IAER Econometrics Workshop 2026

June 22 – 23, 2026

Institute for Advanced Economic Research

School of Economics

Office of Academic Research

Strategic Planning Office

Dongbei University of Finance and Economics

Dalian, China

Contents

Dongbei University of Finance and Economics

Dongbei University of Finance and Economics (DUFE) was founded in October 1952. With the mission of "cultivating excellent financial and economic talents to serve economic and social developments," DUFE is a multidisciplinary and research-oriented university focusing on economics, management, law, literature, and science. DUFE is now offering 48 Ph.D. programs, 97 master programs. 25 undergraduate programs have been selected as national first-class undergraduate programs, and 6 provincial.

In 2012, China's Ministry of Finance, Ministry of Education, and the Liaoning Provincial Government signed an agreement to foster DUFE's development. Since then, DUFE has made great strides towards achieving better academic excellence. According to China University Subject Rankings (CUSR) released by the China Academic Degrees and Graduate Education Centre (CDGDC) in December 2017, Applied Economics at DUFE is ranked 2-5% (2% excluded, the same below), Business Administration and Statistics 5-10%, and Management Science and Engineering 10-20%. In recent years, the university subjects have developed in a balanced manner, with outstanding advantages in economics and management. The overall strength of the subjects has further improved, and a historic breakthrough has been made in the latest round of subject rankings.

DUFE initiated international exchanges at the beginning of the 1980s. Up to now, DUFE has established different forms of cooperative relations with over 140 universities and 8 international institutions from 28 different countries or regions, among which over 50 universities have carried out long-term stable cooperation with DUFE.

In the decades since its foundation, DUFE has achieved much progress in its teaching facilities, education quality, student disciplinary systems, and scientific research.

Institute for Advanced Economic Research

The Institute for Advanced Economic Research (IAER) at Dongbei University of Finance and Economics (DUFE) was established in 2019, with a mission to build a leading global institute known for its academic excellence in research, teaching, and mentoring. The goal is to attract world-class scholars with outstanding research or the potential of outstanding research. IAER offers tenure-track positions with various incentives for research and teaching, including competitive salaries, and benefits with lower teaching loads, and stimulating research environment.

As a newly-founded institute, IAER now has nineteen full-time faculty members. IAER young faculty members have papers published in journals, including *Journal of Development Economics*, *Journal of Economic Theory*, *Journal of Monetary Economics*, *Journal of Public Economics*, *Journal of Econometrics*, and *Games and Economic Behavior*. Faculty members received grants from the National Natural Science Foundation of China.

Ever since its establishment, IAER has successfully hosted conferences such as CES 2019 China Annual Conference and CES 2019 Presidents' Forum, and a series of workshops such as IAER Econometrics Workshop, IAER Macroeconomics Workshop, and IAER Microeconomics Workshop. In addition, IAER launched the IAER Seminar series in 2019, where more than 130 speakers have shared their latest research. With more faculty members joining, the IAER Internal Seminar series was introduced in 2022 for faculty members to share with each other their latest research agenda, to brainstorm together, and to exchange ideas.

DUFE Honors Program in Economics was granted a national honors program by Ministry of Education of China in 2020, which is one of the 20 honors programs in Economics in China. It's designed for students who are highly motivated to be an economist and are looking for a more research-intensive experience in his or her undergraduate studies. Around 25 DUFE freshmen are enrolled in this program every year. DUFE is continually investing the program.

The IAER Combined Master-Ph.D. Program in Economics was initiated in 2021, with the aim to build a leading graduate program in China with a strong focus on academic research. The program targets creative and inquisitive students with academic ambitions. By offering thorough training in economic theory and econometrics, and by rooting the program in the vibrant research environment at IAER, we offer inspirations for the students to explore their own research interests, cultivate students' research potential, and guide their development as researchers.

Invited Speakers

In Alphabetical Order

Prof. Giuseppe Cavaliere, University of Bologna

Dr. Giuseppe Cavaliere is a Distinguished Research Professor of Economics at the University of Exeter Business School and a Full Professor of Econometrics at the University of Bologna. A leading expert in time series and financial econometrics, his research spans bootstrap methods, non-stationarity, unit roots and cointegration, heavy-tailed data, and structural vector autoregressions (SVARs). His work is regularly published in top-tier statistical and econometric journals, including Econometrica, the Journal of the American Statistical Association, the Annals of Statistics, and the Journal of the Royal Statistical Society.

