

# *Ecole Internationale Daniel Chalonge*



## *The Daniel Chalonge Medal 2012*

### *has been awarded to Brian Schmidt*

The International School of Astrophysics "Daniel Chalonge" has awarded the Daniel Chalonge Medal 2012 to **Professor Brian P. Schmidt**, Nobel Laureate of physics 2011 for the outstanding results of the discovery of the present accelerated expansion of the Universe.



The medal was awarded to Brian Schmidt in recognition to his huge contribution to the modern cosmology and in particular for his outstanding effort in promoting and

leading key missions for the study of the Universe, deeply discussed in the frame of the International Astrophysics School D. Chalonge. Brian Schmidt was lecturer in several courses of the School, and from the very beginning in the discovery of the acceleration of the Universe. The scientific activity of Brian Schmidt, recognized with the Nobel Prize in 2011, has motivated the realization of very important projects in cosmology and the training and formation of young physicists and astrophysicists over the world.



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) for the Chalonge School. 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).



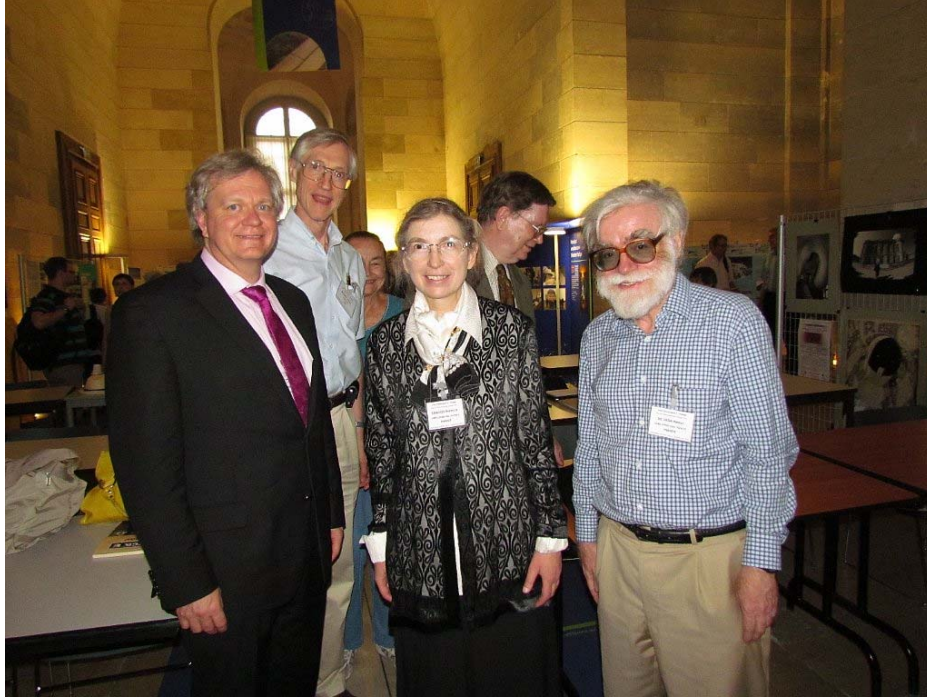
With the Chalonge Medal, the International School of Astrophysics Daniel Chalonge confirms its great appreciation to Dr. Brian Schmidt and his contribution to the construction of the Standard Model of the Universe, at the center of the Chalonge School programmes. This recognizes the outstanding scientific value and impact of the discovery of the dark energy component, compatible with the cosmological constant, which constitutes about three quarters of the content of the Universe.

