



EPP and Center for Climate and Energy Decision Making

Sponsored Seminar

Klaus Keller

Associate Professor of Geosciences
Pennsylvania State University

Presenting on:



“The Network for Sustainable Climate Risk Management (SCRiM): An Overview”

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10:30 AM

129 Baker Conference Room

Department of Engineering and Public Policy

Seminar Abstract: Past fossil fuel use has imposed a complex mixture of benefits and risks on current and future generations. While enabling a tremendous growth in prosperity, the resulting greenhouse gas emissions may contribute to climate threshold responses. For example, the Greenland Ice Sheet might disintegrate in response to anthropogenic climate forcings. The resulting sea-level rise would impose serious risks for the sustainability of low-lying regions in the United States and beyond. Managing climate risks has already motivated local, national, and global actions: utilities replace coal-fired power plants with gas turbines, engineers design sea-walls for future climates, companies sequester carbon dioxide into geological reservoirs, and the U.S. Government Accountability Office has assessed possible geoengineering approaches.

Speaker Bio: Klaus Keller is an associate professor of geosciences at Penn State, where he also directs the center for climate risk management. Before joining Penn State, he worked as a research scientist and lecturer at Princeton University and as an engineer in Germany. Professor Keller graduated from Princeton with a Ph.D. in Civil and Environmental Engineering. He received Master's Degrees from M.I.T. and Princeton as well as an Engineer's degree from the Technical University Berlin. His research addresses two interrelated questions. First, how can we mechanistically understand past and potential future changes in the climate system? Second, how can we use this information to design scientifically sound, economically efficient, and ethically defensible climate risk-management strategies? He analyzes these questions by mission-oriented basic research covering a wide range of disciplines such as Earth system science, oceanography, biogeochemistry, economics, and ethics.

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