

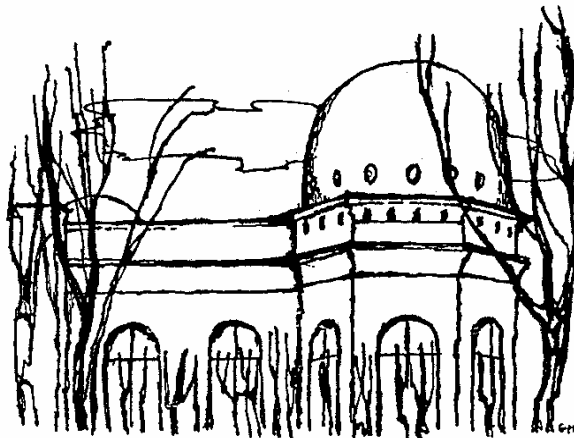
Ecole Internationale Daniel Chalonge



The 17th Paris Cosmology Colloquium 2013

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

The International School Daniel Chalonge: 22 Years of Activity
OBSERVATOIRE DE PARIS 24, 25, 26 JULY 2013



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

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1 HOUR = 45 minutes lecture + 15 minutes discussion

WEDNESDAY 24 JULY MORNING

8.00 - 9.10: GRANDE GALERIE & SALLE DU CONSEIL (in Perrault building) **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 (Chalonge Medal, Cavendish Laboratory, Cambridge, UK)
CMB Observations and its implications: A Status Report

10.30 - 11.30 Eiichiro KOMATSU (Max-Planck-Inst. für Astrophysik, Garching, Germany)
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 Héctor J. DE VEGA (CNRS LPTHE UPMC, Paris, France)
The New Standard Model of the Universe: Warm Dark Matter and galaxy structure in agreement with observations.

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

WEDNESDAY 24 JULY AFTERNOON

« SALLE CASSINI »

14.30 - 15.30 **Peter BIERMANN** (Chalonge Medal, MPI-Bonn, Germany & Univ of Alabama, Tuscaloosa, USA)
Cosmological and astrophysical signatures of Warm Dark Matter.

15.30 - 16.30 **Ferruccio FERUGLIO** (INFN Sezione di Padova, Italy)
Neutrino oscillations and the problem of neutrino masses: A Status Report

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

17.00 - 18.00 **Gianluigi FOGLI** (INFN Sezione di Bari, Italy)
Neutrino masses, mixings, phases: Theory vs. Experiments

THURSDAY 25 JULY MORNING

« SALLE CASSINI »

9.30 - 10.30 **Gerard F. GILMORE** (Institute of Astronomy, Cambridge University, UK)

Observations of Galaxy properties and Dark Matter at small scales

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 **Paolo SALUCCI** (SISSA-Astrophysics, Trieste, Italy) *Testing Warm Dark Matter with Galaxy observations and Cored Density Profiles*

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

THURSDAY 25 JULY AFTERNOON

« SALLE CASSINI »

14.30 - 15.30 Christopher J. CONSELICE (University of Nottingham, School of Physics and Astronomy, UK)
Observational overview on galaxy formation and evolution

15.30 - 16.30 Félix MIRABEL (CEA-Saclay, France & IAFE-Buenos Aires, Argentina) *Re-ionization of the Universe*

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

17.00 - 18.00 Casey WATSON (Millikin Univ, Dept Physics & Astron., Decatur, Illinois, USA)
Using X-rays to Constrain Sterile Neutrino Warm Dark Matter

18.00 - 19.00 PHOTO OF THE GROUP *on the meridian of Paris in the middle of the monumental south entry of the Perrault building & CHAMPAGNE - Delikatessen*

FRIDAY 26 JULY MORNING

« SALLE CASSINI »

9.30 - 10.30 **Christian WEINHEIMER** (Institut für Kernphysik Universität Münster, Münster, Germany)
Absolute scale of the active neutrino mass and the search of sterile neutrinos at the KATRIN experiment

10.30 - 11.30 **Carlo BURIGANA** (INAF-IASF, Bologna, Italy) On behalf of the Planck Collaboration. *Recent results from the PLANCK satellite and their implications*

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

12.00 - 13.00 **Norma G. SANCHEZ** (CNRS LERMA Observatoire de Paris, France)
The New Standard Model of the Universe: Warm Dark Matter Galaxies in agreement with observations. New Results

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

FRIDAY 26 JULY AFTERNOON

« SALLE CASSINI »

OPEN SESSION 14.30-19.30

14.30 – 15.30 George F. SMOOT III Chalonge Medal, Nobel prize of Physics (BCCP LBL Berkeley, IEU Seoul, Univ Paris Diderot USA)

Testing the most energetic phenomena in the Universe

15.30 - 16.30 Guido DREXLIN (INP-KIT-KACETA, Karlsruhe, Germany)

The Karlsruhe Tritium Neutrino experiment KATRIN and its scientific goals

16. 30-17.00 COFFEE-TEA-MATE BREAK at SALLE DU CONSEIL, in Perrault building, downstairs of Salle Cassini.

17.00-18.00 Michel Ange TOGNINI (Brigadier General French Air Force, Astronaut, France)

Highlights from My Space Missions

18.00-18.30 *The Daniel Chalonge Medal: A Surprise Award*

18.30-19.00 *Terrasse de l'Observatoire 360° & Coupole Arago* in Perrault building

19.00-22.00 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**
