



**Stevanovich Center
for Financial Mathematics**
at the University Of Chicago

5727 South University Avenue
Chicago, IL 60637
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October 3-5, 2024

Big Data and Artificial Intelligence in Econometrics, Finance, and Statistics

**Venue: Eckhardt Research Center (ERC), Room 161
5640 S Ellis Ave, Chicago**

Program

This conference is made possible by the generous philanthropy of University of Chicago Trustee Steve G. Stevanovich and the University of Chicago Financial Mathematics Program.

Thursday, October 3

9:00 AM **Coffee/Pastry**

9:30-11:30 AM **Session 1**

9:30 AM	Katja Smetanina	U Chicago	Perceived shocks and impulse responses
10:10 AM	Zongming Ma	Yale	Multimodal data integration and cross-modal querying via orchestrated approximate message passing
10:50 AM	Ruimeng Hu	UC Santa Barbara	Deep reinforcement learning for games with controlled jump-diffusion dynamics

11:30 AM – 1:00 PM **Lunch Break**

1:00-3:00 PM **Session 2**

1:00 PM	Chao Gao	U Chicago	Are adaptive robust confidence intervals possible?
1:40 PM	Fang Han	U Washington	Chattejee’s rank correlation: what is new?
2:20 PM	Pragya Sur	Harvard	<i>Title TBA</i>

3:00 – 3:30 PM **Coffee Break**

3:30-5:00 PM **Session 3**

3:30 PM	Bodhi Sen	Columbia	Multivariate, heteroscedastic empirical bayes via nonparametric maximum likelihood
4:10 PM	Wenxin Zhou	U Illinois Chicago	Nonparametric expected shortfall regression with tail-robustness

5:00 PM **End of Program (Thursday)**

Friday, October 4

9:00 AM **Coffee/Pastry**

9:30-11:30 AM	Session 4		
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9:30 AM	Theodor Misiakiewicz	Yale	Deterministic equivalents and scaling laws for random feature regression
10:10 AM	Bryan Kelly	Yale	APT or 'AIPt'? The surprising dominance of large factor models
10:50 AM	Mladen Kolar	USC	<i>Title TBA</i>

11:30 AM – 1:00 PM **Lunch Break**

1:00-2:20 PM	Session 5		
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1:00 PM	Andrea Montanari	Stanford	Overparametrization in machine learning: insights from linear models
1:40 PM	Chenhao Tan	U Chicago	Towards human-centered AI: predicting fatigue and generating hypothesis with LLMs

2:20 – 2:50 PM **Coffee Break**

2:50-4:10 PM	Session 6		
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2:50 PM	Dacheng Xiu	U Chicago	On the theory of autoencoders
3:30 PM	Denis Chetverikov	UCLA	Estimation of risk premia with many factors

4:10 PM **End of Program (Friday)**

Saturday, October 5

8:30 AM **Coffee/Pastry**

9:00-10:20 AM	Session 7		
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9:00 AM	Whitney Newey	MIT	Automatic debiased machine learning via Riesz regressions
9:40 AM	Francis Diebold	U Penn	Machine learning and the yield curve: tree-based macroeconomic regime switching

10:20 – 10:40 AM **Coffee Break**

10:40AM-12:00PM	Session 8		
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10:40 AM	Yacine Ait-Sahalia	Princeton	Asset pricing in an economy with changing sentiment and price feedback
11:20 AM	Per Mykland / Lan Zhang	U Chicago / U Illinois Chicago	Estimating the volatility of drift

12:00 PM **End of Program (Saturday)**