

2024 NBER-NSF Time Series Conference

Friday-Saturday, September 20-21
University of Pennsylvania

Local organizers and program committee (University of Pennsylvania):

[Karun Adusumilli](#), [Xu Cheng](#), [Francis X. Diebold](#), [Wayne Gao](#), [Frank Schorfheide](#)

Ongoing organizers:

[Richard Davis](#) (Columbia), [Serena Ng](#) (Columbia), [Ruey Tsay](#) (Chicago)

The conference web site is [here](#).

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**DEPARTMENT OF STATISTICS
AND DATA SCIENCE**



**Jacobs Levy Equity
Management Center
for Quantitative Financial Research**

Program

Friday, September 20

Perlman Center for Political Science and Economics, 133 S. 36th Street

08:15 – 08:50 Registration and Breakfast (Lower Level Outside Auditorium)

08:50 – 09:00 Welcome (Lower Level Auditorium)

2024 NBER-NSF Time Series Conference, University of Pennsylvania

Chair: Francis X. Diebold (Department of Economics)

- Petra Todd (Chair, Department of Economics)

09:00 – 10:30 Oral Session 1 (Lower Level Auditorium)

Exogeneity, Instrumental Variables, and Causal Estimation

Chair: Rong Chen (Rutgers University, Department of Statistics)

- *Uncovering Disaggregated Oil Market Dynamics: A Full-Information Approach to Granular Instrumental Variables*
James Hamilton (University of California, San Diego), with Christiane Baumeister.
- *Granular Instrumental Variables: Theory for Panels with Finite Cross Sectional Units*
Eric Renault (University of Warwick), with Gokul Gopalan Ramachandran and Kenichi Nagasawa.
- *Intermittency and the Potential of wind energy for CO2 Abatement*
Bent Jesper Christensen (University of Aarhus), with Federico Carlini, Nabanita Datta Gupta, and Paolo Santucci de Magistris.

10:30 – 11:00 Coffee Break

11:00 – 12:30 Oral Session 2 (Lower Level Auditorium)

Vector Autoregressions

Chair: Serena Ng (Columbia University, Department of Economics)

- *Double Robustness of Local Projections and Some Unpleasant VARithmetic*
Mikkel Plagborg-Moller (Princeton), with José Luis Montiel Olea.
- *Unified Bayesian-Frequentist Inference for SVARS*
Timothy Christensen (Yale University), with Juan Rubio-Ramirez.
- *Common Trends and Long-Run Multipliers in Nonlinear Structural VARs*
James Duffy (University of Oxford), with Sophacles Mavroeidis.

12:30 – 14:00 Lunch and Poster Session 1 (Second Floor Forum – Room 250)

1. *Single Component Analysis: A New Approach to Supervised Factor Estimation*
Juhee Bae (Georgetown University), with Seung Ahn.
2. *Bootstrap Inference for Group Factor Models*
Benoit Perron (Université de Montréal), with Silvia Gonçalves and Julia Koh.
3. *Instability of Factor Strength in Asset Returns*
Daniele Massacci (King's College London).
4. *What Does it Take to Control Global Temperatures? A Toolbox for Testing and Estimating the Impact of Economic Policies on Climate*
Guillaume Chevillon (ESSEC Business School), with Takamitsu Kurita.

5. *Climate Change and Socio-Economic Inequality in the U.S.*
Tatjana Dahlhaus (Bank of Canada), with Barbara Sadaba.
6. *Structured Exploration of Machine Learning Model Complexity for Spatio-Temporal Forecasting of Urban Flooding*
Candace M. Agonafir (Columbia University), with Tian Zheng.
7. *From Reactive to Proactive Volatility Modeling with Hemisphere Neural Networks*
Philippe Goulet Coulombe (Université du Québec à Montréal), with Mikael Frenette and Karin Klieber.
8. *SpotV2Net: Multivariate Intraday Spot Volatility Forecasting via Vol-of-Vol-Informed Graph Attention Networks*
Alessio Brini (Duke University), with Giacomo Toscano.
9. *Volatility Forecasting Using Similarity-based Parameter Correction and Aggregated Shock Information*
David Lundquist (University of Illinois), with Daniel Eck.
10. *On the Connection Between Threshold Models and Tree Regressions: Application to Volatility Forecasting*
Nour Meddahi (Toulouse School of Economics), with Christian Gourieroux and Serge Nyawa.
11. *Smooth Forecast Reconciliation*
Sakai Ando (International Monetary Fund).
12. *Central Bank Density Forecasts: Do Higher-order Moments Matter?*
Tatevik Sekhposyan (Texas A&M University), with Jonathan Benchimol and Ryan Rholes.
13. *Simultaneous Confidence and Significance Bands for Autocorrelation Functions,*
Uwe Hassler (Goethe University, Frankfurt), with Marc-Oliver Pohle and Tanja Zahn.
14. *The Information Matrix Test for Markov Switching Autoregressive Models with Dynamic Transition Probabilities*
Enrique Sentana (CEMFI), with Dante Amengual and Gabriele Fiorentini.
15. *Matrix Factor Models: Navigating Temporal Structural Shifts*
Stevenson Bolivar (Rutgers University), with Bin Chen, Elynn Chen, Rong Chen, and Xialu Liu.

14:00 – 15:30 Oral Session 3 (Lower Level Auditorium)

Forecasting

Chair: Minchul Shin (Federal Reserve Bank of Philadelphia)

- *Forecasting with Panel Data: Estimation Uncertainty Versus Parameter Heterogeneity*
Hashem Pesaran (University of Southern California and Trinity College Cambridge), with Andreas Pick and Allan Timmermann.
- *Macroeconomic Forecasting with Large Language Models*
Davide Pettenuzzo (Brandeis University), with Andrea Carriero and Shubhranshu Shekhar.
- *An Empirical Evaluation of some Long-Horizon Macroeconomic Forecasts*
Kurt Lunsford (Federal Reserve Bank of Cleveland), with Kenneth D. West.

