

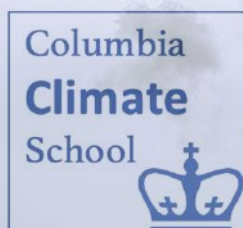


Forms of Economic Modeling and Public Action in the Era of Climate Change

Paris workshop, June 20, 2024

Mines Paris – PSL, 60 bd Saint Michel, 75006 Paris
Conference Room L312

Sara Aguiton (CNRS, CAK)
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Alexandre Violle (CSI-i3, Mines Paris - PSL)



The event is open to all upon registration.
To register, please visit the CSI website:
<https://www.csi.minesparis.psl.eu>

Sixteen years after French historian of science Amy Dahan's book *Les modèles du futur*, what new analytical challenges do the social sciences face in understanding the role of modeling and use of environmental scenarios in economic expertise and public action? As climate change worsens, economic expertise is increasingly mobilized in a variety of public action fields to act in situations of uncertainty. By way of illustration, the authorities responsible for regulating the financial sector, like central banks, are now developing new scenarios to integrate the issue of climate change into the risk calculations of banks and insurance companies, in order to encourage them to finance decarbonized activities and protect themselves against climate damages. In an entirely different example, at the convergence of geology and clean energy, the issue of relocating strategic extractive activities in Europe raises the question of how to model future supply and demand for rare earth minerals, and match these forecasts with current estimates of subterranean reserves.

With the development of public actions based on models or scenarios, interdisciplinary communities of experts are constantly emerging and expanding to take on the novel economic problems posed by environmental issues. This phenomenon raises new theoretical questions: How do communities of experts interact to make interdisciplinary models work? What are the institutional conditions that facilitate the production of new, hybrid forms of scientific knowledge? How, despite uncertainties, are new forms of public action co-produced by the development of models and scenarios? And how do expert communities both problematize and communicate these uncertainties to decision makers?

This workshop will bring together academics and stakeholders in modeling and public action to reflect on how modeling and scenario development shape, accompany or prescribe different forms of public action. The theoretical questions developed invoke a number of empirical questions, including but not limited to: How are models made? How do they hybridize different types of scientific (economic, climate) knowledge in practical forms of action? Given the significant costs involved in creating and maintaining complex models, what kind of path dependency do modeling practices generate? What perspectives of alternative forms of modeling do these path dependencies open and close? What do models reveal/understand, and what do they leave in the shadows? What futures are inscribed in the models? For which audiences are these futures intended? How do models relate to forms of deliberation, decision-making or other instruments of public action?

8h30-9h - Coffee

9h-9h15 - **Opening Remarks**

Brice Laurent (Senior researcher, CSI, Mines Paris PSL)

9h15-11h - **Workshop 1: Time horizons**

The problematization of time embedded in models

Christina Peñasco (Senior Economist, Banque de France)

Christophe Cassen (Research engineer, CIRED)

Julia Nordblad (Associate Professor of Philosophy, Uppsala University)

11h-11h15 - Coffee break

11h15-13h15 - **Workshop 2: Spatialization of climate information**

Data production, scaling, and disaggregating

Christelle Castet (Head of Science, AXA Climate)

Melody Braun (Senior Associate, IRI/Lamont-Doherty Observatory)

Kai Kornhuber (Senior Theme Coordinator for Extreme Weather & Climate Dynamics, IIASA)

Zac Taylor (Assistant Professor, Architecture and Built Env., TU Delft)

13h-14h30 - Lunch

14h30-16h30 - **Workshop 3: The use of models and their results**

What knowledge for what public action?

Masa Kageyama (CNRS research director, LSCE)

Marina Baldissera Pacchetti (Research Fellow, Department of Science, Technology, Engineering, and Public Policy, University College London)

Olivier Vidal (CNRS research director, Institut des sciences de la Terre)

Louis-Marie Malbec (researchers at IFPEN)

16h30-17h30 - **Open Discussion/Closing Remarks**

Béatrice Cointe (CNRS researcher, CSI, Mines Paris PSL)