### *A surprise Award*

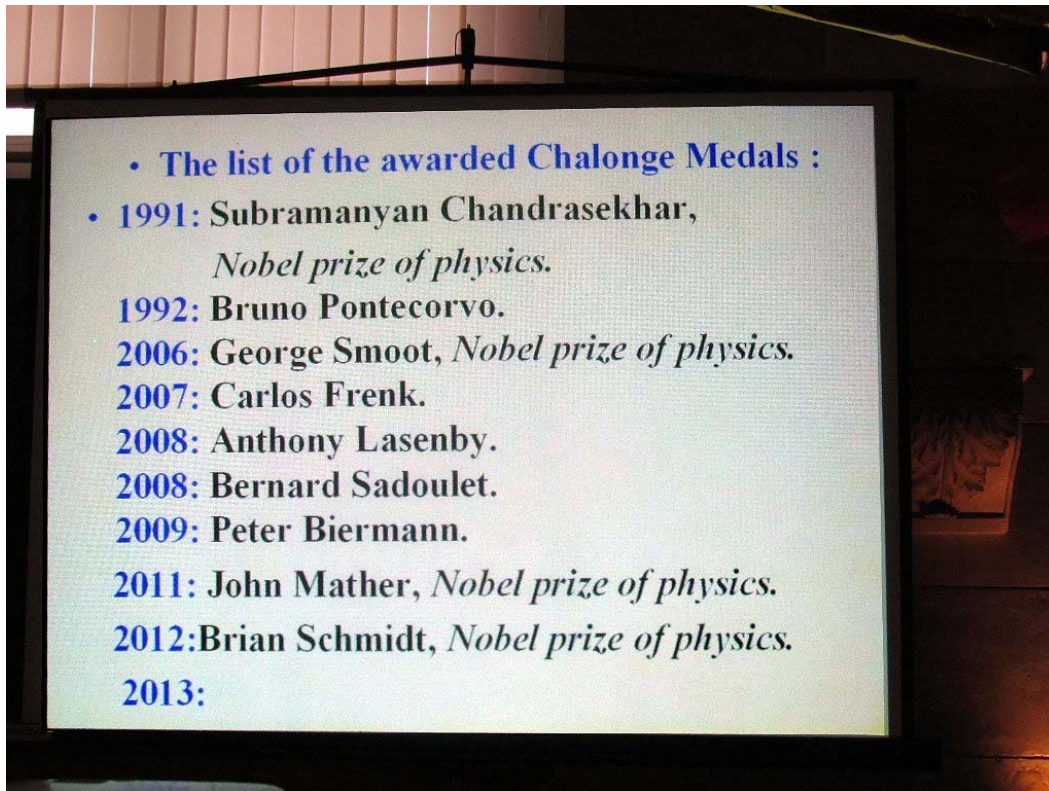
The medal was presented to Brian Schmidt on the 27<sup>th</sup> July 2012 during the last and open session of the 16th Paris Cosmology Colloquium at the Paris Observatory (Observatoire de Paris), attended by about hundred participants from over the world, among them cosmologists John Mather and George Smoot, both laureates with the Nobel prize in Physics 2006 and with the Daniel Chalonge Medal, Chalonge Medal laureates Anthony Lasenby and Peter Biermann, and French test pilot, Brigadier General in the French Air Force, and former CNES and ESA astronaut Michel Tognini. Brian Schmidt brilliantly exposed the discovery of the



accelerated expansion of the Universe. He showed the successive steps and efforts in measuring and interpreting the unexpected results found by him and his team in the project of observing the most distant supernovae.



## *Nine Chalonge Medals awarded in the 21-year school 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, including neutrino oscillations and "sterile" neutrino, 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 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 96 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 2006 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 presentations of the Medal since 2007. Science with great intellectual endeavour and a human face. True and healthy science. Outstanding scientists who are gentlepersons. Scientists recipients of the Daniel Chalonge Medal (Subramanyan Chandrasekhar, Bruno Pontecorvo, George Smoot, Carlos Frenk, Anthony Lasenby, Bernard Sadoulet, Peter Biermann, John Mather and Brian Schmidt ) are Ambassadors of the School.

## *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 the introduction of modern physics in astronomy, 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 was at the center of international colloquia being great friend and colleague of S Chandrasekhar, Zwicky, Ambartzumian, Blackett, Oort, and many others. He worked at the Observatoire de Paris, at the Observatoire d'Haute Provence, and at the Jungfrauoch 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 Brian Schmidt for being awarded with the Daniel Chalonge Medal. With the Chalonge Medal, the International School of Astrophysics Daniel Chalonge confirms its great appreciation to Professor Brian Paul Schmidt, the scientist and the human person, and his outstanding contribution to the deep knowledge of the Universe and cosmology.



The 16<sup>th</sup> Paris Cosmology Colloquium 2012

<http://www.chalonge.obspm.fr/colloque2012.html>

Brian Schmidt's Lecture 2012

[http://chalonge.obspm.fr/Paris12\\_Schmidt.pdf](http://chalonge.obspm.fr/Paris12_Schmidt.pdf)

Photo Gallery

<http://chalonge.obspm.fr/album2012/index.html>

<http://www.chalonge.obspm.fr/albumopensesion2012/index.html>

Open Session

<http://www.grandpublic.obspm.fr/Session-d-ete-de-Culture>

<http://www.planetastronomy.com/special/2012-special/27jul/chalonge-cosmo.htm>

Programme 2012

<http://chalonge.obspm.fr/Programme2012.html>

Archives Daniel Chalonge

[http://chalonge.obspm.fr/Archives\\_Daniel\\_Chalonge.html](http://chalonge.obspm.fr/Archives_Daniel_Chalonge.html)

The Daniel Chalonge Medal in the French Senate, 50<sup>th</sup> Anniversary of Sputnik

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

<http://www.starlight2007.net/spoutnikes.htm>

The Chalonge School

<http://chalonge.obspm.fr>