



Dr. Ben Kravitz

Ben is a postdoctoral fellow at the Carnegie Institution for Science's Department of Global Ecology in Stanford, California. His main research interests are the atmospheric science aspects of climate change and atmospheric radiative transfer. Specifically, most of his work has involved climate model simulations of aerosol radiative forcing from large volcanic eruptions and geoengineering. He has a bachelor's degree in mathematics from Northwestern University, a masters in mathematics from Purdue University, and a masters and Ph.D. in atmospheric science from Rutgers University

Solar Geoengineering: Cooling the Earth with Black Carbon or other aerosols in the Stratosphere

Thursday, September 1st, 2011 | EV1 - 221 | Start at: 12:00 p.m.

University of Waterloo, 200 University Ave. West, Waterloo, ON
Lunch will be provided.

<http://www.ic3.uwaterloo.ca>

In his talk, Dr. Ben Kravitz will provide an overview of *Solar Geoengineering* or *SRM* proposals that have emerged over the past few years to counteract greenhouse gas induced global warming. Ben will begin by exploring the full range of SRM proposals that have emerged in recent years, and then focus specifically on those considered by many to be the most feasible: mimicking large volcanic eruptions by placing or creating aerosols in the stratosphere (upper atmosphere), which would reflect a fraction of sunlight back to space.

Building on his expertise as a preeminent climate modeler of SRM, Ben will provide an overview of early climate model results — including early indications of benefits and problems — for aerosol-based SRM techniques, and then describe results from his own work both leading the *Geoengineering Model Intercomparison Project* (GeoMIP) and conducting climate model experiments on injecting Black Carbon aerosols into the stratosphere for SRM.