Department of Environmental Science and Policy Seminar Series

The Economic Value of Forecasting Environmental Hazards

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DATE: Friday, 03/11/2022 Time: 1:30 pm

Zoom: https://bit.ly/3rDYGXH

Abstract: In this project, we derive an empirical estimator of the ex-ante value of information for hazardous weather forecasts and apply it to hurricane forecasts in the United States. The methodology connects data on past hurricane forecasts, recorded damages, and adaptive actions to derive the social demand for hurricane forecasts. Using recent tropical storms and hurricanes, we calculate the benefits of past and future improvements in forecast precision, as well as the overall welfare generated by publicly funded research activities. These results shed light on the value of publicly funded hurricane research programs and the effectiveness of different private and public strategies to reduce the impact of hurricanes.

Bio: Renato Molina is an Assistant Professor professor at the Rosenstiel School of Marine and Atmospheric Science at the University of Miami. He is also a Faculty Scholar at the Abess Center for Ecosystem Science and Policy at the University of Miami and a Visiting Scholar at the Faculty of Natural Resources at the Pontificia Universidad Católica de Valparaíso in Chile. The focus of his research revolves around pricing the resiliency of human and natural systems with an emphasis on informing sound and responsible policymaking. He is currently involved in projects studying the economics of natural resource extraction and conservation, the impacts of natural disasters, and the value of climate adaptation.

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