



Ecole Internationale Daniel Chalonge



George F Smoot, Nobel Prize of Physics 2006

Professor George F. Smoot has been awarded the 2006 Nobel Prize in Physics for the discovery of the anisotropy in the CMB radiation with the COBE satellite in 1992.

This landmark discovery ushered in the era of precision cosmology and established the basic keystone of the concordance (or standard) model of the Universe.

Since 1992, the impressive observational program on CMB anisotropies as well as remarkable theoretical progress on inflationary cosmology have been fueled by the results from this discovery.

CMB anisotropies are explained by inflation and the concordance model:

microscopic quantum fluctuations at the scale of inflation of 10^{-27} cm evolve through inflation into macroscopic fluctuations today at astronomical scales $10 \text{ Mpc} = 10^{25}$ cm. Such spectacular transition from quantum fluctuations into macroscopic classical fluctuations at the astronomical scales was never observed before.

George F Smoot has lectured regularly at the Chalonge School since its creation in 1991, having actively participated in all events of the School: courses, colloquia and workshops. The development of the concordance model of the Universe, along with inflation, CMB, and large scale structure formation, have been at the center of the Chalonge School program during the last 15 years.

The International School Daniel Chalonge is very proud and delighted by the recognition of George's outstanding achievements and sends him the warmest congratulations.

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links :

http://nobelprize.org/nobel_prizes/physics/laureates/2006/index.html

<http://www.lbl.gov/Publications/Nobel/>

<http://aether.lbl.gov/personnel/smoot.html>

