2024 Asian Summer School
in Econometrics and Statistics

July 15 – 21

Dalian, China

Organizers：

- The Econometric Society
- Institute for Advanced Economic Research, Dongbei University of Finance and Economics
- School of Economics, Dongbei University of Finance and Economics
- Office of Academic Research, Dongbei University of Finance and Economics
- Paula and Gregory Chow Institute for Studies in Economics, Xiamen University
- Center for Forecasting Science, Academy of Mathematics and Systems Science, Chinese Academy of Sciences
- School of Economics and Management, University of Chinese Academy of Sciences

Contents

ES Program for the Asian Summer School in Econometrics and Statistics

The Econometric Society has announced that the “2024 Asian Summer School in Econometrics and Statistics of the Econometric Society” will be held at Dongbei University of Finance and Economics (DUFE), Dalian, China, from July 15 to July 21, 2024. The Summer School is a collaborative effort by a) the Econometric Society; b) Institute for Advanced Economic Research, Dongbei University of Finance and Economics; c) School of Economics, Dongbei University of Finance and Economics; d) Office of Academic Research, Dongbei University of Finance and Economics; e) Paula and Gregory Chow Institute for Studies in Economics, Xiamen University; f) Center for Forecasting Science, Academy of Mathematics and Systems Science, Chinese Academy of Sciences; and g) School of Economics and Management, University of Chinese Academy of Sciences. The primary objective of this activity is to highlight the latest advancements in econometrics both in Asia and worldwide, and to promote the growth of econometrics education and research in the Asia-Pacific region.

Esteemed experts in econometrics from institutions such as the Chinese Academy of Sciences, University of Chinese Academy of Sciences, the Hong Kong Polytechnic University, University of Tokyo, Seoul National University, University of Macau, and Singapore Management University have been invited to deliver lectures on cutting-edge research in their respective fields. The lectures will cover a diverse range of topics, including but not limited to time series econometrics, panel data analysis, machine learning, causal inferences, and stochastic dominance.

Organizers

- **The Econometric Society**
- **Institute for Advanced Economic Research, Dongbei University of Finance and Economics**
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The Econometric Society

The Econometric Society is an international society for the advancement of economic theory in its relation to statistics and mathematics. The main activities of the Society are:

- Publication of the journals *Econometrica*, *Quantitative Economics*, and *Theoretical Economics*.
- Publication of a research Monograph Series.
- Organization of scientific meetings in six regions of the world.

Ragnar Frisch is at the origin of the Econometric Society. Along with Charles Roos and Irving Fisher, he convened an organization meeting in December 1930 in Cleveland, where the American Economic Association, the American Statistical Association and the American Mathematical Society were holding their annual meeting. Joseph Schumpeter chaired the 16-strong meeting, which founded the Econometric Society and elected Irving Fisher as its first President. The first annual meeting of the Econometric Society took place in Lausanne in September 1931. After Alfred Cowles offered funding for a journal, the Society launched *Econometrica* in 1933, with Ragnar Frisch as its Editor. The first issue of *Econometrica* published the papers presented in the first meeting; and the fourth issue listed the first 29 Fellows of the Econometric Society.

The Econometric Society publishes two open-access journals in addition to *Econometrica*, *Quantitative Economics* and *Theoretical Economics*. *Theoretical Economics* was an established journal in its field ahead of the Society adopting it. The Society approached TE's Executive Board about bringing the journal on as a title of the Society. An agreement was finalized on December 25, 2008, and the first issue of TE published under the auspices of the Econometric Society appeared in January 2010. *Quantitative Economics* was a new journal developed by the Society, which published its first issue in July 2010.

Institute for Advanced Economic Research, Dongbei University of Finance and Economics

IAER 东北财经大学高等经济研究院
DONGBEI UNIVERSITY OF FINANCE AND ECONOMICS 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 seventeen full-time faculty members, with three more to join this coming fall. IAER young faculty members have papers published in journals, including *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 90 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.

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.

School of Economics, Dongbei University of Finance and Economics

The School of Economics (SOE) at Dongbei University of Finance and Economics (DUFE) was established in 1997. As of March 2024, there are 59 full-time faculty members, including 12 Ph.D. supervisors, 19 professors and 21 associate professors.

SOE offers doctoral and master's programs in 7 majors including "History of Economic Thought," "Economic History," "Western Economics," "Population, Resources and Environmental Economics," "Industrial Economics," "Labor Economics," and "Quantitative Economics." It also offers undergraduate programs in "Economics" and "Digital Economy." The Economics major at DUFE began enrolling students in 1996. It is a national first-class undergraduate program. The Digital Economy major at DUFE began enrolling students in 2023. Among these, Industrial Economics and Quantitative Economics are the national key disciplines. The Applied Economics is ranked A a.k.a. top 2%-5% nationwide in the fourth round of national discipline evaluation.

As of December 2023, 253 doctoral candidates, 1617 master's students, and 938 undergraduates in economics have graduated from SOE. In the past five years, 3 doctoral graduates and 3 master's graduates have won the Liaoning Province Excellent Dissertation Award, with 1 master's graduate nominated for the award. Currently, there are 152 doctoral students, 304 master's students, and 288 undergraduate students enrolled. The employment rate of the school's graduates has consistently remained above 95%, with the rate of further studies at home and abroad ranking among the top in similar programs at the university.

In the past five years, faculty members have undertaken more than 100 research projects funded by the National Social Science Fund and the National Natural Science Foundation, including five major projects of the National Social Science Fund; they have published over 400 papers in international and domestic academic journals such as the *Journal of Economic Behavior and Organization*, and *Journal of Comparative Economics*. Top Chinese Journals such as *Social Sciences in China* (*Zhongguo Shehui Kexue*), *Economic Research Journal* (*Jingji Yanjiu*), and *Management World* (*Guanli Shijie).* The school has won more than 50 national, provincial, and municipal scientific research awards, including the Ministry of Education's Higher Education Scientific Research Outstanding Achievement Award and the Liaoning Province Philosophy and Social Sciences Achievement Award.