Professor Cavaliere currently serves as a Co-Editor of the Journal of Econometrics. His extensive editorial leadership also includes a long tenure as Co-Editor of Econometric Theory (2009–2024), alongside associate editorships for the Econometrics Journal and the Journal of Time Series Analysis. He is a past President of SIdE, the Italian Econometric Association (2017–2019).

Prof. Jiti Gao, **Monash University**

Prof. Jiti Gao is the Donald Cochrane Chair of Business and Economics and a Professor of Econometrics and Statistics at Monash University. An internationally recognized leader in non- and semi-parametric econometrics, his extensive research interests span nonlinear and nonstationary time series analysis, panel and spatial data analysis, financial econometrics, and deep neural networks. He is an elected Fellow of the Academy of the Social Sciences in Australia (FASSA), a Fellow of the Journal of Econometrics, and an elected Fellow of the International Association for Applied Econometrics (IAAE).

Professor Gao plays a prominent role in shaping the field's leading literature, currently serving as a Co-Editor of Econometric Theory. His extensive editorial contributions also include long-standing tenures as an Associate Editor for flagship publications such as the Journal of Econometrics, the Journal of Business & Economic Statistics, and Econometric Reviews. His profound contributions to the discipline have been recognized with major distinctions, including the Econometric Theory Plura Scripsit and Multa Scripsit awards, alongside an Australian Professorial Fellowship awarded by the Australian Research Council.

Prof. Yong Li, Renmin University of China

Prof. Yong Li is a Professor of Econometrics in the School of Economics at Renmin University of China (RUC), where he also serves as the Director of the Artificial Intelligence Economics Research Center at the National Academy of Development and Strategy. He is a recipient of national-level talent honors, including the prestigious National Talent Distinguished Professor and the National Young Scholars Program. He holds a PhD in Statistics from the Chinese University of Hong Kong

Professor Li's extensive research interests focus heavily on Bayesian econometrics, latent variable models, asset management, and quantitative investment. An exceptionally prolific researcher, he has published nearly 60 papers in leading Chinese and international journals, including a remarkable series of pioneering articles in the Journal of Econometrics, as well as top-tier Chinese journals like Economic Research Journal (经济研究) and Management World (管理世界). His academic contributions have been recognized with numerous accolades, including the Second Prize for Natural Sciences and the Third Prize for Humanistic and Social Sciences awarded by the Ministry of Education of China.

Prof. Xia Wang, Renmin University of China

Prof. Xia Wang is a Professor of Economics and doctoral supervisor at the School of Economics, Renmin University of China. She is recognized under the Ministry of Education's "Changjiang Scholar" Young Scholars Program and holds the Wu Yuzhang Distinguished Professor title, having earned her PhD from the Wang Yanan Institute for Studies in Economics (WISE) at Xiamen University. Her extensive research interests focus on theoretical econometrics and macroeconomic monitoring and forecasting, with an emphasis on nonlinear relationships, factor models, nonparametric methods, and mixed-frequency modeling utilizing high-frequency data.

She has published over 30 papers in top-tier journals, including the Journal of Econometrics, International Economic Review, Journal of Business & Economic Statistics, Econometric Theory, and the Economic Research Journal (经济研究). Since 2026, she has served as an Associate Editor for the Journal of Econometrics. Her research is supported by multiple National Natural Science Foundation of China (NSFC) projects and has been recognized with prestigious honors from the Econometric Scholars Forum and the China Quantitative Economics Society.

Prof. Xinyu Zhang, Chinese Academy of Sciences

Prof. Xinyu Zhang is a Research Fellow at the Academy of Mathematics and Systems Science, Chinese Academy of Sciences. He has long focused his research on the theory and applications of management statistics and econometrics. Working closely with collaborators, he has resolved multiple critical challenges in the study of model averaging, while proposing innovative methodologies that integrate model averaging with transfer learning and random forests. Furthermore, his developed forecasting methods have been successfully applied to real-world problems, providing vital decision-making support for relevant government and institutional departments.

An exceptionally prominent scholar, he has served as the principal investigator for several major research grants, including the prestigious National Science Fund for Distinguished Young Scholars (国家自然科学基金委杰出青年基金) and its subsequent continuation projects by the National Natural Science Foundation of China. His significant academic contributions to the field have also earned him the China Youth Science and Technology Award.

