

Ecole Internationale Daniel Chalonge

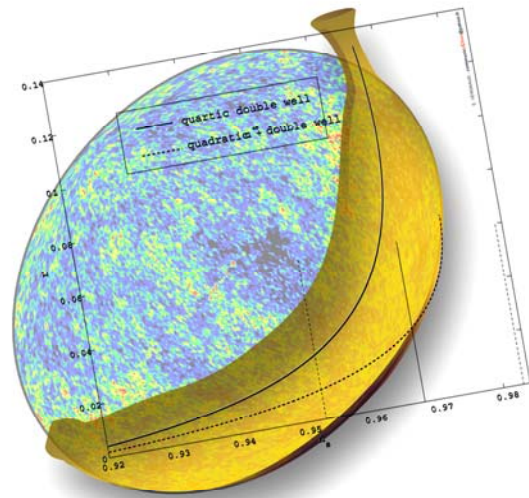
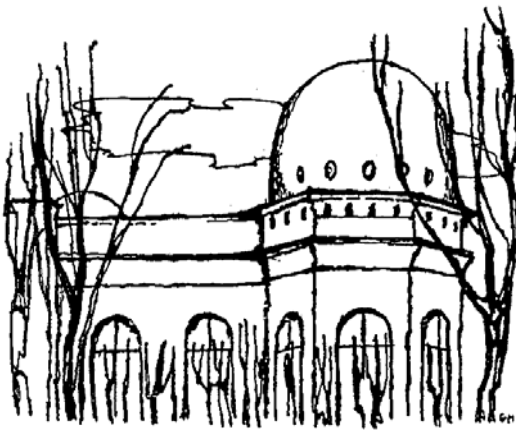


The 16th Paris Cosmology Colloquium 2012

LAMBDA WARM DARK MATTER (Λ WDM): THE NEW STANDARD MODEL OF THE UNIVERSE THEORY AND OBSERVATIONS

The International School Daniel Chalonge: 21 Years of Activity

OBSERVATOIRE DE PARIS 25, 26, 27 JULY 2012



All Sessions of the Colloquium take place
in the historic PERRAULT building ("Bâtiment PERRAULT")
Observatoire de Paris ENTRY: 77, Avenue Denfert Rochereau, 75014 Paris

All Sessions start at the indicated times sharp

Observatoire de Paris, Ecole Daniel Chalonge

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1 HOUR = 45 minutes lecture + 15 minutes discussion

WEDNESDAY 25 JULY MORNING

8.00 - 9.10: **GRANDE GALERIE** (*in Perrault building just aside Salle du Conseil*) **REGISTRATION:** *badges, lunch tickets for the Observatoire Restaurant, copies of the full Time Table with Lectures and Lecturers.* **Exhibition**

« SALLE CASSINI »

9.15 - 9.30 **Welcome Address**

9.30 - 10.30 **Anthony N. LASENBY** (Cavendish Lab. Cambridge, UK) *The CMB in the Standard Model of the Universe: A Status Report*

10.30 - 11.30 **Lyman PAGE** (Princeton Univ. Dept. of Physics, NJ, USA) *ACT results and WMAP 9-year results and their cosmological implications*

11.30 - 12.00 **COFFEE-TEA-MATE BREAK** at **SALLE DU CONSEIL**, *in Perrault building, downstairs of Salle Cassini.*

12.00 - 13.00 **Hector J. DE VEGA** (CNRS LPTHE UPMC Paris, France) *The Standard Model of the Universe: Warm Dark Matter and galaxy structure.*

13.00 - 14.30 **LUNCH** *at the Observatoire Restaurant (Building B, ground floor)*

WEDNESDAY 25 JULY AFTERNOON

« SALLE CASSINI »

14.30 - 15.30 **Peter BIERMANN** (Chalonge Medal, MPI-Bonn, Germany & Univ of Alabama, Tuscaloosa, USA)
Warm dark matter: cosmological and astrophysical signatures.

15.30 - 16.30 **Ernest MA** (Univ California Riverside, IAS Hong Kong and IAS Singapore)
Stable Interacting Majorana Fermion (Scotino) as keV Warm Dark Matter

16.30 - 17.00 **COFFEE-TEA-MATE BREAK** at **SALLE DU CONSEIL**, *in Perrault building, downstairs of Salle Cassini.*

17.00 – 18.00 **C.GIUNTI** (INFN-Turin) & **Marco LAVEDER** (Università di Padova, Italy) *Sterile Neutrinos: Phenomenology and Fits*

18.00 – 19.00 **Christian WEINHEIMER** (Institut für Kernphysik Universität Münster, Münster, Germany)
Absolute scale of the active neutrino mass and the search of sterile neutrinos