The school places great importance on academic exchanges with universities at home and abroad, establishing close academic cooperation relationships with renowned universities in the United States, Canada, the United Kingdom, Australia, and other countries. The school regularly hosts high-level international and national academic conferences, including the International Symposium of Econometric Analysis and Forecasting (ISEAF), the National Doctoral Candidate Forum on Quantitative Economics, and the China Econometricians Forum, creating a robust academic atmosphere.

Paula and Gregory Chow Institute for Studies in Economics, Xiamen University

厦门大学邹至庄经济研究院
PAULA AND GREGORY CHOW INSTITUTE FOR STUDIES IN ECONOMICS, XIAMEN UNIVERSITY

The Paula and Gregory Chow Institute for Studies in Economics is one of China's leading centers for research, policy evaluation, and academic training, dedicated to excellence in producing original research, training academic candidates, and facilitating strong policy dialogue. Initially established as the Chow Center in 2016, under the auspices of Professor Gregory Chow from Princeton, the Institute became an independent institution in May 2022.

The Chow Institute houses three research centers: the NSFC Basic Science Center for Econometric Modelling and Economic Policy Studies, the Key Laboratory of Econometrics of the Ministry of Education (Xiamen University), and the Center for Macroeconomic Research of Xiamen University.

The NSFC Basic Science Center for Econometric Modelling and Economic Policy Studies is the first national basic science center in the Management Science Division of NSFC and Fujian Province. It combines the research strengths of Xiamen University and the Chinese Academy of Sciences in the fields of econometrics, statistics and data science, forecasting science, policy studies, quantitative finance, international economics, environmental economics, and climate change economics. The Basic Science Center actively promotes interdisciplinary exploration, striving to deliver cutting-edge research, and is positioned to be an academic highland for econometric modeling and economic forecasting with international influence.

The Key Laboratory of Econometrics of the Ministry of Education (Xiamen University) was founded in 2009 and is among the first key laboratories of the Ministry of Education. As China's first key laboratory in economics, the Key Lab promotes econometrics education, research, and international academic exchanges in Xiamen University and China.

The Center for Macroeconomic Research of Xiamen University was established in September 2001, with a specific research agenda focusing on policy relevance. It has become a key research center for humanities and social sciences of China's Ministry of Education and is one of the most important components of the National Philosophy and Social Science Innovation Base, engaging in China's macroeconomic analysis and forecasting research.

Committed to scientific values and objectives, Chow Institute is rooted in China yet truly international. We adhere to rigorous scientific exploration, innovation in economic research methodology, and interdisciplinary complementarities, striving to provide evidence-based policy insights meeting national demand in growth, development, and social governance. We are committed to developing well-trained academic talents with a strong theoretical foundation, proficient skills in applying cutting-edge econometrics methods, and a deep understanding of China's economic system. The Chow Institute aims to be the most active exchange center of academic frontier, a think tank of quality policy research, and a talent training center in the Asia-Pacific region.

Center for Forecasting Science, Academy of Mathematics and Systems Science, Chinese Academy of Sciences

中国科学院数学与系统科学研究院
预测科学研究中心
The Centre for Forecasting Science

The Center for Forecasting Science of the Chinese Academy of Sciences (hereinafter referred to as "the center") was established in February 2006, under the direct promotion and personal guidance of Lu Yongxiang, vice chairman of the National People's Congress and president of the Chinese Academy of Sciences. The research team is composed of elite members from various institutes including the Institute of Mathematics and System Science, the Institute of Geographic Sciences and Resources, the Institute of Science and Technology Policy and Management Science, the Institute of Remote Sensing Application, the Graduate School, and the University of Science and Technology of China, and it relies on the Academy of Mathematics and Systems Science of the Chinese Academy of Sciences. The center is divided into four forecasting research departments: the Agricultural Products Forecasting Department, Strategic Resources Forecasting Department, Macroeconomic Forecasting Department, and International Market Forecasting Department.

Mission and Vision of the Center:

- As an important forecasting research center in the field of China's economic and social development, it provides a scientific basis and important suggestions for the central government to make major decisions.
- In view of the major decision-making problems and basic scientific problems in economic and social development, we carry out innovative research on prediction theory, methods and technology to promote the research and development of prediction science.
- Through graduate programs and short-term training, we cultivate outstanding talents in the field of economic forecasting and social emergency management for China and the international community.

Goals:

- We are striving to forge the research center to one of the most influential forecasting research centers in the field of China's economic and social development.
- One of the most influential scientific research centers in the field of prediction theory and methods.
- An international training base for senior professionals in the field of economic and social forecasting.

The center has strategically tackled key problems in major scientific research tasks, leveraging the diverse strengths of various related branches. This approach has enabled the center to continuously enhance its academic level and capability, expand its research field, and explore new research directions. As a result, the center has achieved significant theoretical research breakthroughs in the fields of prediction science, economic analysis, management science, and policy science, providing valuable support for high-level decision-making of the central government. Its research has garnered praise from national leaders, government decision-making departments, international academic circles, and the economic and financial sectors, cementing its influential role in the field.

School of Economics and Management, University of Chinese Academy of Sciences

The School of Economics and Management, previously known as the Management department, was founded in 1986 and became the first school established at GUCAS (which later changed its name to UCAS in 2012) in 2001. The school's inaugural dean was the renowned economist Siwei Cheng, followed by Professor Shouyang Wang as the second dean. Currently, Professor Yongmiao Hong serves as the school's dean.

