

John C. Mather

Dr. John C. Mather is the Senior Project Scientist for the James Webb Space Telescope at Goddard Space Flight Center, and is Chief Scientist of the Science Mission Directorate of NASA Headquarters. His research centers on infrared astronomy and cosmology. As an NRC postdoctoral fellow at the Goddard Institute for Space Studies (New York City), he led the proposal efforts for the Cosmic Background Explorer (74-76), and came to GSFC to be the Study Scientist (76-88), Project Scientist (88-98), and the Principal Investigator for the Far IR Absolute Spectrophotometer (FIRAS) on COBE. He showed that the cosmic microwave background radiation has a blackbody spectrum within 50 parts per million, confirming the Big Bang theory to extraordinary accuracy. He is the recipient of numerous awards, including the Nobel Prize in Physics (2006) with George Smoot, for the COBE work, and the NASA Distinguished Service Medal (2007). He is a member of many professional societies including the National Academy of Sciences and the American Academy of Arts and Sciences.

He received his Bachelor of Arts degree from Swarthmore College with highest honors in physics in 1968, and his PhD in physics from the University of California at Berkeley in 1974. His doctoral advisor was Paul Richards, and his thesis on measurements of the cosmic microwave background radiation led directly to the COBE satellite.