



Ecole Internationale Daniel Chalonge



19 July 2008

*The Daniel Chalonge Medal 2008 has been awarded to
Anthony Lasenby and Bernard Sadoulet*

The International School of Astrophysics "Daniel Chalonge" has awarded the Daniel Chalonge Medal 2008 to Professor Anthony Lasenby from the Cavendish Laboratory-University of Cambridge (UK) and to Professor Bernard Sadoulet from the University of California at Berkeley and Lawrence Berkeley National Laboratory (USA).



The medal was awarded to Anthony Lasenby and Bernard Sadoulet for their pioneering work in the CMB anisotropies (Lasenby) and in the search of dark matter and astroparticle physics (Sadoulet), and for their support and outstanding contributions to the Chalonge School. Since the school was established in 1991, Anthony Lasenby and Bernard Sadoulet have actively contributed to two scientific milestones of what is called today the Standard Model of the Universe (CMB

anisotropies and particle dark matter research respectively). They are key lecturers of the School since its creation and continuously participated to the training and formation of young physicists and astrophysicists (graduate and postdoctoral students) from the world over in the courses and programmes the school offers on cutting-edge topics in cosmology and astrophysics. The construction and understanding of the Standard Model of the Universe is at the center of the scientific programme of the Chalonge School since its creation. Anthony Lasenby and Bernard Sadoulet are at the heart of the programs and life of the School, promoting fruitful discussions and work with the participants and supporting the origin and development of new ideas and projects.





Anthony Lasenby, Professor of Astrophysics and Cosmology at Cambridge University, author of numerous publications related to anisotropy of the microwave background, telescope surface profile measurement, phase reconstruction

problems, atmospheric spectral line broadening but also theoretical work related to these subjects, was involved in many experiments on cosmology. Anthony Lasenby introduced an original analysis of data coming from CMB and is today a point of reference for both theorists and experimentalists.



Bernard Sadoulet, intellectual protagonist of many experiments both in Europe and in USA, currently Director of the UC system-wide Institute for Nuclear and Particle Astrophysics and Cosmology (INPAC) , is an eclectic scientist which devoted his research both to particle physics and cosmology. Bernard Sadoulet is actively involved in Dark Matter research (B. Sadoulet et al., 9, 61 (2007); 315 Science) among the most discussed subjects of the Chalonge School, and also currently in the underground science project DUSEL (Deep Underground Science and Engineering Laboratory).

A surprise Award

The Chalonge Medal is a totally surprise award. The medal was presented to Anthony Lasenby and Bernard Sadoulet on July 19 2008 during the sessions of The 12th Paris Cosmology Colloquium at the Paris Observatory (Observatoire de Paris) which was attended by about hundred participants from the world over.

Only six Chalonge Medals awarded in the 17-year school history

Anthony Lasenby's Chalonge Medal and Bernard Sadoulet's Chalonge Medal are the fifth and sixth the school has awarded in its 17-year history. The first medal was awarded in 1991 to astrophysicist and Nobel prize of Physics Subramanyan Chandrasekhar (1910-1995), who was a great friend of Daniel Chalonge and delivered the school's inaugural lecture in 1991 "Daniel Chalonge and the Problem of the Abundance of the Hydrogen". The second medal was awarded in 1992 to the distinguished high-energy physicist Bruno Pontecorvo (1913-1993), a pioneer of neutrino physics and a major supporter and lecturer at the school. The third medal was awarded in 2006 to cosmologist and Nobel prize of Physics 2006 George F. Smoot, who is at the center of the Chalonge School since its creation. George Smoot has the original copy of the medal: the noted french sculptor who designed the medal, Madeleine Pierre Quérolle, today aged 95 and always active in her Parisian workshop, offered her own original copy of the medal for the third award presentation to George Smoot. Motivated by the Nobel prize of Physics to George Smoot and the success of the Chalonge School, the French Mint coined in february 2007 exclusively for the Chalonge School a second limited edition of the medal. This made possible the 2007 and 2008 presentations of the Medal. Science with great intellectual endeavour and a human face. True and healthy science. Outstanding scientists who are gentle persons. Scientists recipients of the Daniel Chalonge Medal (Subramanyan Chandrasekhar, Bruno Pontecorvo, George Smoot, Carlos Frenk, Anthony Lasenby, Bernard Sadoulet, ...) are Ambassadors of the School.



The Daniel Chalonge Medal was designed by the noted french sculptor and artist painter Madeleine Pierre Quérolle and coined by the Hôtel de la Monnaie de Paris (the French Mint). The first side of the medal shows Daniel Chalonge's portrait. The reverse side is composed of two scenes: the upper half depicts the mirror of a telescope on which a part of the Milky Way and the Orion constellation is

reflected. The lower half depicts the French Alps and the "Pic Chalonge", (the mountain, 3343 m height, named after him).

Daniel Chalonge

The School is named after the pioneering French astrophysicist Daniel Chalonge (1895-1977) for his work in experimental and theoretical astrophysics. Precursor in France of stellar spectroscopy and stellar and atmospheric spectrophotometry, he worked on the conception and construction of new instruments like the hydrogen tube, the spectrographe to reach the far ultraviolet spectra and the microphotometer named after him. He was a personality of his time, one of the founders of the Institut d'Astrophysique de Paris. He worked at the Observatoire de Paris, at the Observatoire d'Haute Provence, and at the Jungfrau Scientific Station in Switzerland, where particle physics experiments (such as the Manchester-Cern collaboration) were performed.

Congratulations

Scientists from over the world participated to the event and congratulated Anthony Lasenby and Bernard Sadoulet for being awarded with the Daniel Chalonge Medal. At the end of the 12th Paris Cosmology Colloquium, a celebration took place along the meridian of Paris crossing the Cassini Hall of Observatoire de Paris. What started as a Colloquium celebration concluded as a twofold celebration.



<http://chalonge.obspm.fr/colloque2008.html>

Photo Gallery: <http://chalonge.obspm.fr/album2008/album/index.html>

Anthony Lasenby's Lecture 2008 (pdf)

http://chalonge.obspm.fr/Paris08_Lasenby.pdf

Bernard Sadoulet's Lecture 2008 (pdf)

http://chalonge.obspm.fr/Paris08_Sadoulet.pdf

The Daniel Chalonge Medal 2007 to Carlos Frenk

http://chalonge.obspm.fr/Medal_FRENK.pdf

The Daniel Chalonge Medal 2006 to George Smoot

<http://www.lbl.gov/Science-Articles/Archive/Smoot-Chalonge.html>

http://chalonge.obspm.fr/Chalonge_Medal.pdf

The Daniel Chalonge Medal in the French Senate, 50th Anniversary of Sputnik
(October 2007)

<http://planetastronomy.com/special/2008-special/09oct07/spoutnik-senat.htm>

Arkives Daniel Chalonge
http://chalonge.obspm.fr/Archives_Daniel_Chalonge.html

The Chalonge School <http://chalonge.obspm.fr>