

Conference on Frontiers in Machine Learning and Economics

October 3-4, 2025
Gleacher Center Room 100
Chicago, IL

CHICAGO BOOTH
THE UNIVERSITY OF CHICAGO BOOTH SCHOOL OF BUSINESS

Center for
Applied Artificial
Intelligence

FRB PHL

DAY 1: FRIDAY, OCTOBER 3

9:00 - 10:00 AM

Continental Breakfast (outside of classroom)

10:00 - 11:30 AM

Session 1: LLM Applications

"AI Inventions and AI Talent Migrations: US and China"

Hanming Fang (University of Pennsylvania)

with Xian Gu (Durham University), Hanyin Yan (Tsinghua University) and Wu Zhu (Tsinghua University)

Discussant: **Lee Fleming (University of California, Berkeley)**

"A Century of Inflation Narratives"

Alexander K. Zentefis (Stanford University)

with Mourad Heddaya (University of Chicago), ChenhaoTan (University of Chicago), Rob Voigt (Northwestern university) and Qingcheng Zeng (Northwestern University)

Discussant: **Leland Bybee (Booth School of Business)**

11:30 AM - 1:15 PM

Lunch

1:15 - 2:45 PM

Session 2: Finance

"Economic Representations"

Suproteem Sarkar (Chicago Booth)

Discussant: **Bryan Routledge (CarnegieMellon University)**

"Firm-Level Input Price Changes and Their Effects: A Deep Learning Approach"

Indrajit Mitra (Federal Reserve Bank of Atlanta)

with Sudheer Chava (Georgia Institute of Technology), Wendi Du (University of South Carolina), Agam Shah (Georgia Institute of Technology) and Linghang Zeng (Babson College)

Discussant: **Bradford Levy (University of Chicago)**

2:45 - 3:30 PM	Break
3:30 - 5:00 PM	Session 3: Pricing <i>“The Rise of AI Pricing: Trends, Driving Forces, and Implications for Firm Performance”</i> Min Fang (University of Florida) with Jonathan Adams (Federal Reserve Bank of Kansas City), Zheng Liu (Federal Reserve Bank of San Francisco) and Yajie Wang (University of Missouri) Discussant: Kevin Lee (Michigan) <i>“Algorithmic Collusion of Pricing and Advertising on E-commerce Platforms”</i> Ron Berman (University of Pennsylvania) with Hangcheng Zhao (University of Pennsylvania) Discussant: Ilya Morozov (Northwestern)
6:00 - 8:00 PM	Dinner and Keynote: Tamara Broderick (MIT) <i>Room 621</i>

DAY 2: SATURDAY, OCTOBER 4

8:30 - 9:30 AM	Continental Breakfast (outside of classroom)
9:30 - 11:45 AM	Session 4: Methods <i>“Double Descent in Time Series”</i> Jesus Fernandez-Villaverde (University of Pennsylvania) with Pablo A. Guerron Quintana (Boston College) Discussant: Yuan Liao (University of Iowa) <i>Anytime-Valid Inference for Double/Debiased Machine Learning of Causal Parameters”</i> Abhinandan Dalal (University of Pennsylvania) with Patrick Blöbaum (Amazon Web Services), Shiva Kasiviswanathan (AmazonWeb Services) and Aaditya Ramdas (Carnegie Mellon University) Discussant: Rahul Singh (Harvard University)- <i>“Pre-Training Estimators for Structural Models: Application to Consumer Search”</i> Zhenling Jiang (University of Pennsylvania) with Yanhao “Max”Wei (University of Southern California) Discussant: Guillaume Pouliot (Rice University)

11:45 AM - 12:00 PM	Break
12:00 - 1:00 PM	Keynote: Dashun Wang (Northwestern) <i>"AI and the Science of Science"</i>
1:00 - 2:00 PM	Lunch and Departure

Conference Organizers



Simon Freyaldenhoven

Federal Reserve Bank of Philadelphia · Senior Machine Learning Economist



Christian B. Hansen

The University of Chicago · Wallace W. Booth Professor of Econometrics and Statistics, Booth School of Business



Vitaly Meursault

Federal Reserve Bank of Philadelphia · Senior Machine Learning Economist



Sanjog Misra

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