Program

June 22 / 08:10 – 09:00

08:10 – 08:30 **Registration** (1st Floor Lobby, Duxing Building)

08:30 – 08:40 **Group Photo** (1st Floor Lobby, Duxing Building)

08:40 – 08:50 **Welcome Speech: Prof. Xuhui Wang (DUFE President)**

Chair: Prof. Huiyu Cui
Location: Room 710, Duxing Building (笃行楼)

Session 1 / June 22 / 09:00 – 10:00

1. 09:00-09:30 **Keynote Speech: Semiparametric Instrumental Variable method**
   Jiti Gao (Monash University)
2. 09:30-10:00 **Keynote Speech: Capturing Common and Idiosyncratic Information in High-dimensional Data with Structural Breaks**
   Xia Wang (Renmin University of China)

Chair: Yanqin Fan
Location: Room 710, Duxing Building (笃行楼)

Coffee Break / June 22 / 10:00 – 10:20

Location: Hallway

Session 2 / June 22 / 10:20-11:50

3. 10:20-10:50 **Realized Volatility Forecasting: Continuous versus Discrete Time Models**
   Chen Zhang (Sun Yat-sen University)
4. 10:50-11:20 **Counterfactual Inference in Continuous-Time Models: An IVX Approach**
   Yiu Lim Lui (Dongbei University of Finance and Economics)

5. 11:20-11:50 **Clustering for Block Correlation Models**
Yijie Fei (Hunan University)

Chair: Yutao Sun
Location: Room 710, Duxing Building (笃行楼)

Lunch / June 22 / 11:50 – 13:30

Location: Central Dinning Hall

Session 3 / June 22 / 13:30 – 14:00

6. 13:30 – 14:00 **Keynote Speech: Prediction-Powered Linear Regression: A Balance between Interpretation and Prediction**
Xinyu Zhang (Chinese Academy of Sciences)

Chair: Yiu Lim Lui

Location: Room 710, Duxing Building (笃行楼)

Session 4 / June 22 / 14:00 – 15:30

7. 14:00 – 14:30 **Limit Theory for Mildly Explosive Time Series when Initialization is in the Infinite Past**
Xuewen Yu (Fudan University)

8. 14:30 – 15:00 **Near-Unit-Root Theory for Affine Processes**
Yang Lu (Concordia University)

9. 15:00 – 15:30 **Series Estimation of Cointegrated System with Time Varying Coefficients**
Yu Bai (City University of Macau)

Chair: Yiu Lim Lui

Location: Room 710, Duxing Building (笃行楼)

Coffee Break / June 22 / 15:30 – 15:50

Location: Hallway

Session 5 / June 22 / 15:50 – 17:20

10. 15:50 – 16:20 **Treatment Effects with Contaminated Comparisons: Partial Identification and Inference**
    Shengbin Wei (Boston College)

11. 16:20 – 16:50 **Uniform Inference on Quantile Effects under Network Interference**
    Zequn Jin (Shanghai University of Finance and Economics)

12. 16:50 – 17:20 **Inflation Forecasting in Small Open Economies: Incorporating Short Predictors to Compare Global and Domestic Drivers**
    Zhoulihua Zhang (University of Strathclyde)

    Chair: Hyeonseok Park
    Location: Room 710, Duxing Building (笃行楼)

Session 6 / June 23 / 08:30 – 09:30

13. 08:30 – 09:00 **Keynote Speech: Bootstrap Diagnostic Tests**
    Giuseppe Cavaliere (University of Bologna)

14. 09:00 – 09:30 **Keynote Speech: Hypothesis Testing via Posterior-Test-Based Bayes Factors**
    Yong Li (Renmin University of China)

    Chair: Jun Yu
    Location: Room 710, Duxing Building (笃行楼)

Coffee Break / June 23 / 09:30 – 09:50

Location: Hallway

Session 7 / June 23 / 09:50 – 11:20

15. 09:50 – 10:20 **Consistent Moment Selection Procedures for Many Moments**
    Shuo Jiang (Xiamen University)

16. 10:20 – 10:50 **Common Correlated Effects Estimation of Binary Panel Data Model with Individual and Time Effects**
    Gang Yu (Dongbei University of Finance and Economics)

17. 10:50 – 11:20 **Inference in Non-linear Panel Data after Discretizing**
    Haoyuan Xu (KU Leuven)

Chair: Han Chen
Location: Room 710, Duxing Building (笃行楼)

June 23 / 11:20 – 11:30

11:20 – 11:30 **Closing Speech: Prof. Weiguo Wang (Director of College of Statistics, former DUFE Vice President)**

Chair: Prof. Huiyu Cui
Location: Room 710, Duxing Building (笃行楼)

List of Abstracts

In order of presentations

1. **Semiparametric Instrumental Variable method**

   Jiti Gao

   This paper proposes a semiparametric instrumental variable (SIV) method for addressing endogeneity in regression models without relying on externally supplied instruments. The approach constructs instruments directly from observed regressors through a projection-based decomposition of the structural error. The method applies to linear, nonlinear, and non- and semi-parametric models and provides a simple and computable alternative to conventional instrumental variable approaches.

