

# Professor George Smoot

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The universe of observational astrophysics and cosmology may seem remote from every day life and people. When you are a Nobel Laureate as well, the peaks of ivory tower eminence may beckon rather more than the down-to-earth crowd.

Prof George Smoot begs to differ. “Scientists have a duty to share and let the public know what is happening.” In the 1990s, the experimental astrophysicist and his research team made an unparalleled discovery about the evolution of the universe that eventually led to his 2006 Nobel Prize, jointly shared with Dr John Mather. And he wanted everyone - not just the science community - to understand its significance.

That’s why, along with 500 academic papers, he is also the author of *Wrinkles in Time* (written with Keay Davidson). The popular science book turned his award-winning insights related to the blackbody form and anisotropy of the cosmic microwave background radiation into the more straightforward “seeds” of today’s galaxies. It explained how the research helped further the Big Bang theory of the universe and propelled forward the mega questions of why and how we are here.

He certainly has a life of adventure to share. Following bachelor degrees in mathematics and physics and a PhD in physics, all at MIT, he took to peering at the galaxy as a profession at the Lawrence Berkeley National Laboratory, and later the University of California, Berkeley. During the decades of search and exploration, this has meant working with ground-based radio-telescopes and instrumentation hoisted aboard high-altitude balloons, as well as satellite experiments utilizing such vehicles as NASA’s Cosmic Background Explorer, which led to the revelation of those wrinkles in space.

In pursuit of his quest, he has ascended mountains, visited Antarctica, and ventured into the Brazilian rain forest while his findings have earned him the highest recognitions from his peers. He is a member of the US National Academy of Sciences and Fellow of the American Physical Society as well as a recipient of the Albert Einstein Medal and NASA Medal for Exceptional Science Achievement.

In addition to communicating the significance of science, Prof Smoot is keen to set basic physics discoveries to work through technological innovation and products that can help to improve people’s lives. To do so, he is working with partners in China and other locations on technical projects ranging from biomedical devices to speed up recovery from injuries to affordable air quality monitors. It is a direction he is keen to fast forward at HKUST and a potentially cosmic occurrence for Hong Kong.

