



First RCEA-Panel on Predictability in Science and Society

Thursday, 26 January 2023

Online on zoom (EU: 5 pm - 7 pm CET, Milan; US: 8 am - 10 am PST, Riverside)

RCEA is organizing an interdisciplinary colloquium on predictability in the Natural and Social Sciences with prominent researchers from various disciplines. Even in their more quantifiable disciplines, such as Economics, Social Sciences have always struggled with experimentation, measurement, and predictability limitations. Lucas (1977), in the wake of Frisch (1938) and Marschak (1953), elaborated on the inherent difficulties in identifying structural relationships. Such challenges have marred economic policy analysis, which requires structure invariance under potential interventions. Physics (more generally, Natural Sciences) may be converging toward an impasse that has slowed progress in the Social Sciences: "*During the last few decades, our view upon matter, the fundamental forces, and the geometry of spacetime have undergone a metamorphosis, enabling us to extrapolate our knowledge towards time- and distance scales that in fact cannot be directly probed by experiment.*" (Gerard t 'Hooft, 2001). The impossibility of experimentation, measurement, and predictability could obstruct scientific progress and open epistemological precipices.

RCEA wishes to bring together researchers from different fields to debate predictability in relation to the common thread of the effect of experimentation limits on the ability to make predictions. Is Predictability feasible even without experimentation? Is verifiability essential, while experimentation is not? These and similar questions could emerge from an interdisciplinary conversation. Cross-discipline cooperation and cross-pollination of ideas have, in the past, helped develop path-breaking insights. It has happened recently with the marrying of Economics and Psychology by Kahneman and his co-authors (Fleming, 2004) or the application of earthquake modeling to predictions in financial markets (Rundle, 2016). We hope that this colloquium could bring similar fruits.

The First Panel features keynote speeches by **Nancy Cartwright** (Durham University and University of California San Diego), **David F. Hendry** (Oxford University), and **Carlo Rovelli** (Aix-Marseille University). Chair: **Paolo Giordani** (Norwegian Business School, RCEA).

Organizers: Karim Abadir (Imperial College London, RCEA), Marcelle Chauvet (University of California-Riverside, RCEA), Paolo Giordani (Norwegian Business School, RCEA), Claudio Morana (University of Milano-Bicocca, RCEA) Gianluigi Pelloni (RCEA).

Participation is free upon registration in zoom [here](#)