   This paper establishes identification conditions and derives the asymptotic properties of the resulting estimators. It then proposes a simple LASSO approach coupled with a generalized cross-validation method to examine the finite-sample performance of both the proposed method and the established theory by simulated and real data examples.

2. **Capturing Common and Idiosyncratic Information in High-dimensional Data with Structural Breaks**

   Xia Wang

   This paper introduces a factor-augmented regularized model with multiple structural breaks to jointly exploit common and idiosyncratic information under structural instability in high dimensions. To address the dual challenges of high dimensionality and instability, we propose a two-stage estimation procedure combing split-sample adaptive group LASSO and group fused LASSO. The procedure achieves both variable selection and break detection consistency, and the post-LASSO estimator is asymptotically normal. Monte Carlo simulations demonstrate the excellent finite-sample performance of the proposed estimators. Application to forecasting U.S. industrial production show substantial gains over competing methods, highlighting the importance of accommodating idiosyncratic information and structural instability.

3. **Realized Volatility Forecasting: Continuous versus Discrete Time Models**

Chen Zhang

Forecasting realized volatility (RV) is central to financial econometrics, with important implications for risk management, asset allocation, and derivative pricing. Motivated by the ongoing debate on volatility modeling, this paper provides a comprehensive empirical comparison of many alternative models. We evaluate leading continuous time models estimated using state-of-the-art methods from the rough volatility literature, together with both standard long-memory autoregressive fractionally integrated moving average (ARFIMA) models and their rough-volatility extensions, as well as several variants of the heterogeneous autoregressive (HAR) model and their logarithmic counterparts. The models are applied to a large panel of equities and cryptocurrencies, with performance assessed using both statistical and economic criteria. Our results show that for equities, continuous time models consistently outperform discrete time alternatives across all evaluation criteria and forecasting horizons. The fractional Brownian motion model for log RV performs best at short horizons, while the fractional Ornstein Uhlenbeck model for log RV dominates in the long run. For cryptocurrencies, a mild divergence emerges between economic and statistical performance: based on realized utility, the quarticity-augmented heterogeneous autoregressive (HARQ) model for RV leads in the short term and the Brownian semistationary models prevail at longer horizons, whereas the HAR-type models for log RV deliver superior statistical accuracy.

4. **Counterfactual Inference in Continuous-Time Models: An IVX Approach**

Yiu Lim Lui

This paper develops a novel counterfactual inference within the framework of panel data approach initiated by Hsiao et al. (2012). Departing from the existing literature, we consider measuring the treatment effects of a unit in a continuous-time environment, in which all units are driven by common latent factors following a multivariate Ornstein Uhlenbeck (OU) process. The counterfactual outcomes for the treated unit are approximated by a linear projection approach. To achieve an asymptotically pivotal inference for the treatment effect, the IVX approach proposed in Phillips and Magdalinos (2009) is adapted for the estimation of projection coefficients. Under an in-fill asymptotic paradigm with fixed time span and shrinking sampling intervals, the estimated integrated treatment effect (ITE) is shown to be pivotal and chi-square-distributed. To improve the finite-sample performance, we further propose a fixed regressor bootstrap method and establish its asymptotic validity. Monte Carlo simulation evidence documents satisfactory size control and power performance of our IVX-based inferential procedure. Empirically, we deploy the proposed methodology to quantify the causal spillover effect of the 2022 FTX insolvency on the price of mainstream cryptocurrencies, with fiat currencies serving as valid control cohorts.

