

Obituary: George F. Smoot (1945-2025)

O. López-Cruz 0



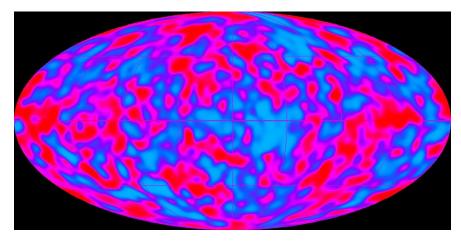
George F. Smoot. Credit: https://georgefsmoot.com/

Nobel laureate George Fitzgerald Smoot III was born on February 20, 1945. He is best known for directing the Differential Microwave Radiometer (DMR) experiment on board the Cosmic Background Explorer (COBE) satellite and for leading the team that discovered primordial temperature fluctuations in the cosmic microwave background (CMB) in 1991. John Mather was the principal investigator of COBE's Far Infrared Absolute Spectrophotometer (FIRAS), which measured the peak of the CMB spectrum. For these breakthroughs, Smoot and Mather were awarded the Nobel Prize in Physics in 2006. Smoot, Mather, and their colleagues from COBE ushered in a new epoch called *high-precision cosmology*.

George was an intelligent and generous person with a very jovial and attractive personality, who, after receiving the Nobel Prize, decided to make Cosmology popular worldwide. As part of his efforts, he lectured widely and made television appearances, including two on *The Big Bang Theory*. George was also very popular in México, as he often visited us for scientific engagements, book presentations, lectures, and conference presentations. Other sporadic visits included spending holidays with his family in Cabo San Lucas, Baja California Sur, Mexico.

George received a Ph.D. in physics from the Massachusetts Institute of Technology. A year later, he joined the faculty at the University of California and was later appointed as an emeritus professor of physics. He was also a senior scientist at the Lawrence Berkeley National Laboratory. In addition, George was cross-appointed as a physics professor at the Université Paris-Cité, affiliated with the Laboratoire Astroparticule et Cosmologie (APC) since 2009.

With Axel de la Macorra (IF-UNAM), Jorge Cervantes (ININ), Tonatiuh Matos (Cinvestav), and Darío Núñez (ICN-UNAM), George helped create the Instituto Avanzado de Cosmología (IAC) in 2007. In 2009, the IAC began a highly acclaimed series of winter schools known as *Cosmology on the Beach (COTB): Essentials of Cosmology for the Next Generation*. Nine COTB schools were established between 2009 and 2024. The first COTB school happened in Cabo San Lucas, Baja California Sur.



All-sky map of the CMB temperature anisotropies detected by COBE-DMR. They are represented in the map as cooler blue and warmer red patches; the variations are of the order of 10^{-5} K. Credit: https://cosmos.lbl.gov/cobehome.html.

In January 2014, the COTB returned to Cabo San Lucas. The organizing committee asked me to make arrangements for George's public lectures. I suggested the nearby city of La Paz, BCS. On January 23, George spoke about "The New Map of the Cosmos" before a packed *Teatro de la Ciudad*.

In 2018, I decided to publish *Arrugas en el Tiempo*, George's story about his discovery of thermal anisotropies in the CMB. I searched for a publisher and funds to secure the book's publication. On December 4, 2018, George returned to La Paz to give a lecture and sign his book. We delivered 500 books to the public for free on that occasion as part of a science dissemination program that we named *La Paz, Puerto de la Ciencia*. Before reaching La Paz, George stopped at the Feria Internacional del Libro de Guadalajara (FIL) and the Escuela Superior de Física y Matemáticas (ESFM-IPN).

Prof. George F. Smoot died of cardiac arrest in Paris on September 18, 2025. Nóra Csiszár, his beloved partner, was by his side.