

# Colloquium Notice

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### *Democratization of Climate Change*

I will try to outline four major challenges to the democratization of the decision making process that in my view are needed to address the challenges that anthropogenic changes in the chemistry of the atmosphere will pose: Climate Change and the Nature of Science - We are now part of the physical world on planet earth. When we try to investigate global phenomena such as climate change we include us in the system that we investigate. In medical or legal terms this process is called self-diagnosis or self-defense. A common saying is that a lawyer that serves as his own legal adviser got a fool for a client. The same holds true for a doctor that tries to treat himself in a serious medical issue. Doctors and lawyers have the options to hire somebody else. The global human population doesn't. We didn't yet identify an exoplanet that can help. "Hate of Science" - Most of us hate science and students that takes my courses that are identified as science courses, tell me with great pride that they "despise" math We are not prophets - The Popperian scientific method is based on refutability. We develop hypothesis and theories based on everything that we know and we should be able to test the theory based on predictions for observations that we didn't yet make. If the tests fail - we change the theory. This amounts to prediction of future results. Since we are part of the system - failure might mean closing the window that allows us to survive. NIMBY (Not In My Backyard) - Climate Change is a global, collective, phenomena that all of us contribute to and all of us, sooner or later are being affected by. The common denominator in all of these challenges is that in my view all of them can be addressed through the educational system. The instruments that we are developing include a "popular" blog (climatechangefork), a book that was just published titled "Climate Change: The Fork at the End of Now" that was written to serve as a textbook for the general public; development of a multiplayer electronic learning system, built on social/scientific simulations and fed by relevant and timely databases that require students to make choices and examine the consequences of these choices; and a documentary film that documents energy transition in the Sunderban region of India from hunter-gatherer to electrified modern existence.

Monday

**November 26, 2012**

Starts at 12:15 PM

Physics Conference Room, SB B326