THURSDAY 26 JULY MORNING

« SALLE CASSINI »

9.30 - 10.30 **John KORMENDY** (Texas Univ., Dept Astron., Austin TX, USA) *Scaling Laws for Dark Matter Halos in Late-Type and Dwarf Spheroidal Galaxies*

10.30 - 11.30 **Matthew WALKER** (Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, USA)
Observations of cored density profiles in galaxies and related results

11.30 - 12.00 **COFFEE-TEA-MATE BREAK** at **SALLE DU CONSEIL** *in Perrault building, downstairs of Salle Cassini.*

12.00 - 13.00 **Christopher J. CONSELICE** (University of Nottingham, School of Physics and Astronomy, UK)
Observational overview on galaxy formation and evolution

13.00 – 14.30 **LUNCH** *at the Observatoire Restaurant (Building B, ground floor)*

THURSDAY 26 JULY AFTERNOON

« SALLE CASSINI »

14.30 - 15.30 Rafael REBOLO (Inst. Astrofísico Canarias, Tenerife, Spain) *CMB polarization and Science with the QUIJOTE Experiment*

15.30 - 16.30 QUIET Collaboration-Ingunn K. WEHUS (Univ of Oslo, Sweden) *Last results on the B-mode CMB polarization from QUIET.*

16.30 - 17.00 COFFEE-TEA-MATE BREAK at SALLE DU CONSEIL, in Perrault building, downstairs of Salle Cassini.

17.00 – 18.00 Félix MIRABEL (CEA-Saclay, France & IAFE-Buenos Aires, Argentina)
Re-ionization of the Universe

18.00 – 19.00 Aldo SERENELLI (Inst. de Ciències de l'Espai ICE-CSIC, Barcelone Bellaterra, Spain)
The solar abundance problem and solar models

19.00 -20.00 PHOTO OF THE GROUP on the meridian of Paris in the middle of the monumental south entry of the Perrault building & **CHAMPAGNE – DELIKATESSEN** for all participants and accompanying persons

FRIDAY 27 JULY MORNING

« SALLE CASSINI »

9.30 - 10.30 **Sudeep DAS** (Berkeley Center Cosmological Physics BCCP-LNBL, Berkeley, USA)

CMB lensing research and results: a status report

10.30 - 11.30 **Asantha COORAY** (University of California, Irvine, USA) *Recent cosmological results with Herschel Space Observatory*

11.30 - 12.00 **COFFEE-TEA-MATE BREAK** at **SALLE DU CONSEIL** *in Perrault building, downstairs of Salle Cassini.*

12.00 - 13.00 **Carlo BURIGANA & Reno MANDOLESI** (INAF-IASF, Bologna, Italy) *Results from the PLANCK satellite and their science implications*

13.00 - 14.30 **LUNCH BREAK:** *at the Observatoire Restaurant (Building B, ground floor) for all participants and accompanying persons*

FRIDAY 27 JULY AFTERNOON
« SALLE CASSINI »

14.30 - 15.30 **Norma G. SANCHEZ** (CNRS LERMA Observatoire de Paris, France) *The Standard Model of the Universe: Warm Dark Matter in agreement with observations*

15.30 - 16.00 **COFFEE-TEA-MATE BREAK** at **SALLE DU CONSEIL**, in Perrault building, downstairs of Salle Cassini.

OPEN SESSION 16.00-19.30

16.00 – 17.00 **John C. MATHER** (Chalonge Medal, Nobel prize of Physics, NASA Goddard Space Flight Center, Greenbelt, MD, USA) *The James Webb Space Telescope*

17.00 – 18.00 **George F. SMOOT III** (Chalonge Medal, Nobel prize of Physics, BCCP LBL Berkeley, IEU Seoul, Univ Paris Diderot USA) *News from UFFO (Ultra Fast Flash Observatory) Pathfinder: Science and Launch*

18.00 - 19.00 **Brian P. SCHMIDT** (Nobel prize of Physics (Research School Astron. & Astroph. Australian Nat Univ, Weston Creek, Australia) *Discovery of the Accelerated Expansion of the Universe*

19.00-19.30 *The Daniel Chalonge Medal: A Surprise Award*

19.30-20.00 Michel Ange TOGNINI (Brigadier General,
French Air Force, Test pilot, Astronaut, France)

Profession Astronaut

**20.00-20.30 Terrasse de l'Observatoire 360° et Coupole
Arago in Perrault building**

20.30-22.00 APERITIF/COCKTAIL at **SALLE DU
CONSEIL** in Perrault building, downstairs of Salle Cassini,
for all participants and accompanying persons

END OF THE COLLOQUIUM

**All Lecturers and Participants are expected to stay
untill the end of the Colloquium**
