

**Department of Geology and Environmental Science  
University of Pittsburgh  
Spring 2016 Colloquium Series**

**Thursday, 31 March 2016  
Chevron Science Center, Room 154, 4:00 pm**

**Dr. David Grinspoon  
Senior Scientist, Planetary Science Institute**

**Abstract:**

**The Anthropocene Epoch in Cosmic Evolution**

Informed by comparative planetology and a survey of the major transitions in Earth history, I will offer a taxonomy of planetary catastrophes meant to illuminate the unusual nature of the “Anthropocene”, the current epoch of human-driven planetary-scale changes, and reframe our current environmental and technological predicaments as part of a larger narrative of planetary evolution. This saga has now reached the pivotal moment when humans have become a dominant force of planetary change, and geological and human history are becoming irreversibly conjoined. Is this a likely or even inevitable challenge facing other complex life in the universe? Possible implications for exoplanet characterization and SETI (search for extraterrestrial intelligence) will be considered, as well as the choices our civilization faces in seeking to foster a wisely managed Earth.

**About David Grinspoon:**



David Grinspoon, Senior Scientist at Planetary Science Institute, is an astrobiologist who studies the possible conditions for life on other planets. He is on the science team for spacecraft that are currently exploring Mars and Venus. In 2013, he served as inaugural Baruch S. Blumberg/NASA Chair in Astrobiology at the John W. Kluge Center of the United States Library of Congress, researching and writing a forthcoming book about human influence on Earth, seen in cosmic perspective. His book, *Lonely Planets: The Natural Philosophy of Alien Life* won the PEN Center USA Literary Award for Research Nonfiction. Grinspoon was awarded the 2006 Carl Sagan Medal for Public Communication of Planetary Science by the American Astronomical Society.