Conference on Frontiers in Machine Learning and Economics: Methods and Applications

Day 1: Friday, October 7th

8:30 a.m. to 9:00 a.m. Continental Breakfast

9:00 a.m. to 10:00 a.m. Keynote Presentation

> "How to Make Causal Inferences with Text"
> **Margaret Roberts (University of California, San Diego)**

10:30 a.m. to 12:45 p.m. Session 1: Natural Language Processing

> *"On the Testability of Anchor Words"*
> **Simon Freyaldenhoven (Federal Reserve Bank of Philadelphia)** with Jose Luis Montiel Olea (Cornell University)
> Discussant: audience

> *"Systematic Monetary Communication Rules"*
> **Amy Handlan (Brown University)** with Laura Gati (European Central Bank)
> Discussant: Taeyoung Doh (Federal Reserve Bank of Kansas City)

> *"The Fast and the Circuitous: Semantic Progression as a Type of Disclosure Complexity"*
> **Nicholas Guest (Cornell University, Samuel Curtis Johnson Graduate School of Management)** with Jiawen Yan (Cornell University, Samuel Curtis Johnson Graduate School of Management)
> Discussant: Bryan Routledge (Carnegie Mellon University)

Lunch at the Federal Reserve Bank of Philadelphia

2:00 p.m. to 3:00 p.m. Keynote Presentation

> *"How Approximate Are Approximate Bayesian Computation Methods?"*
> **Christian Robert (Université Paris–Dauphine and University of Warwick)**

3:30 p.m. to 5:00 p.m. Session 2: Model Estimation

> *"Adversarial Estimation of Structural Models"*
> **Guillaume Pouliot (University of Chicago)** with Tetsuya Kaji (Booth School of Business) and Elena Manresa (New York University)
> Discussant: Zhenling Jiang (Wharton School of the University of Pennsylvania)

The conference is cosponsored by the Penn Institute for Economic Research and the Department of Economics of the University of Pennsylvania.

"Sequential Monte Carlo with Model Tempering"
Frank Schorfheide (University of Pennsylvania) with Marko Mlikota (University of Pennsylvania)
Discussant: Stephen Brown (independent researcher)

5:00 p.m. to 6:30 p.m. Reception at the Federal Reserve Bank of Philadelphia

Day 2: Saturday, October 8th

8:30 a.m. to 9:00 a.m. Continental Breakfast

9:00 a.m. to 10:30 a.m. Session 3: Computational Methods

"Exploiting Symmetry in High-Dimensional Dynamic Programming"
Jesús Fernández-Villaverde (University of Pennsylvania) with Mahdi Ebrahimi Kahou and Jesse Perla (both of the University of British Columbia) and Arnav Sood (Carnegie Mellon University)
Discussant: Minsu Chang (Georgetown University)

"DeepHAM: A Global Solution Method for Heterogeneous Agent Models with Aggregate Shocks"
Yucheng Yang (Princeton University) with Jiequn Han (Flatiron Institute and Princeton University) and Weinan E (Peking University and Princeton University)
Discussant: Pablo Guerron (Boston College)

11:00 a.m. to 1:15 p.m. Session 4: Machine Learning in Economics

"Policy Choice in Time Series by Empirical Welfare Maximization"
Toru Kitagawa (Brown University) with Weining Wang (York University) and Mengshan Xu (University of Mannheim)
Discussant: Karun Adusumilli (University of Pennsylvania)

"Structural Deep Learning in Conditional Asset Pricing"
Andreas Neuhierl (Washington University) with Jianqing Fan (Princeton University), Zheng Tracy Ke (Harvard University), and Yuan Liao (Rutgers University)
Discussant: Winston Dou (Wharton School of the University of Pennsylvania)

"Causal Inference for Spatial Treatments"
Michael Pollmann (Duke University)
Discussant: Christian Hansen (University of Chicago)

Lunch/Departure

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