15:30 – 16:00 Coffee Break

16:00 – 17:30 Oral Session 4 (Lower Level Auditorium)

Dynamic Financial Econometrics

Chair: Tatjana Dahlhaus (Bank of Canada)

- *Robust Estimation of Realized Correlation: New Insights about Intraday Fluctuations in Market Betas*
Peter Hansen (University of North Carolina, Chapel Hill), with Yiyao Luo.
- *(Quantile) Spillover Indexes: Simulation-Based Evidence, Confidence Intervals and a Decomposition*
Massimiliano Caporin (University of Padova), with Giovanni Bonaccolto, Syed Jawad, and Hussain Shahzad.
- *Realized Candlestick Wicks*
Shifan Yu (University of Oxford), with Yifan Li, Ingmar Nolte, and Sandra Nolte.

18:00 – 20:00 Reception

The Study Hotel, 20 South 33rd Street (33rd & Chestnut), in the second-floor “Drafting Room”. (Walk down Walnut St. three blocks from 36th to 33rd, turn left, and walk one block to 33rd & Chestnut.)

Saturday, September 21

Perlman Center for Political Science and Economics, 133 S. 36th Street

08:30 – 09:00 Breakfast (Lower Level Outside Auditorium)

09:00 – 10:30 Oral Session 5 (Lower Level Auditorium)

Prediction, Extraction, and Inference

Chair: Alessandra Luati (Imperial College London, Department of Statistics)

- *Bellman Conformal Inference: Calibrating Prediction Intervals for Time Series*
Lihua Lei (Stanford University), with Zitong Yang and Emmanuel Candés.
- *Extremum Monte Carlo Filters: Real-Time Signal Extraction via Simulation and Regression*
Karim Moussa (Vrije Universiteit Amsterdam), with Francisco Blasques and Siem Jan Koopman.
- *An Estimating Equation Approach for Robust Confidence Intervals for Autocorrelations of Stationary Time Series*
Timothy Vogelsang (Michigan State University), with Taeyoon Hwang.

10:30 – 11:00 Coffee Break

11:00 – 12:30 Oral Session 6 (Lower Level Auditorium)

Panel Data

Chair: Petra Todd (University of Pennsylvania, Department of Economics)

- *Prediction when Factors are Weak*
Dacheng Xiu (Chicago Booth), with Stefano Giglio and Dake Zhang.
- *Market Returns Dormant in Options Panels*
Yoosoon Chang (Indiana University), with Youngmin Choi, Soohun Kim, and Joon Park.
- *Binary Models with Extreme Covariates: Estimation and Prediction*
Laura Liu (University of Pittsburgh), with Yulong Wang.

12:30 – 14:00 Lunch and Poster Session 2 (Second Floor Forum, Room 250)

1. *Avoiding Unintentionally Correlated Shocks in Proxy Vector Autoregressions*
Martin Bruns (University of East Anglia), with Helmut Lütkepohl and James McNeil.
2. *Estimation of Non-Gaussian SVAR Using Tensor Singular Value Decomposition*
Alain Guay (ESG-UQAM Montreal), with Dalibor Stevanovic.
3. *Innovation Powered Narrative Inference*
Geert Mesters (Universitat Pompeu Fabra), with Regis Barnichon.
4. *Forecast Relative Error Decomposition*
Quinlan Lee (University of Toronto), with Christian Gourieroux.
5. *Inference in High-Dimensional Linear Projections: Multi-Horizon Granger Causality and Network Connectedness*
Eugene Dettaa (University of Montreal), with Endong Wang.
6. *NIRVAR: Network Informed Restricted Vector Autoregression*
Alessandra Luati (Imperial College London), with Brendan Martin, Francesco Sanna Passino, and Mihai Cucuringu.
7. *Cross-Sectional Dynamics Under Network Structure: Theory and Macroeconomic Applications*
Marko Mlikota (Geneva Graduate Institute).
8. *Heterogeneity-Robust Granular Instruments*
Eric Qian (Princeton University).
9. *Taylor Rules with Endogenous Regimes*
Knut Are Aastveit (Norges Bank), with Jamie Cross, Francesco Furlanetto, and Herman van Dijk.
10. *The Term Structure of Natural Rates of Interest*
Gianni Amisano (Board of Governors of the Federal Reserve), with Oreste Tristani.
11. *Measuring Interest Rate Risk Management by Financial Institutions*
Celso Brunetti (Federal Reserve Board), with Nathan Foley-Fisher and Stéphane Verani.
12. *Predicting High Inflation Episodes: The Role of Uncertainty and Inflation Expectations*
George Kouretas (Athens University of Economics and Business, and IPAG Business School), with Maria-Eleni K. Agoraki and Nektarios Aslanidis.
13. *Conditional Independence Testing for High-Dimensional Non-Stationary Nonlinear Time Series*
Michael Wieck-Sosa (Carnegie Mellon University), with Michel F.C. Haddad and Aaditya Ramdas.
14. *On the Inconsistency of Cluster-Robust Inference and how Subsampling Can Fix It*
Yulong Wang (Syracuse University), with Harold D. Chiang and Yuya Sasaki.
15. *Testing for Identification in Potentially Misspecified Linear GMM*
Frank Kleibergen (University of Amsterdam), with Zhaoguo Zhan.
16. *Semiparametric Estimation of Probability Weighting Functions Implicit in Option Prices*
Jeroen Dalderop (Notre Dame), with H. Peter Boswijk, Roger J.A. Laeven, and Niels Marijnen.