Scott Hannon received his BA, and in 1990, his MS in Physics from UMBC. He remained at UMBC for the next 22 years as a Research Assistant in the Physics Department/Joint Center for Earth Systems Technology.

Scott's early work in the Physics Department's Atmospheric Spectroscopy Laboratory involved laser spectroscopy of carbon dioxide and nitrogen molecular collisions, providing a new model for understanding carbon dioxide absorption in the earth's atmosphere.

Following this work he spent most of his career helping to develop and use a new generation of high-spectral resolution infrared satellite instruments that provide input for daily weather forecasts around the world, and are now being used for climate trending. He also developed algorithms for the measurement of various atmospheric gases using high-spectral resolution infrared satellite data, including nitric acid, carbon dioxide, sulphur dioxide, dust, and volcanic ash.

Scott had a particular talent for distilling complicated physics models into computationally simple but accurate algorithms. He applied this talent to topics such as the atmospheric water vapor absorption, and more recently the effects of solar radiation on mesospheric carbon dioxide emissions. His model for this "non-LTE" emission is now the standard for models being developed by other research groups around the world.

Scott's work is known, and used, world-wide by many national meteorological centers and research centers. This includes two algorithms he helped develop for atmospheric radiative transfer that provide the basis for converting the measured satellite radiances into atmospheric temperature and water vapor. To this day, and most likely for years to come, his fast radiative transfer algorithm called SARTA, is run every day on both NOAA and NASA computers to analyze the daily satellite data from two US satellite instruments (AIRS and CrIS), and a European instrument (IASI). Scott participated in the ground testing of both the NASA AIRS instrument, and the NOAA/JPSS CrIS instrument, and his models of the instrument hardware are also used worldwide by many meteorological centers (Europe, Japan, New Zealand, Australia, etc.).

Scott was very well known to students in the Atmospheric Physics Ph.D. program, who often took advantage of his in-depth knowledge of atmospheric spectroscopy and radiative transfer for their classes and thesis research. He was always ready and willing to help anyone who asked, including outside academics and industry.

Scott worked very closely for over 15 years with the AIRS Project Office at NASA Jet Propulsion Laboratory. His advice and algorithms were highly valued by JPL and he will be missed by many there. One of his last activities was to influence changes to the in-orbit operation of the AIRS instrument in order to preserve the integrity of the climate record produced by that instrument.

Scott's quiet manner belied his intense commitment to integrity and quality in everything he did. He was one of those un-sung heroes of science, quietly doing first-rate work with no interest in personal accolades of any sort. Unknown to many, Scott had a encyclopedic knowledge of many topics, ranging from World History to Music, and he was always happy to have friendly discussions on any topic. His presence and camaraderie, and willingness to help everyone, will be missed by many.

A private funeral service was held for Mr. Hannon. Plans for a UMBC memorial service are pending. Condolences may be sent to:

The Hannon Family
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Larrabee Strow
Sergio deSouza-Machado