



Inaugural Lectures

Prof. Negar Kiyavash & Prof. Andreas Fuster

June 1st, 2022, 17h30 - ELA 1, EPFL

Event organized by
the College of Management of Technology

Program

17h30: General introduction by Prof. Dominique Foray, Director of the College of Management of Technology & Prof. Ambrogio Fasoli, Vice President Associate for Research

17h45: Introduction by Prof. Daniel Kuhn, Director of the MTE Section

17h50: Inaugural Lecture Prof. Negar Kiyavash

18h40: Introduction by Prof. Damir Filipovic, Director of the Swiss Finance Institute@EPFL

18h45: Inaugural Lecture Prof. Andreas Fuster

19h30: Q&A

19h45: Apéritif

Prof. Negar Kiyavash «Causal Inference in Complex Networks»

Abstract:

Causal determinism states that every event is necessitated by precedent events together with governing laws, natural or otherwise. Causal determinism is deeply ingrained with our ability to understand the physical sciences and their explanatory ambitions. Besides understanding phenomena, identifying causal networks is important for effective policy design in nearly any avenue of interest, be it epidemiology, financial regulation, management of climate, etc. Yet determining statistical causation among interacting stochastic processes and variables remains quite challenging. This lecture will review recent advances in causal inference: How far have we come, and where do we go from here?

Short bio

Professor Negar Kiyavash is an Associate Professor of Business Analytics in the College of Management of Technology. She is an internationally recognised information theoretician. Her research focuses on data analysis, data security, discrete optimisation and causal inference. She has received particular acclaim for introducing the principle of directed information graphs (DIGs), which characterise the concept of causality in time series. Negar Kiyavash undertakes tasks at the interface of social science, business management and data science. She contributes to EPFL's research and teaching, particularly in the field of business analytics – both on the theoretical research as on the applications designated to enhance data-driven business decision-taking.

Prof. Andreas Fuster «FinTech in Household Credit Markets»

Abstract:

Technological innovation is changing the way financial intermediation works. In particular, lenders increasingly rely on big data and machine learning algorithms, rather than on human loan officers reviewing individual loan applications. This raises numerous questions: for instance, are there efficiency gains from increased automation, or does reducing the human element lead to worse lending decisions? When statistical models improve, are the gains shared equally across groups of society, or do some benefit while others lose? And how does FinTech lending interact with fair lending regulations and privacy concerns? This lecture will review recent work on these questions, with a focus on household credit markets.

Short bio

Andreas Fuster is an Associate Professor of Finance at Swiss Finance Institute @ EPFL and a Research Fellow at the CEPR. Previously, he worked at the Federal Reserve Bank of New York and the Swiss National Bank. Andreas's main research interests are in empirical finance, macroeconomics, and behavioral economics. His recent work has focused in particular on the effects of technological advances on household credit markets. Andreas's research has been published in academic journals such as the Quarterly Journal of Economics, the Review of Economic Studies, the Journal of Finance, and the Review of Financial Studies. Andreas obtained his Ph.D. from Harvard University and also holds an M.Phil. from Oxford University and a B.A. from the University of Lausanne (Switzerland), all in economics.