The school has always aimed to be a top-tier research-oriented institution with significant global impact. Through years of dedicated effort, it has emerged as a national leader in several research fields. One of its key strengths is interdisciplinary education, which benefits from the integration of schools and institutes in CAS's system, facilitating the fusion of scientific research and teaching. The school is committed to developing a deep understanding of China's economic development both theoretically and practically, and expanding its teaching and research fields based on its unique features.

Invited Lecturers *In Order of Lectures*

Prof. Yongmiao Hong, Chinese Academy of Sciences and University of Chinese Academy of Sciences

Prof. Yongmiao Hong is currently a Kwan Chao-Chih Chief Research Fellow at Academy of Mathematics and Systems Science, Chinese Academy of Sciences, and the Dean of School of Economics and Management, University of Chinese Academy of Sciences. He is a Fellow of the World Academy of Sciences, a Fellow of the Econometric Society, a Vice Chairperson of Steering Committee for Economics Teaching in Higher Education under Chinese Ministry of Education, and the Project Manager of the NSFC Basic Science Center on Econometric Modeling and Economic Policy Studies. Professor Hong was the Ernest S. Liu Professor of Economics and International Studies at Cornell University from 2010 to 2020, and the President of Chinese Economists Society in North America from 2009 to 2010.

Professor Hong's research interests include econometric theory, time series econometrics, financial econometrics, statistics and Chinese economy. He has published referred papers in mainstream economic, financial and statistical journals such as *Annals of Statistics*, *Biometrika*, *Econometric Theory*, *Econometrica*, *International Economic Review*, *Journal of American Statistical Association*, *Journal of Business and Economic Statistics*, *Journal of Econometrics*, *Journal of Political Economy*, *Journal of Royal Statistical Society (Series B)*, *Quarterly Journal of Economics*, and *Management Science*, *Review of Economic Studies*, *Review of Economics and Statistics*, *Review of Financial Studies*. His most recent book is *Foundations of Modern Econometrics: A Unified Approach*. He has been listed among Most Cited Chinese Researchers in Economics/Statistics by Elsevier for 10 consecutive years from 2014 to 2023, and was awarded the first prize in the 2022 National Teaching Award for Higher Education (Undergraduate).

Homepage: https://teacher.ucas.ac.cn/~ymhong?language=en

Prof. Jian Huang, The Hong Kong Polytechnic University

Prof. Jian Huang is Chair Professor of Data Science and Analytics in the Department of Applied Mathematics at the Hong Kong Polytechnic University. He obtained his Ph.D. degree in Statistics from the University of Washington in Seattle. His recent research interests include deep generative models and inference, statistical inference in deep learning, representation learning, and statistical analysis leveraging pretrained large models. He has published widely in the fields of Statistics, Biostatistics, Machine Learning, Bioinformatics and Econometrics. He was designated a highly cited researcher in the field of Mathematics from 2015 to 2019 by Clarivate and included in the list of top 2% of the world's most cited scientists by Elsevier and Stanford University (2022, 2023). Professor Huang is a fellow of the American Statistical Association and a fellow of the Institute of Mathematical Statistics.

Homepage: https://www.polyu.edu.hk/ama/people/academic-staff/prof-huang-jian/

Prof. Yichong Zhang, Singapore Management University

Prof. Yichong Zhang is an Associate Professor of Economics at School of Economics (SOE), Singapore Management University (SMU). His research focus is theoretical and applied econometrics. His research has appeared in leading journals in economics, statistics and machine learning, including *Annals of Statistics*, *Journal of Econometrics*, *Journal of Machine Learning Research*, *Journal of the American Statistical Association*, *Review of Economics and Statistics*, and *Quantitative Economics*, among others.

Homepage: https://faculty.smu.edu.sg/profile/yichong-zhang-1521

Prof. Shouyang Wang, Chinese Academy of Sciences and University of Chinese Academy of Sciences

Prof. Shouyang Wang is a Bairen Distinguished Professor at Academy of Mathematics and Systems Science of Chinese Academy of Sciences and the Xiamen International Bank Distinguished Professor at School of Economics and Management of University of Chinese Academy of Sciences. His research interest lies in Decision Analysis, Financial Management, Logistics and Supply Chain Management, Economic Analysis and Forecasting and Policy Analysis.

He has won the first prize of Scientific and Technological Progress Award (Natural Science Award) at the ministerial and provincial-level 9 times, the second prize 7 times, and third prize 4 time. He has won a lot of other prizes at home and abroad, such as Fudan Management Excellence Award and Jr. Scott Award, and so on.

He has published 45 monographs (including 22 monographs published in English by Springer and Taylor & Francis). He has published more than 480 papers in leading journals, in which more than 450 papers are indexed by SCI/SSCI with over 23500 citations by other SCI/SSCI papers.

Homepage: https://people.ucas.ac.cn/~sywang?language=en

Prof. Jun Yu, University of Macau

Prof. Jun Yu is currently UMDF Chair Professor of Finance and Economics and Dean of Faculty of Business Administration at the University of Macau. He received his Ph.D. in Economics from University of Western Ontario in 1998. His primary research interests are financial econometrics, econometric theory, and empirical asset pricing. He provides editorial service for *Journal of Econometrics* and *Econometric Theory*. He was awarded Fellow of *Journal of Econometrics* in 2011, Inaugural Fellow of Society of Financial Econometrics (SoFiE) in 2012, Certificate for Highly Cited Research of *Journal of Asian Economics* in 2016, etc. His work has appeared in *Journal of Econometrics*, *International Economic Review*, *Review of Financial Studies*, *Quantitative Economics*, *Econometric Theory*, *Journal of Business & Economic Statistics*, *Management Science* etc.

