

“CLIMATE SCIENCE MYTH BUSTERS”

DR. JONATHAN GILLIGAN



Associate Professor of Earth & Environmental Sciences
Associate Professor of Civil & Environmental Engineering
Vanderbilt University

ABSTRACT

There is a lot of misinformation out there regarding climate change. Dr. Jonathan Gilligan will present on the state of climate science and answer questions such as

- Is climate change real and how do we know?
- Isn't cooling and warming part of the natural climate cycle?
- On what issues is there strong scientific consensus and where is there disagreement?
- What is the evidence supporting scientists' conclusions?
- Are there respected scientists who do not think humans are contributing to climate change?
- Are a few degrees warmer really that big a deal?

Questions sent to leah.a.dundon@vanderbilt.edu will be provided to Dr. Gilligan anonymously in advance. FREE Hattie B's ('till it runs out!).

BIOGRAPHY

Dr. Gilligan works primarily at the intersection of natural science, social science, and public policy with a focus on coupled human-natural systems and on the ways in which scientific knowledge and uncertainty affect policy decisions about the environment. His current work makes extensive use of agent-based models to simulate the ways that small changes in behavior at the individual level can add up to large-scale shifts at the level of the whole population, giving what is often referred to as “emergent phenomena.” These models have the potential to help identify vulnerabilities to environmental stress and opportunities to promote sustainable adaptations. His prior research has included nonlinear dynamics and chaos, quantum optics, stratospheric photochemistry, electrocardiology, physical mechanisms of laser surgery, laser processing and analysis of semiconductors, laser-cooling of atomic ions, and high-precision atomic and molecular spectroscopy. He teaches Vanderbilt's Global Climate Change course, has authored numerous peer-reviewed journal articles in the area of climate change and, together with Michael Vandenberg, is this year's winner of the Morrison Prize for the most impactful scholarship on sustainability and the law.