Department of Mathematics
Spring 2017 Colloquium Series

Connections Beyond the Margins of the Grid:

Information technology and off-grid solar electricity in the developing world

Peter Alstone,

Humboldt State University

Thursday, January 26, 2017

Behavioral and Social Sciences Building Room 204, 4 pm

Access to electricity is vital for meeting basic human and societal needs, and since 1882 (when the *Edison Illuminating Company* began centralized production and sale of electricity service in Manhattan) there have consistently been between one and two billion people off the grid. This talk will explore the mechanisms and implications of information technology being integrated with decentralized energy systems into new architectures that reach beyond the margins of the grid, with both a global and user-focused perspective. I will start with a discussion of the global potential of decentralized energy to simultaneously reduce energy poverty and climate change. Then I will show the value of remote monitoring data from individual pay-as-you-go systems for public interest research and policymaking to catalyze energy access.

Dr. Peter Alstone is an assistant professor of Environmental Resources Engineering and a Faculty Scientist at Schatz Energy Research Center at Humboldt State University. His research bridges clean energy and information technology development, with approaches that bring together data science, field study, technology modeling, and economic analysis. The current focus areas of Peter's work are advanced off-grid energy systems and distributed energy technology that facilitates renewables integration on the grid. Dr. Alstone holds a PhD in Energy and Resources from the University of California, Berkeley. He is also an affiliate researcher at Lawrence Berkeley National Laboratory

For a complete abstract, go to http://www.humboldt.edu/math/news-and-events/math-colloquium

We cordially invite you to the Pre-Colloquium Tea on the third floor of the BSS

building at 3:30 pm on Thursday.