Homepage: https://fba.um.edu.mo/faculty/junyu/

Prof. Katsumi Shimotsu, University of Tokyo

Prof. Katsumi Shimotsu is a professor at University of Tokyo. He obtained his Ph.D. in Economics from Yale University in 2000. His research fields are Econometrics and Statistics and he has a focus on Finite mixture models, dynamic discrete choice models and long memory time series. His papers have been published in *Annals of Statistics*, *Journal of the American Statistical Association*, *Econometrica*, *Journal of Econometrics*, etc. He is a fellow of the Econometric Society.

Homepage: https://www.e.u-tokyo.ac.jp/fservice/faculty/shimotsu/shimotsu-e/shimotsu01-e.html

Prof. Yoon-Jae Whang, Seoul National University

Prof. Yoon-Jae Whang is a Distinguished Professor at the Department of Economics in Seoul National University. He holds B.A. and M.A. degrees in economics from Seoul National University and earned his Ph.D. in economics from Yale University in 1991. He has held previous positions at the University of Toronto, Ewha University, and Korea University. His main research interests are in econometric theory, financial econometrics and applied econometrics. His current research topics include nonparametric and semiparametric methods, inference on stochastic dominance and its applications, and econometric analysis of big data.

He is an elected fellow of the Econometric Society (since 2010) and the International Association for Applied Econometrics (since 2018), and a fellow of the *Journal of Econometrics* (since 2012). His research has been recognized via various awards including the SNU Creative Leading Researcher Fellowship, the Dasan Economics Prize, the Maekyung Economist Award, and the Chung-Ram Academic Award.

He was previously the President of the Korean Econometric Society, the President of the Korean Economic Association, the Director of the Institute of Economic Research in Seoul National University, the Editor of *Korean Economic Review*, and an Associate Editor of *Journal of Econometrics*. He is presently the Director of the Center for Econometrics in Seoul National University, a Co-Editor of *Econometric Theory*, and an Associate Editor of *Econometric Reviews*.

Homepage: https://econ.snu.ac.kr/people/faculty?mode=view&profidx=30

Prof. Degui Li, University of Macau

Prof. Degui Li is Distinguished Professor of Business Economics at the Faculty of Business Administration, University of Macau. Prior to that, he worked as a professor at the Department of Mathematics, University of York. His main research areas include Functional Data Analysis, High-Dimensional Variable/Feature Selection, High-Frequency Financial Econometrics, Longitudinal Data Modeling, Network Modeling, Nonparametric and Semiparametric Statistics, Robust Statistics and Time Series Econometrics. His research works have been published in leading statistical and econometric journals such as *Annals of Statistics*, *Journal of the American Statistical Association*, *Journal of Econometrics*, *Journal of Business and Economic Statistics and Econometric Theory*. He has been supported by the Leverhulme Research Fellowship, British Academy/Leverhulme Small Grant, Australian Research Council Discovery Project and Discovery Early Career Researcher Award. He serves as the Associate Editor of *Econometric Theory*, *Journal of Time Series Analysis*, and *Econometrics and Statistics*.

Homepage: https://fba.um.edu.mo/faculty/deguili/

Program

Online Participants of Lectures

- **Tencent Meeting** (VooV Meeting for online overseas participants). Access is restricted to authorized/qualified participants. 仅限暑期学校学员参会。

  Tencent (VooV) Meeting ID (腾讯会议号): 625-1263-7159

- Participants whose phone numbers submitted are also the user ID of Tencent (VooV) Meeting can directly join the meeting.

  会议系统已录入学员信息，如您暑期学校预留手机号是腾讯会议账号，可直接入会。

- Participants, whose phone numbers submitted are not the user ID of Tencent (VooV) Meeting, shall register the meeting via the following link by 10:00 am, July 14. We'll approve your registration before the lecture begins.

  如您暑期学校预留手机号不是腾讯会议账号，请于 7 月 14 日上午 10 点前通过下方报名链接报名入会，工作人员将在课程开始前通过您的报名。报名一次可全程参会。

  Registration Link (报名链接): https://meeting.tencent.com/dm/UDQT5ATUG94S

Monday, July 15th, 2024

Lecture		
Venue: Room 707, Duxing Building, DUFE		
Time	**Events**	**Details**
08:30-08:45	**Opening Ceremony**	
08:45-10:00	**Lecture I**	*Adjusted-Range Based Self-Normalization Approach in Time Series Analysis I* **Prof. Yongmiao Hong,** Chinese Academy of Sciences and University of Chinese Academy of Sciences
10:00-10:30	**Coffee Break**	
10:30-11:45	**Lecture II**	*Adjusted-Range Based Self-Normalization Approach in Time Series Analysis II* **Prof. Yongmiao Hong,** Chinese Academy of Sciences and University of Chinese Academy of Sciences
11:45-14:00	**Lunch Break**	
14:00-15:15	**Lecture III**	*Time-Varying GMM with Applications to Asset Pricing I* **Prof. Yongmiao Hong,** Chinese Academy of Sciences and University of Chinese Academy of Sciences
15:15-15:45	**Coffee Break**	
15:45-17:00	**Lecture IV**	*Time-Varying GMM with Applications to Asset Pricing II* **Prof. Yongmiao Hong,** Chinese Academy of Sciences and University of Chinese Academy of Sciences
17:00-17:30	**Group Photo**	In front of Duxing Building

