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**Friday, March 3, 2017, 10:45AM**  
**Alampi Room, Marine & Coastal Sciences**

## **Inequality and the Social Cost of Carbon**

This talk presents a novel way to disentangle inequality aversion over time from inequality aversion between regions in the computation of the Social Cost of Carbon. The approach nests a standard efficiency based Social Cost of Carbon estimate and an equity weighted Social Cost of Carbon estimate as special cases. It also presents a methodology to incorporate more fine grained regional resolutions of income and damage distributions than typically found in integrated assessment models. Finally, I will present quantitative estimates of the Social Cost of Carbon that use our disentangling of different types of inequality aversion. We use two integrated assessment models (FUND and RICE) for our numerical exercise to get more robust findings. Our results suggest that inequality considerations lead to a higher (lower) SCC values in high (low) income regions relative to an efficiency based approach, but that the effect is less strong than found in previous studies that use equity weighting. Our central estimate is that the Social Cost of Carbon increases roughly by a factor of 2.5 from a US perspective when our disentangled equity weighting approach is used.

*Dr. David Anthoff is an environmental economist who studies climate change and environmental policy. He co-develops the integrated assessment model FUND that is used widely in academic research and in policy analysis. His research has appeared in Science, the Journal of Environmental Economics and Management, Environmental and Resource Economics, the Oxford Review of Economic Policy and other academic journals. He contributed a background research paper to the Stern Review and has advised numerous organizations (including US EPA and the Canadian National Round Table on the Environment and the Economy) on the economics of climate change.*

*He is an assistant professor in the Energy and Resources Group at the University of California, Berkeley. Previously he was an assistant professor in the School of Natural Resources and Environment at the University of Michigan, a postdoc at the University of California, Berkeley and a postdoc at the Economic and Social Research Institute in Ireland. He also was a visiting research fellow at the Smith School of Enterprise and the Environment, University of Oxford.*

—Coffee/tea will be served prior to the lecture—