

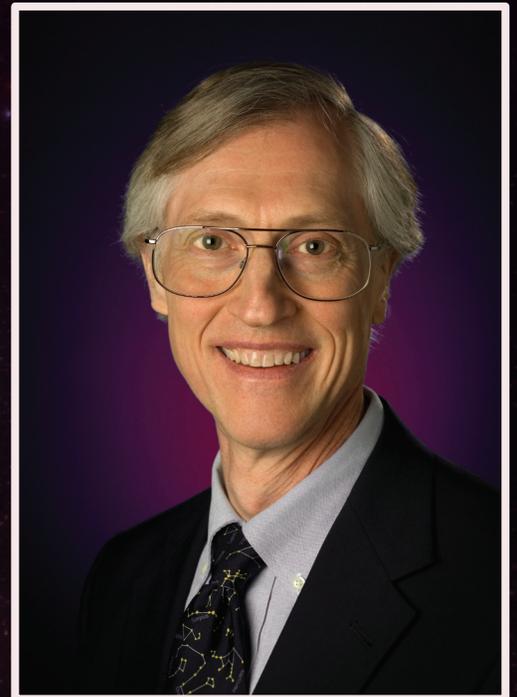
# From the Big Bang to the Nobel Prize and on to the James Webb Space Telescope

John C. Mather, 2006 Nobel Laureate in Physics  
7 p.m., Thursday, April 23  
Jordan Hall of Science, Room 101

The history of the Universe in a nutshell, from the Big Bang to now, and on to the future – John Mather will tell the story of how we got here, how the Universe began with a Big Bang, how it could have produced an Earth where sentient beings can live, and how those beings are discovering their history.

Mather was Project Scientist for NASA's Cosmic Background Explorer (COBE) satellite, which measured the spectrum (the color) of the heat radiation from the Big Bang, discovered hot and cold spots in that radiation, and hunted for the first objects that formed after the great explosion. He will explain Einstein's biggest mistake, show how Edwin Hubble discovered the expansion of the Universe, how the COBE mission was built, and how the COBE data support the Big Bang theory.

He will also show NASA's plans for the next great telescope in space, the James Webb Space Telescope. It will look even farther back in time than the Hubble Space Telescope, and will look inside the dusty cocoons where stars and planets are being born today. Planned for launch in 2013, it may lead to another Nobel Prize for some lucky observer.



## About Mather

Mather is a Senior Astrophysicist in the Observational Cosmology Laboratory at NASA's Goddard Space Flight Center. His research centers on infrared astronomy and cosmology. Mather graduated with a Ph.D. in Physics from the University of California at Berkeley in 1974 with a 4.0 GPA. Mather and George F. Smoot share the 2006 Nobel Prize in Physics for their discovery of the blackbody form and anisotropy of the cosmic microwave background radiation.