Tuesday, July 16th, 2024

Lecture		
Venue: Room 707, Duxing Building, DUFE		
Time	**Events**	**Details**
08:45-10:00	**Lecture I**	*Statistical Generative Learning Leveraging Pretrained Large Models I* **Prof. Jian Huang,** The Hong Kong Polytechnic University
10:00-10:30	**Coffee Break**	
10:30-11:45	**Lecture II**	*Statistical Generative Learning Leveraging Pretrained Large Models II* **Prof. Jian Huang,** The Hong Kong Polytechnic University
11:45-14:00	**Lunch Break**	
14:00-15:15	**Lecture III**	*Hypothesis Testing I* **Prof. Yichong Zhang,** Singapore Management University
15:15-15:45	**Coffee Break**	
15:45-17:00	**Lecture IV**	*Hypothesis Testing II* **Prof. Yichong Zhang,** Singapore Management University

Workshop		
Venue: Room 710, Duxing Building, DUFE		
Time	**Events**	**Details**
18:30-19:00	**Workshop** Session I: Econometrics 1	*On LASSO Inference for High Dimensional Predictive Regression* **Ziwei Mei,** The Chinese University of Hong Kong
19:00-19:30		*Distinguishing Functional Coefficient Models from Time-varying Parameter Models* **Xueqiang Sui,** Renmin University of China
19:30-20:00		*The DFT-Based Test for Structural Changes in Factor Models* **Yixuan Wang,** Renmin University of China
20:00-20:30		*Sparse portfolio optimization with transaction costs* **Xin Yuan,** Wuhan University
Workshop		
Venue: Room 703, Duxing Building, DUFE		
Time	**Events**	**Details**
18:30-19:00	**Workshop** Session II: Applied Microeconomics 1	*Examining the Effect of Green Finance on Green Economy in China* **Zixin Ling,** The Chinese University of Hong Kong
19:00-19:30		*Robot and skills: The Evidence from US* **Wen Zhang,** University of Chinese Academy of Sciences

Wednesday, July 17th, 2024

Lecture		
Venue: Room 707, Duxing Building, DUFE		
Time	**Events**	**Details**
08:45-10:00	**Lecture I**	*Hypothesis Testing III* **Prof. Yichong Zhang,** Singapore Management University
10:00-10:30	**Coffee Break**	
10:30-11:45	**Lecture II**	*Hypothesis Testing IV* **Prof. Yichong Zhang,** Singapore Management University
11:45-14:00	**Lunch Break**	
14:00-15:15	**Lecture III**	TBA **Prof. Shouyang Wang,** Chinese Academy of Sciences and University of Chinese Academy of Sciences
15:15-15:45	**Coffee Break**	
15:45-17:00	**Lecture IV**	TBA **Prof. Shouyang Wang,** Chinese Academy of Sciences and University of Chinese Academy of Sciences

Workshop		
Venue: Room 710, Duxing Building, DUFE		
Time	**Events**	**Details**
18:30-19:00	**Workshop** Session III: Econometrics 2	*Decoupling Systemic Risk into Endopathic and Exopathic Competing Risks Through Autoregressive Conditional Accelerated Fréchet Model* **Jingyu Ji,** Capital University of Economics and Business
19:00-19:30		*Stochastic Dominance with Factor* **Sehyeok Lee,** Seoul National University
19:30-20:00		*Overlapping Community Detection with Network* **Siao Xu,** University of Mannheim
20:00-20:30		*Score-Driven Time-Varying Parameter VAR Models* **Shiqi Ye,** Xiamen University
Workshop		
Venue: Room 703, Duxing Building, DUFE		
Time	**Events**	**Details**
18:30-19:00	**Workshop** Session IV: Applied Microeconomics 2	人力资本约束下城乡双战略的共同富裕效应 **Haixin Huang,** NorthWest University
19:00-19:30		中欧班列开通对企业进入和空间布局的影响效应研究 **Jiafeng Li,** Dongbei University of Finance and Economics
19:30-20:00		“双碳”目标下基于机器学习方法的资源型城市碳达峰路径研究 **Xiangyu Li,** Hubei University
20:00-20:30		RCEP 贸易福利效应的量化分析——基于非关税视角 **Xinyi Qi,** Peking University

Thursday, July 18th, 2024

Lecture		
Venue: Room 707, Duxing Building, DUFE		
Time	**Events**	**Details**
08:45-10:00	**Lecture I**	*Estimation, Inference, Prediction of Continuous-Time Fractional Processes I* **Prof. Jun Yu,** University of Macau
10:00-10:30	**Coffee Break**	
10:30-11:45	**Lecture II**	*Estimation, Inference, Prediction of Continuous-Time Fractional Processes II* **Prof. Jun Yu,** University of Macau
11:45-14:00	**Lunch Break**	
14:00-15:15	**Lecture III**	*Estimation, Inference, Prediction of Continuous-Time Fractional Processes III* **Prof. Jun Yu,** University of Macau
15:15-15:45	**Coffee Break**	
15:45-17:00	**Lecture IV**	*Estimation, Inference, Prediction of Continuous-Time Fractional Processes IV* **Prof. Jun Yu,** University of Macau

Workshop		
Venue: Room 710, Duxing Building, DUFE		
Time	**Events**	**Details**
18:30-19:00	**Workshop** Session V: Macroeconomics	*Thus Spoke FOMC: The FED and Sovereign CDS Spreads* **Mingyu Liu,** Dongbei University of Finance and Economics
19:00-19:30		*Measurement of income inequality of opportunity of rural residents in China-- Findings from machine learning* **Yuhui Sheng,** South China Agricultural University
19:30-20:00		卖空机制是影子银行的防火墙吗--基于商业信用二次配置的视角 **Bohan Su,** Southwestern University of Finance and Economics
20:00-20:30		*Downside risk Analysis of China's Macroeconomy from the Perspective of Financial situation* **Ruixia Wei,** Lanzhou University of Finance and Economics
20:30-21:00		*Green Investors and Crash Risk: Evidence from China* **Ruoxuan Yao,** Peking University
Workshop		
Venue: Room 704, Duxing Building, DUFE		
Time	**Events**	**Details**
18:30-19:00	**Workshop** Session VI: Applied Microeconomics 3	*Agricultural product certification for green development: A tripartite evolutionary game* **Yuheng Geng,** Guizhou University
19:00-19:30		制造业价值链升级：基于专精特新"小巨人"企业培育的视角 **Lijun Wang,** Capital University of Economics and Business
19:30-20:00		*Asymmetric Fertility Elasticities* **Chong Pang,** The University of Hong Kong

