

Our plenary speaker is Don Thomas, a former astronaut who is now the Director of the Hackerman Academy of Mathematics and Science at Towson University in Maryland.

Dr. Thomas received his PhD in Materials Science from Cornell University; his dissertation involved evaluating the effect of crystalline defects and sample purity on the superconducting properties of niobium. After graduation, Dr. Thomas joined AT&T Bell Laboratories in Princeton, New Jersey, working as a Senior Member of the Technical Staff. His responsibilities there included the development of advanced materials and processes for high density interconnections of semiconductor devices. He was also an adjunct professor in the Physics Department at Trenton State College in New Jersey. He holds two patents and has authored several technical papers. He left AT&T in 1987 to work for Lockheed Engineering and Sciences Company in Houston, Texas, where his responsibilities involved reviewing materials used in Space Shuttle payloads.

In 1988 he joined NASA's Lyndon B. Johnson Space Center as a Materials Engineer. His work involved lifetime projections of advanced composite materials for use on Space Station Freedom. He was also a Principal Investigator for the Microgravity Disturbances Experiment, a middeck crystal growth experiment which flew on STS-32 in January 1990. This experiment investigated the effects of Orbiter and crew-induced disturbances on the growth of crystals in space.

Selected by NASA for the astronaut program in January 1990, Dr. Thomas became an astronaut in July 1991.

As an astronaut, Dr. Thomas flew on four space shuttle missions, three on Columbia and one on Discovery, logging 44 days in space, 600 earth orbits and 20 million miles. He also spent two years in Russia working at the cosmonaut training center, worked as the International Space Station Program Scientist for four years, worked in Mission Control, served on safety-review panels for the agency, and had a wide range of other jobs and experiences on the ground. Dr. Thomas retired from NASA in July 2007.

As the Director of the Hackerman Academy at Towson University, Dr. Thomas is charged with attracting more students to the STEM disciplines and then preparing those students to be STEM teachers in area schools.