for all*  
*participants and accompanying persons.*

**End of the Conference**