5. **Clustering for Block Correlation Models**
   Yijie Fei
   Block correlation models have recently been shown to be powerful tools for analyzing the dependence among financial time series of large dimension. Although predetermined group assignments have been widely used for forming block structure, they may lack statistical efficiency and produce inferior forecasts. In this paper, we introduce a novel specification for block correlation matrices and propose an efficient likelihood-based k-means algorithm to estimate the unknown block structure. We show that both the number of groups and the group memberships can be consistently estimated with probability approaching one. Furthermore, we establish the asymptotic distribution of the estimated correlations. Simulation studies demonstrate that the proposed data-driven clustering exhibits excellent finite-sample performance. We apply the new method to US stock return data and find that it outperforms competing block-forming approaches.

6. **Prediction-Powered Linear Regression: A Balance between Interpretation and Prediction**
   Xinyu Zhang
   Machine learning can rapidly generate numerous predicted labels using complex

prediction techniques, emerging as an efficient and low-cost labeling solution. However, most machine learning algorithms lack interpretability. This study adopts linear regression as the baseline model and proposes a prediction-powered prediction approach to leverage unlabeled data to enhance prediction performance while ensuring model interpretability. In the proposed approach, we incorporate model averaging to address the uncertainty caused by model, power tuning parameter, and machine learning algorithm selection. Simulation and applications demonstrate its promising performance.

7. **Limit Theory for Mildly Explosive Time Series when Initialization is in the Infinite Past**

   Xuewen Yu

   Mildly explosive (ME) time series models are commonly analyzed under the assumption of recent past initialization--a convenient but empirically untenable simplification, as many financial and economic series exhibit long histories where the initial condition is not negligible. This paper reconsiders inference for the ME model by allowing for more realistic initialization schemes, including those in the distant or infinite past. We develop the limit theory for the least squares estimator of the autoregressive coefficient within this framework. Our central theoretical result shows that the associated t-statistic maintains an asymptotic standard normal distribution, irrespective of the initialization horizon. This pivotal property permits the construction of simple, asymptotically valid confidence intervals for the autoregressive coefficient that are robust to various initial conditions and to the presence of non-negligible drift. The framework is extended to models augmented with exogenous regressors, including high-dimensional cases, where a post-Lasso-based confidence interval is proposed and its validity established. Monte Carlo simulations confirm that the proposed intervals achieve correct coverage and that incorporating relevant covariates leads to sharper inference. An empirical application to the Nasdaq index during the dot-com bubble demonstrates that our confidence intervals are substantially narrower and more robust than the conventional Cauchy-based interval.

8. **Near-Unit-Root Theory for Affine Processes**

   Yang Lu

   Discrete-time affine processes are widely used in finance and economics and encompass count, positive, and nonnegative-valued processes. This paper develops near- unit-root asymptotic theory for this class of models. Unlike linear AR(1) processes, affine processes exhibit time-varying conditional variance that remains asymptotically non-negligible near unity, leading to qualitatively different scaling limits and estimator behavior. We show that the local-to-unity regime suffers from the usual nuisance-parameter problem, whereas the mildly explosive regime, while free of it, still does not allow consistent estimation of the intercept. By contrast, the mildly stationary framework is more tractable: the OLS estimator is asymptotically normal, the resulting trajectories are more realistic than those of linear AR(1) models, and inference is possible through both a plug- in method or bootstrap. The theoretical results are supported by simulation evidence and illustrated through applications to insurance and financial data.

9. **Series Estimation of Cointegrated System with Time Varying Coefficients**

   Yu Bai

   This paper proposes a series estimation approach for cointegrated system with coefficients that evolve smoothly over time. After establishing the baseline limit theory, we extend the frame- work to include stationary regressors with time-invariant coefficients. While the associated estimator for time-invariant coefficients retain standard asymptotic properties, the presence of stationary components alters the distribution of the estimators for the time-varying coefficients and motivates our development of a new series-type dynamic OLS estimator. Under suitable conditions, the new estimator admits a tractable mixed normal limiting distribution. A bootstrap procedure is also proposed to construct pointwise confidence intervals. Monte Carlo simulations indicate that the series-type dynamic OLS estimator can improve finite-sample performance. An empirical application to the consumption–wealth ratio shows that allowing for time variation in the cointegrating relationship can enhance equity premium forecasts relative to conventional fixed-coefficient specifications.

