Interdisciplinary Speed Talks 2017

Wednesday, March 22nd 2017 6:00 pm – 7:30pm International Affairs Building 1510

- Tentative schedule -

Alex Heaney (Environmental Health Sciences)

Title: Understanding the effects of environmental variables on childhood diarrhea in

Botswana

Synopsis: [cancelled]

<u>Justin Ho</u> (Sustainable Development)

Title: Smart Meters, Programmable Thermostats, and Electricity Consumption: Is it hot in

here, or just me? **Synopsis:** [unavailable]

Ben Mylius (Political Science)

Title: Two concepts of anthropocentrism (TBC)

Synopsis: I'm interested in understanding what we mean when we call human action or thinking 'anthropocentric' (human-centred) – and in developing a clearer conceptual framework for distinguishing different kinds of anthropocentric thinking and action. In particular, I'm interested in distinguishing *analytically* anthropocentric thinking (starting from the assumption that humans are 'separate from' nature [whatever this means]) and *morally* anthropocentric thinking (starting from the assumption that humans are 'better than' nature [whatever *this* means]).

Alex Huddell (Ecology, Evolution, and Environmental Biology)

Title: Nitrogen-Use Efficiency in Tropical Agriculture

Synopsis: Nitrogen fertilizer use is critical for food production, but it has significant negative consequences on the environment and human health. Will the global impacts of food production in this century differ from the last? I will give a brief overview of my research related to these questions and highlight potential connections between ecology and economics.

Eval Frank (Sustainable Development)

Title: Conservation & Employment: Evidence from the Listing of the Northern Spotted Owl **Synopsis:** Does environmental conservation destroy jobs? Knowing the indirect costs, in terms of labor market outcomes, is important when determining the extent of preservation. I estimate that the areas placed under protection as part of the Northern Spotted Owl conservation plan led to a reduction of 31% in employment in the Lumber & Wood sector in California, Oregon, and Washington.

Lucile Maertens (Earth Institute)

Title: (De)constructing the environmental threat

Synopsis: [unavailable]

Carlos Gould (Environmental Health Sciences)

Title: Cooking up change in Ecuador: national household energy transitions

Synopsis: [unavailable]

Richard McAlexander (Political Science)

Title: Using Gaussian processes to predict conflict onset

Synopsis: My project is to write a paper explaining, using, and applying Gaussian Processes to data on civil conflict for political scientists. Gaussian processes are incredibly flexible tools to model nonlinear spatial and temporal data, but they have not been used in applied political science research. This project consists of paper explaining GPs to political scientists, outlining best practices for research, and applying GPs to insurgent attacks in US occupied Iraq.

Daniel Osgood (Earth Institute)

Title: Noisy Audited Incentivized Truthtelling4 Informed Clients #NAITIC-most annoying acronym?

Synopsis: Satellite data is used in development projects when there is no ground data. However satellite data requires ground data for model calibration. In theory, it should be possible to use a noisy audit source to incentivize massive, low-cost truth telling through a "contest." A reward could be offered for reporting that accurately predicts satellite "audit" data. In this way satellite information could be used to incentive the reporting for its own validation. We are developing a randomized controlled trial to test this Noisy Audit Incentivized Truthtelling mechanism for Informed Clients (NAITIC).

Raimundo Atal (Sustainable Development)

Title: Environmental Impacts of Salmon Farming

Synopsis: I estimate the environmental impacts of salmon farming in Chile. We monitor levels of chlorophyll (as a proxy for phytoplankton) in the water using remote sensing (MODIS) images and correlate those with the presence and intensity of aquaculture activity.

Chas Taylor (Sustainable Development)

Title: Historical migrations and droughts

Synopsis: [unavailable]

Zachary Burt (Environmental Health Sciences)

Title: Flooding in Mumbai: Economic & Social Impacts AND Sustainable Water & Sanitation Systems: Planning in Karnataka

Synopsis: I will start a 9-month Fulbright in India in September and I'll be working on two projects there: Flooding in Mumbai, and Water & Sanitation Systems Planning in Karnataka. In Mumbai I'll be working with IIT-Bombay to estimate the impacts of heavy precipitation events and tropical cyclones on Mumbai. We'll be concentrating on quantifying impacts, estimating the distribution of risk across income and social strata, and the co-benefits of mitigation efforts. In Karnataka I'll be working with IISc-Bangalore and the Karnataka Urban Water Supply and Drainage Board (KUWSDB) to create sustainability metrics to assist them in choosing how and where to invest in new systems in large towns of Southern Karnataka.

Ipsita Kumar (Earth and Environmental Science)

Title: Water Reservoir Cost Optimization in Pernambuco, Brazil

Synopsis: [unavailable]