Elena Rovenskaya

Optimal Control and the Stories We Tell About Climate Change Economics

The talk will present three stylized models based on optimal control theory, each addressing a distinct aspect of the economics of climate change. The first model explores optimal transition pathways from 'brown' to 'green' capital. The second investigates potential incentive structures to enhance the contribution of wealthier segments of the society to global climate efforts. Finally, the third model demonstrates how the optimal control approach using *reachable sets* can help tackle the complex challenge of measuring sustainability.