Friday, July 19th, 2024

Lecture		
Venue: Room 707, Duxing Building, DUFE		
Time	**Events**	**Details**
08:45-10:00	**Lecture I**	*Estimation and Identification of Dynamic Discrete Choice Models I* **Prof. Katsumi Shimotsu,** University of Tokyo
10:00-10:30	**Coffee Break**	
10:30-11:45	**Lecture II**	*Estimation and Identification of Dynamic Discrete Choice Models II* **Prof. Katsumi Shimotsu,** University of Tokyo
11:45-14:00	**Lunch Break**	
14:00-15:15	**Lecture III**	*Econometric Analysis of Stochastic Dominance: Theory and Applications I* **Prof. Yoon-Jae Whang,** Seoul National University
15:15-15:45	**Coffee Break**	
15:45-17:00	**Lecture IV**	*Econometric Analysis of Stochastic Dominance: Theory and Applications II* **Prof. Yoon-Jae Whang,** Seoul National University

Workshop		
Venue: Room 710, Duxing Building, DUFE		
Time	**Events**	**Details**
18:30-19:00	**Workshop** Session VII: Applied Microeconomics 4	人口老龄化何以影响城市基本公共服务支出规模与结构？——基于政府行为逻辑视角的实证检验 **Qiqing Ma,** Qingdao University of Science and Technology
19:00-19:30		*Carbon Emissions and the Supply of Green Technologies: Evidence from Technology-related Job Postings* **Mengjie Shi,** Goethe University Frankfurt
19:30-20:00		*The impact of out-of-pocket medical expenditure risk on household risky asset holdings* **Sidong Sun,** University of Chinese Academy of Social Sciences
20:00-20:30		*Education, Marriage and Social Mobility: The Influence of "Educational Assortative Mating"* **Hairuo Yu,** Zhongnan University of Economics and Law

Saturday, July 20th, 2024

Lecture		
Venue: Room 707, Duxing Building, DUFE		
Time	**Events**	**Details**
08:45-10:00	**Lecture I**	*Semiparametric Estimation and Forecasting of High-Dimensional Dynamic Time Series I* **Prof. Degui Li,** University of Macau
10:00-10:30	**Coffee Break**	
10:30-11:45	**Lecture II**	*Semiparametric Estimation and Forecasting of High-Dimensional Dynamic Time Series II* **Prof. Degui Li,** University of Macau
11:45-14:00	**Lunch Break**	
14:00-15:15	**Lecture III**	*High-Dimensional Functional Time Series I* **Prof. Degui Li,** University of Macau
15:15-15:45	**Coffee Break**	
15:45-17:00	**Lecture IV**	*High-Dimensional Functional Time Series II* **Prof. Degui Li,** University of Macau
17:00-17:30	**Closing Ceremony**	

Sunday, July 21st, 2024

Seminar	
Venue: Room 710, Duxing Building, DUFE	
Time	**Events**
09:30-11:00	**Seminar on Paper Publication (TBA)**

List of Abstracts *In Order of Lectures*

Monday, July 15th, 2024 / Lecture I & II

Prof. Yongmiao Hong

"Adjusted-Range Based Self-Normalization Approach in Time Series Analysis"

The existing self-normalization approach in time series analysis uses the variance of a partial sum as a self-normalizer, see Shao (2010). This method is known to be sensitive to irregularities such as persistent autocorrelation, heteroskedasticity, unit roots, and outliers. We introduce a novel self-normalization approach based on the adjusted-range of a partial sum, which is robust to these aforementioned irregularities.

First, we develop an adjusted-range-based Kolmogorov-Smirnov (KS) type test for structural breaks in both univariate and multivariate time series. Additionally, we consider testing parameter constancy in a time series regression setting. Our approach can rectify the well-known power decrease issue associated with existing self-normalized KS tests without requiring backward and forward summations as in Shao and Zhang (2010). It can also alleviate the "better size but less power" phenomenon observed when existing SN approaches (Shao, 2010; Zhang et al., 2011) re used. Moreover, our proposed tests can cater to more general alternatives. Monte Carlo simulations and empirical studies demonstrate the merits of our approach.

Second, we introduce a novel approach to confidence interval construction for time series analysis using the adjusted-range-based self-normalization proposed by Hong et al. (2024). Similar to Shao's (2010) approach, the adjusted-range-based self-normalizer is an inconsistent long-run variance (covariance) estimator, but it is stochastically proportional to the actual long-run variance (covariance) and yields pivotal statistics. This circumvents the need for parameter specifications, such as bandwidth, kernel, or block size in the block bootstrap. We cover the construction of confidence intervals for a class of statistical quantities known as approximately linear statistics, which includes mean, variance, and quantiles, among others. We also consider the construction of confidence intervals for estimated coefficients in general regression models, incorporating M-estimators, maximum likelihood (ML) estimators, and least-squares (LS) estimators. Through extensive simulation studies, we demonstrate the effectiveness of the adjusted-range-based self-normalization approach. In particular, it generates much narrower confidence intervals and provides good coverage compared to Shao's (2010) self-normalization approach when constructing confidence intervals for estimated coefficients.

