

**The Department of Physics and Astronomy,
Society of Fellows,
& the Institute for Cross-Disciplinary Engagement
At Dartmouth College Present**

A Public Lecture

**“Our Fate in the Stars: How a Universe Rich in
Alien Worlds Can Help Us Save Our Own”**

By

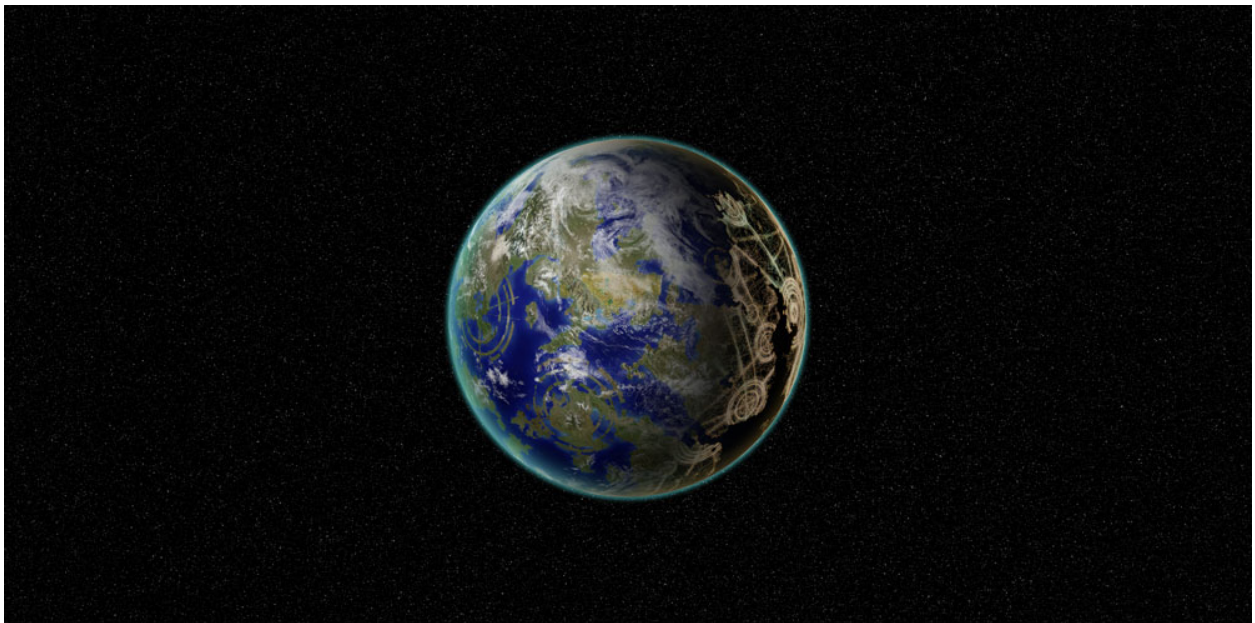
Dr. Adam Frank

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ABSTRACT: In the face of climate change humanity is searching for ways to make our global civilization sustainable. But how do we know such a thing is even possible? In other words how do we know that high-tech, energy-intensive planetary scale civilizations are even something the Universe does? Perhaps no high-tech civilization on anywhere in the Universe lasts more than a few centuries?

In this talk I ask the question of sustainability from the *Astrobiological Perspective*. I begin with a discussion of what we have learned about planets, climate and life from explorations of the Earth, other solar system worlds and exoplanets in the galaxy. From there I explore issues such as: why it is unlikely that we are the first civilization in cosmic history and why climate change will likely occur on any planet that evolves a technological civilization.

Finally I discuss how this Astrobiological Perspective can change the way we approach climate change and sustainability lifting discussion above the usual political polarities.



**Thursday, April 27, 2017
Wilder 104, 4:30 pm**