



Ecole Internationale Daniel Chalonge
Torino Cosmology Colloquium
“LATEST NEWS FROM THE UNIVERSE”
George Smoot, Physics Nobel Prize and Daniel Chalonge Medal
Torino, 21 – 24 October 2009



The Courtyard of Palazzo Lascaris
Colloquium site



Library- Turin Academy of Sciences
Open session site



250th Anniversary of the
Astronomical Observatory of Torino

AIM and TOPICS

On the occasion of the International Year of Astronomy and the 250th anniversary of the Astronomical Observatory of Torino, the Colloquium “LATEST NEWS FROM THE UNIVERSE” will take place in Torino, with the participation of the 2006 Physics Nobel Prize laureate George Smoot. The spirit of the Colloquium will be in keeping with the Chalonge School’s emphasis on astro-fundamental physics, and the topics concern recent observational and theoretical progress made in the CMB, dark matter, dark energy, along with recent data received by satellite regarding astrophysics, space astrometry and physics of the solar system.

<http://ecolechalongetorino.oato.inaf.it>

Registration deadline 5 October 2009

SCHEDULED LECTURES

- George Smoot** (LBNL, Berkeley, USA)
CMB observations and the Standard Model of the Universe
- Norma Sanchez** (CNRS Lerma, Observatoire de Paris, Fr)
Understanding of inflation, dark matter and dark energy in the Standard Model of the Universe
- Hector de Vega** (CNRS, Univ Paris VI, Fr)
Inflation at the GUT scale confronted to the CMB+LSS data
- Reno Mandolesi** (INAF-IASF, Bologna, I) & **Maria Cristina Falvela** (ASI, Rome, I)
Science with the Planck satellite
- Claudio Destri** (Univ. of Milano Bicocca, I)
New Monte Carlo Markov chain analysis of CMB+LSS data
- Anna Curir** (INAF Observatory of Turin, I)
Evolution of galactic disks in cosmology
- GianLuigi Bodo** (INAF Observ. of Turin, I)
Astrophysical jets simulations
- John Miller** (SISSA and Oxford, UK)
Gravitational waves, black holes and neutron stars
- Duccio Macchetto** (ST Inst., Baltimore, US)
The new frontiers of the James Webb Space Telescope
- Gianni Navarra** (University of Turin, I)
Sources of the very-high energy cosmic rays

- Andrea Vacchi** (INFN-Trieste, I)
New data from Pamela
- Roberto Battiston** (University of Perugia, I)
The Alpha Magnetic Spectrometer: a particle physics experiment in space
- Piero Galeotti** (University of Turin, I)
A future cosmic ray mission on the ISS: EUSO
- Mario Lattanzi** (INAF Observatory of Turin, I)
The contribution of the new space astrometry to astrophysics (GALA)
- Fernando De Felice** (University of Padua, I)
Relativity and Astrometry
- Marisa Storini** (INAF-IFSI, Rome, I)
CMEs and cosmic rays
- Alan H. Gabriel** (IAS, Paris, Fr)
The solar atmosphere as driver for the corona
- Giancarlo Noci** (University of Florence, I)
From the corona of the Sun to the solar wind

- Marco Velli** (University of Florence, I)
A new perspective on the Sun: the Solar Orbiter and the Solar Probe missions
- Alberto Cellino** (INAF Observ. of Turin, I)
Small bodies physical properties
- Andrea Milani** (University of Pisa, I)
The dynamics of the solar system
- Open Session**
- Maria P. Azzario** (UNESCO Center, Turin, I)
Introduction
- Ester Antonucci** (INAF Obs. of Turin, I)
History of Turin Astronomical Observatory
- Alba Zanini** (INFN Section of Turin, I)
High Mountain Research Stations: a scientific heritage
- Frances Westall** (Orleans University, Fr)
Life in the solar system
- Mario Di Martino** (INAF Obs. of Turin, I)
Discovery of a recent impact crater
- Anna Sidorenko** (UNESCO Parigi, Fr)
Astronomy and UNESCO World Heritage
- Cipriano Marin** (UNESCO, Canarie, Es)
Starlight project