10. **Treatment Effects with Contaminated Comparisons: Partial Identification and Inference**

Shengbin Wei

Panel-data methods for treatment-effect evaluation often construct counterfactual out- comes. This paper studies settings in which those comparison units may themselves be affected by the policy. Such contamination breaks the clean-control interpretation of synthetic-control and difference-in-differences contrasts: changes in the comparison pool can mask or mimic the direct effect on the treated unit. I develop a partial-identification framework that replaces the clean-control assumption with explicit maintained information. Each comparison weight yields a contaminated equation involving the same direct effect and the same comparison-unit exposure vector. Identification comes from requiring one exposure vector, together with pre-fit-disciplined residual imbalances, to rationalize all comparison equations simultaneously under the exposure restrictions. For LP-representable restrictions, this compatibility check is computationally tractable and can be combined with bootstrap test inversion. In an application to the Legal Arizona Workers Act, a central placebo-supported calibration leaves only negative direct effects unrejected, while sufficiently weaker comparison-validity information makes zero compatible. Application-calibrated Monte Carlo designs show stable finite-sample behavior for the maintained projection.

11. **Uniform Inference on Quantile Effects under Network Interference**

Zequn Jin

We study quantile treatment effects (QTE) under network interference. For units sharing the same degree, our estimands compare outcome quantiles across exposure configurations that differ in own treatment and the number of treated neighbors. Under a local-interference condition and mild restrictions on the degree distribution, these QTEs are point identified. We propose two estimators: (i) a degree-stratified nonparametric CQTE estimator, and (ii) a linear quantile-regression estimator. We establish consistency and weak convergence for both procedures and develop dependence-robust inference based on weighted and multiplier bootstrap. Monte Carlo experiments document small finite-sample bias and near-nominal coverage across a range of net- work designs. In an application to a randomized input-subsidy program in Mozambique (Carter et al., 2021), we uncover substantial distributional heterogeneity in both direct and spillover effects.

12. **Inflation Forecasting in Small Open Economies: Incorporating Short Predictors to Compare Global and Domestic Drivers**
Zhoulihua Zhang
Recent global shocks have renewed interest in whether inflation in small open economies (SOEs) is driven primarily by global forces or domestic conditions. Yet many indicators that capture these evolving pressures have short histories and are observed in high-dimensional, unbalanced panels, posing an important challenge for time-series forecasting. We address this challenge within a factor-augmented forecasting frame- work that draws on recent advances in missing-data estimation to extract economically interpretable factors from such panels. Using monthly data from five developed and emerging-market SOEs, we systematically evaluate the predictive content of factors extracted from economically motivated predictor blocks, capturing global supply conditions, global demand, inflation spillovers, and domestic drivers. We further assess which factor groups drive improvements in both point and density forecasts. Factors capturing global supply and demand conditions consistently improve forecast accuracy across countries. By contrast, the predictive content of global inflation spillovers and domestic drivers varies substantially, revealing meaningful cross-country heterogeneity. Parsimonious specifications that prioritise the most relevant global and domestic drivers outperform broader specifications that aggregate less informative predictors. Our results suggest that carefully grouping predictors along economic dimensions, rather than pooling all available predictors indiscriminately, is key to improving inflation forecasts in SOEs, with implications for how factor models should be specified in open-economy forecasting contexts.

13. **Bootstrap Diagnostic Tests**

Giuseppe Cavaliere

Violation of the assumptions underlying classical (Gaussian) limit theory often yields unreliable statistical inference. We show that the bootstrap can detect such violations by delivering simple and powerful diagnostic tests that (a) induce no pre-testing bias, (b) use the same critical values across applications, and (c) are consistent against deviations from asymptotic normality. The tests compare the conditional distribution of a bootstrap statistic with the Gaussian limit implied by valid specification and assess whether the resulting discrepancy is large enough to indicate failure of the asymptotic Gaussian approximation. The method is computationally straightforward and only requires a sample of i.i.d. draws of the bootstrap statistic. We derive sufficient conditions for the randomness in the data to mix with the randomness in the bootstrap repetitions in a way such that (a), (b) and (c) above hold. We demonstrate the practical relevance and broad applicability of bootstrap diagnostics by considering several scenarios where the asymptotic Gaussian approximation may fail, including weak instruments, non-stationarity, parameters on the boundary of the parameter space, infinite variance data and singular Jacobian in applications of the delta method. An illustration drawn from the empirical macroeconomic literature concludes.