Monday, July 15th, 2024 / Lecture III & IV

Prof. Yongmiao Hong

“Time-Varying GMM with Applications to Asset Pricing”

Part one: We propose a regularized generalized method of moments (RegGMM) approach to estimating time-varying coefficient models via a ridge fusion penalty with a high-dimensional set of moment conditions. RegGMM only requires a mild condition on the oscillations between consecutive parameter values, accommodating abrupt structural breaks and smooth changes throughout the sample period. RegGMM offers an alternative solution for estimating the time-varying stochastic discount factor model when pricing U.S. equity cross-sectional returns. Our time-varying estimate paths for factor risk prices capture changing performance across multiple risk factors and depict potential regime-switching scenarios. Finally, RegGMM demonstrates superior asset pricing and investment performance gains compared to alternative methods.

Part two: We propose a new approach for estimating a time-varying coefficient model under the GMM framework. Our sparse fused GMM (SFGMM) method provides simultaneous specification and estimation for time-varying parameters, heterogeneous structural breaks, and time-varying sparsity of a potentially high dimension of covariates. We derive large sample properties for our estimator with and without prior knowledge of structural changes and test the conditional stochastic discount factor (SDF) model. Our method addresses the “factor zoo” challenge by providing a new perspective for time-varying factor selection. We estimate the conditional SDF for U.S. equity factors from 1972 to 2021. On the one hand, our asymptotic theory on the time-varying specified model suggests rejecting the fixed model hypothesis, indicating the significant factors and their identities change over time. On the other hand, the SFGMM strategy achieves the best risk-adjusted investment performance in the past four decades for out-of-sample performance comparison.

Tuesday, July 16th, 2024 / Lecture I & II

Prof. Jian Huang

“Statistical Generative Learning Leveraging Pretrained Large Models”

This short course focuses on statistical generative learning leveraging pretrained large models. The first part of the course will introduce the basics of two generative learning approaches: generative adversarial networks and diffusion models. The second part of the course will use two examples to illustrate generative modeling with the help of a pretrained large model. The first example considers protein data generation based on data representations learned through a large model trained with a big protein sequence database. The second example demonstrates a Bayesian fine-tuning approach for image generation leveraging a large pretrained diffusion model. In addition, applications of generative modeling to time series data will be briefly discussed.

Tuesday, July 16th, 2024 / Lecture III & IV

Wednesday, July 17th, 2024 / Lecture I & II

Prof. Yichong Zhang

“Hypothesis Testing”

In the two lectures, we will first review some basic concepts in finite sample hypothesis testing, such as sufficient statistics, uniformly most powerful tests, unbiasedness, and invariant tests. Then, we will apply these concepts to limit experiments derived under various large sample theories and investigate the 'optimal' inference with (1) weakly dependent data, (2) weakly identified models, (3) many weak IVs, and (4) high-frequency data.

Wednesday, July 17th, 2024 / Lecture III & IV

Prof. Shouyang Wang

TBA

Thursday, July 18th, 2024 / Lecture I, II, III & IV

Prof. Jun Yu

“Estimation, Inference, Prediction of Continuous-Time Fractional Processes”

This lecture reviews the literature on continuous-time fractional processes based on the fractional Brownian motion. The properties of the processes will be discussed. Alternative estimation methods and their asymptotic theory will be reviewed and compared. Optimal prediction will be introduced. Applications to financial variables, such as realized volatility and trading volume, will be conducted.

Friday, July 19th, 2024 / Lecture I & II

Prof. Katsumi Shimotsu

“Estimation and Identification of Dynamic Discrete Choice Models”

We review recent developments in the estimation and identification of dynamic discrete choice models.

Friday, July 19th, 2024 / Lecture III & IV

Prof. Yoon-Jae Whang

“Econometric Analysis of Stochastic Dominance: Theory and Applications”

Stochastic dominance is an ordering rule of distribution functions widely utilized across economics, finance, insurance, medicine, and statistics. This rule is grounded in the expected utility paradigm and provides a consistent ranking of prospects without relying on specific utility (or social welfare) functions. Additionally, it does not require restrictive parametric assumptions regarding the distributions of the prospects.

Since McFadden's pioneering work in 1989, a substantial body of literature has emerged on nonparametric inference concerning stochastic dominance and related concepts. The stochastic dominance relation corresponds to inequality restrictions among nonparametric distribution functions, making its statistical inference complex. Furthermore, the original concept of stochastic dominance has numerous generalizations across various contexts, each necessitating distinct inference procedures.

This lecture aims to introduce the literature on stochastic dominance, emphasizing recent developments. We will review some of the existing tests of stochastic dominance in the literature and demonstrate how to enhance their power performance by leveraging information about the binding part of the inequality restrictions. Additionally, we will explore methods for testing stochastic dominance in the presence of covariates and compare different approaches to testing conditional stochastic dominance. Finally, we will present inference procedures for various recent extensions of stochastic dominance.

Saturday, July 20th, 2024 / Lecture I & II

Prof. Degui Li

“Semiparametric Estimation and Forecasting of High-Dimensional Dynamic Time Series”

In this talk, we introduce a flexible and easy-to-implement semiparametric approach to estimate and forecast high-dimensional time series data. This is conducted by a novel technique of Model Averaging MArginal Regression (MAMAR) with the weights chosen through a two-stage semiparametric method. Both the large-sample theory and practical application of the proposed estimation and forecasting method are given in the talk. We further study a challenging case where the number of time series variables may exceed the time series length, and combine the developed MAMAR method with the shrinkage and factor modelling approaches to achieve dimension reduction and then construct feasible estimation and prediction. Finally, we discuss the application of the MAMAR approach in estimating large dynamic covariance matrices.

