

NASA Ames Colloquium Wednesday, November 2, 2011

George Sonneborn
NASA Goddard Space Flight Center
Laboratory for Observational Cosmology

Dust and Other Recent Discoveries in SN 1987A

Abstract

Supernova 1987A in the Large Magellanic Cloud is one of the most intensively studied objects in the universe and a Rosetta Stone for understanding the explosions of massive stars. Now almost 25 years old, SN 1987A is a very young supernova remnant, a phase previously unobserved in any other supernova. In this talk I will discuss recent observations from the far-ultraviolet to the far-infrared with HST, the VLT, and the Herschel Space Observatory. These data reveal new insights into the composition, geometry, and heating of the explosion debris, the shock interaction with circumstellar material, and dust in the SN 1987A system.