14. **Hypothesis Testing via Posterior-Test-Based Bayes Factors**

Yong Li

In recent years, there has been growing criticism of hypothesis testing via p-values. As an alternative to p-values, Bayes factors (BFs) have been suggested for hypothesis testing. However, standard BFs encounter certain theoretical and practical difficulties. For example, they are not well defined under improper priors and are subject to Jeffreys-Lindley-Bartlett's paradox under vague priors. Additionally, computing standard BFs for many models can be challenging. In this paper, we propose a novel approach that compares the sampling distributions of posterior-test-based statistics for hypothesis testing. Two posterior-test-based BFs are constructed from the posterior version of the likelihood ratio test and the Wald test, respectively. Under regularity conditions, we show that the new methods can avoid the p-hacking problem asymptotically and the problems in the standard BFs. The advantages of the proposed methods are investigated using several simulation and empirical studies.

15. **Consistent Moment Selection Procedures for Many Moments**
    Shuo Jiang
    This paper studies GMM estimation when the researcher has many candidate moment conditions and some of them may be misspecified. The population target is the largest set of candidate moments that can be satisfied at a common parameter value. This target follows the moment-selection approach of Andrews (1999), but the paper focuses on procedures that are useful when the candidate list is large. We propose two estimators. The modified moment-selection estimator (MMSE) screens partial systems before applying a penalized GMM criterion. The reduction-and-estimation (RE) procedure removes empirically infeasible systems and all of their supersets before the final GMM step. Both procedures use the same simple implication: if a set of moments is infeasible, then every larger set containing it is infeasible. We prove consistency of the selected moment vector and the associated GMM estimator with a fixed number of candidate moments and with a growing number of candidate moments. The many-moment theory is stated under interpretable conditions: the correct system is the largest feasible system, false large systems leave a detectable population discrepancy, and feasible systems have small sample GMM criteria. We also count the number of GMM minimizations required by MMSE and RE. Exhaustive search requires 2^l minimizations. The proposed procedures require far fewer minimizations when misspecification is detectable in overidentified systems, when a conservative valid core is available, or when candidate moments are naturally ordered or grouped.

16. **Common Correlated Effects Estimation of Binary Panel Data Model with Individual and Time Effects**
    Gang Yu
    We propose a two-step common correlated effects (CCE, hereafter) estimation of binary panel data model with both individual and time effects, when the number of individuals observations N goes to infinity, the number of time observations T is 2.

The proposed two-step CCE estimation involves applying conditional likelihood to eliminate the individual effects in the first step, and approximating the time effects based on the cross-sectional averages of the regressors in the second step. The two-step CCE estimator is computationally simple and is consistent and asymptotically normal. The finite sample performance of the two-step CCE estimator is examined through extensive Monte Carlo simulation studies.

17. **Inference in Non-linear Panel Data after Discretizing**

    Haoyuan Xu

    We study nonlinear panel data models with nonseparable fixed effects, allowing for rich inter- actions between unobserved individual and time heterogeneity. We propose a bias-corrected two-step estimator together with a feasible inference procedure. Our framework provides new insights into inference for nonlinear unbalanced panel data models. Simulation results support the theoretical findings.

List of Speakers

In order of presentations

Jiti Gao	Monash University
Xia Wang	Renmin University of China
Chen Zhang	Sun Yat-sen University
Yiu Lim Lui	Dongbei University of Finance and Economics
Yijie Fei	Hunan University
Xinyu Zhang	Chinese Academy of Sciences
Xuewen Yu	Fudan University
Yang Lu	Concordia University
Yu Bai	City University of Macau
Shengbin Wei	Boston College
Zequn Jin	Shanghai University of Finance and Economics
Zhoulihua Zhang	University of Strathclyde
Giuseppe Cavaliere	University of Bologna
Yong Li	Renmin University of China
Shuo Jiang	Xiamen University
Gang Yu	Dongbei University of Finance and Economics
Haoyuan Xu	KU Leuven

Scientific Committee

In Alphabetical Order

Yanqin Fan	University of Washington
Weiguo Wang	Dongbei University of Finance and Economics
Jun Yu	University of Macau

Local Committee

In Alphabetical Order

Huiyu Cui	Dongbei University of Finance and Economics
Yiu Lim Lui	Dongbei University of Finance and Economics
Hyeonseok Park	Dongbei University of Finance and Economics
Yutao Sun	Dongbei University of Finance and Economics
Tongbin Zhang	Dongbei University of Finance and Economics
Xueren Zhou	Dongbei University of Finance and Economics

Conference Guide

Venue

Conference Room:	Room 710, Duxing Building (笃行楼) (elevator in **left wing**)
Registration:	1st Floor Lobby, Duxing Building
Coffee Break:	Hallway next to conference room
Lunch:	Central Dining Hall (中心食堂)

There is a map on the next page for your reference.