Saturday, July 20th, 2024 / Lecture III & IV

Prof. Degui Li

“High-Dimensional Functional Time Series”

We provide a selective review of recent advances in high-dimensional functional time series. Both the number of functional processes and time series length are allowed to diverge to infinity. The following three topics are covered: high-dimensional functional factor models, high-dimensional functional covariance matrix estimation, and high-dimensional nonstationary functional time series models.

Guide

Venue

Online Participants of Lectures

- **Tencent Meeting** (VooV Meeting for online overseas participants). Access is restrict to authorized/qualified participants. 仅限暑期学校学员参会。
  Tencent (VooV) Meeting ID (腾讯会议号): 625-1263-7159

- Participants whose phone numbers submitted are also the user ID of Tencent (VooV) Meeting can directly join the meeting.
  会议系统已录入学员信息，如您暑期学校预留手机号是腾讯会议账号，可直接入会。

- Participants, whose phone numbers submitted are not the user ID of Tencent (VooV) Meeting, shall register the meeting via the following link by 10:00 am, July 14. We'll approve your registration before the lecture begins.
  如您暑期学校预留手机号不是腾讯会议账号，请于 7 月 14 日上午 10 点前通过下方报名链接报名入会，工作人员将在课程开始前通过您的报名。报名一次可全程参会。
  Registration Link (报名链接): https://meeting.tencent.com/dm/UDQT5ATUG94S

Offline Participants

Lecturers (Online and Offline): Room 707, Duxing Building (笃行楼), DUFE
Workshops (Offline): 7th Floor (See program for detailed information), Duxing Building (笃行楼), DUFE
Campus Entrance (Offline): Both Main Entrance (南门) and West Entrance (西门) are open.
There is a map on the next page for your reference.

Contact

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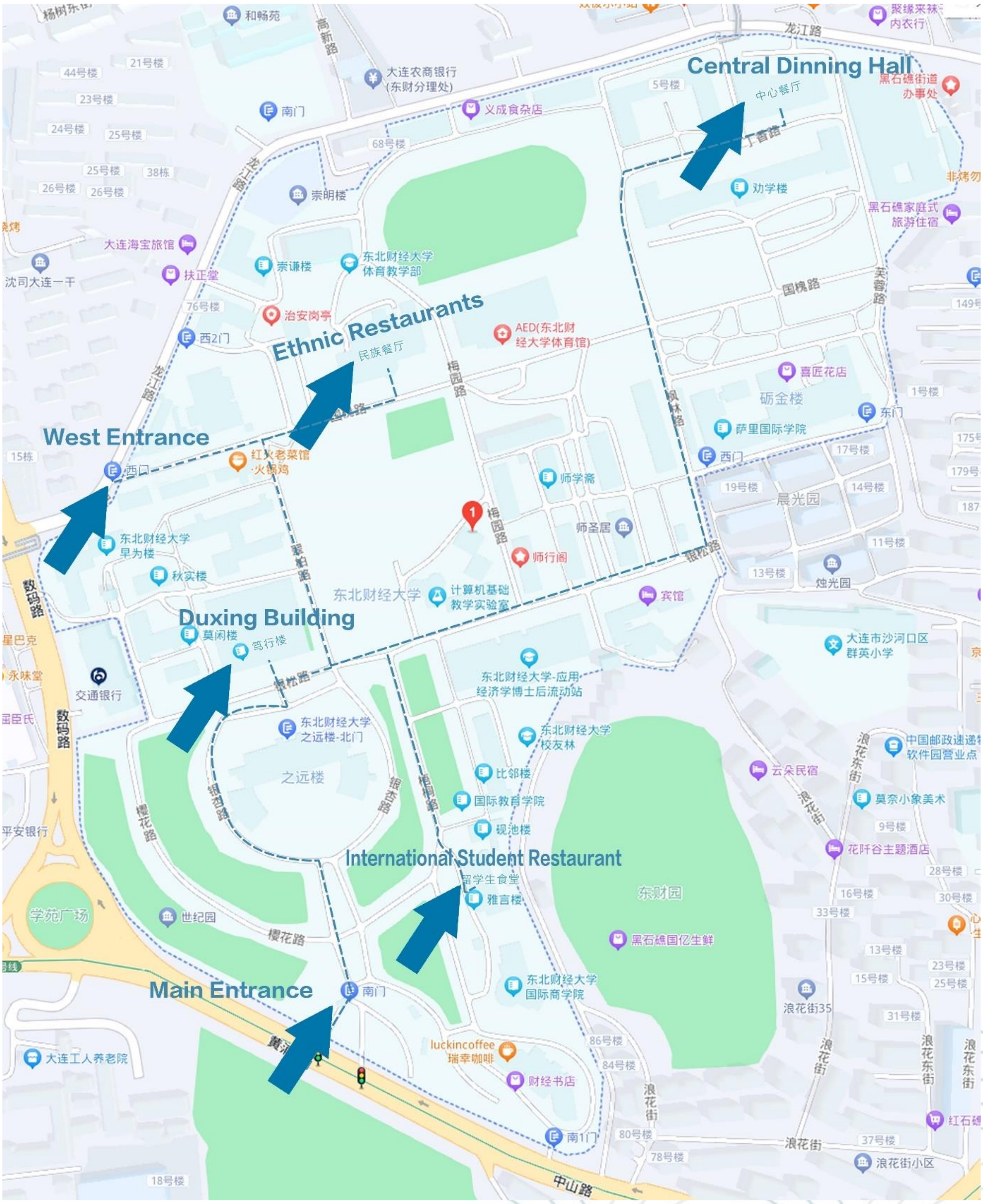
Map



Central Dinning Hall
Ethnic Restaurants
West Entrance
Duxing Building
International Student Restaurant
Main Entrance