Meal

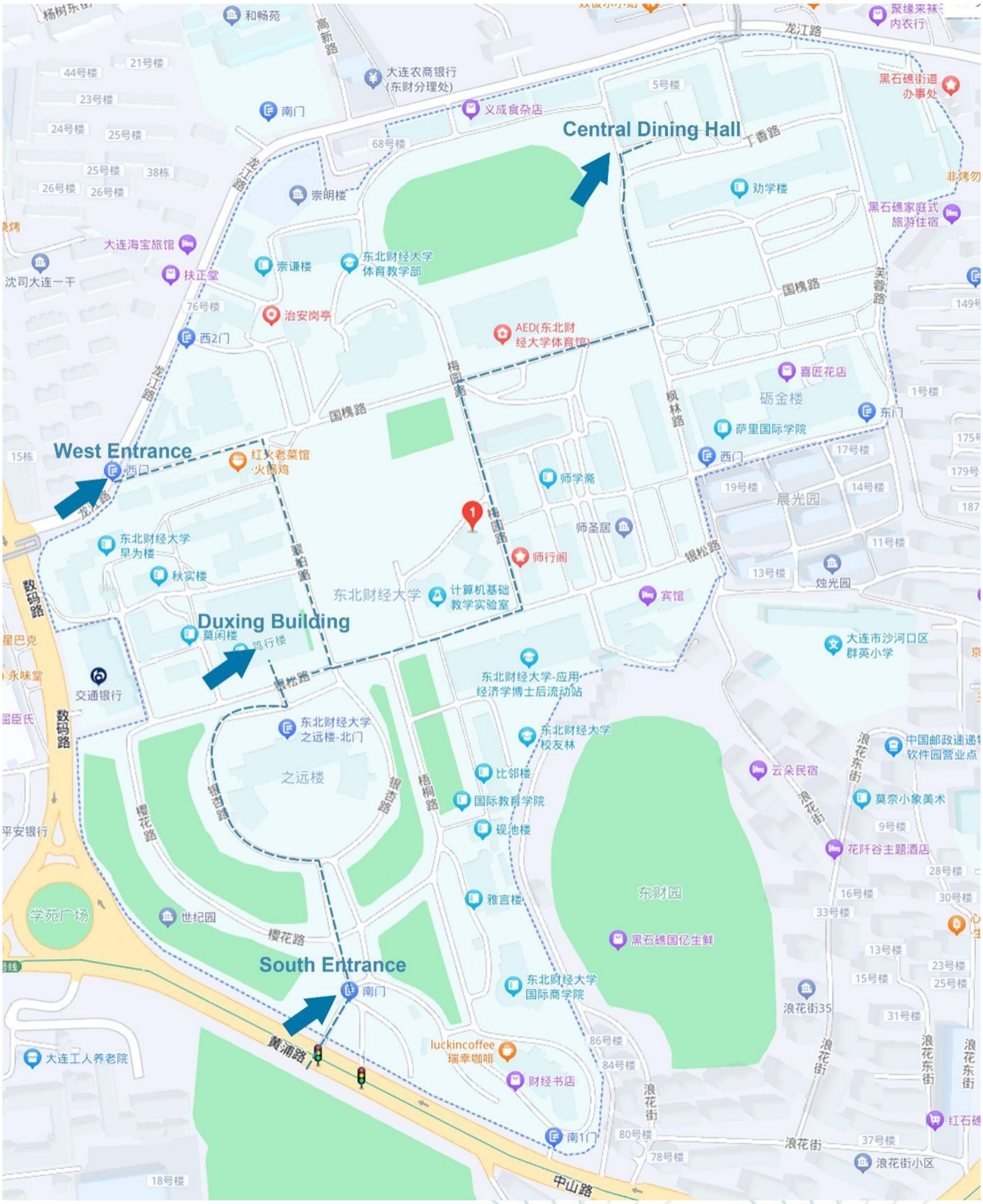
A buffet lunch will be served at the Central Dining Hall on the 22nd and 23rd. **Please show your conference badge to the staff at the entrance.**

Contact

If you need any assistance, please contact the local organizer:

Email: iaer.workshop@dufe.edu.cn
TEL: +86-411-8471 3552

Map


Central Dining Hall
West Entrance
Duxing Building
South Entrance
东北财经大学

Notes

Notes