



第2届全国统计与数据科学联合会议

THE 2nd JOINT CONFERENCE ON STATISTICS AND DATA SCIENCE IN CHINA

会议手册 Program

2024

7月12-14日 中国·昆明
July 12-14, 2024 Kunming·China



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Welcome

Joint Conference on Statistics and Data Science in China (JCSDS) is an international academic conference, jointly sponsored by the Chinese Association for Applied Statistics, the Statistics and Probability Association, the Chinese Association for Industrial Statistics Teaching, the Commerce Statistical Society of China and IMS China. The conference is assisted by the Institute of Mathematical Statistics and the Bernoulli Society for Mathematical Statistics and Probability.

The JCSDS aims to improve the academic communications among domestic and international scholars in statistics and data science, generate a culture of innovation, reinforce the Government-Application-Industry-University-Research collaboration, orient towards the strategic needs of the country and provide powerful statistics and data science support for building China's strength in science and technology. The conference will be regularly held in mid-July every year with a duration of 2-3 days.

The JCSDS 2024 will be held in Kunming, Yunnan Province from July 12 to 14, 2024 (July 11 registration), hosted by the School of Mathematics and Statistics, Yunnan University, Yunnan Key Laboratory of Statistical Modeling and Data Analysis, and the Institute of Yunnan Applied Statistics.

The conference covers a number of sessions, including plenary talks, invited talks, contributed talks and posters. There will be 2,000+ attendees. Enterprise booths, employer hiring, short courses and workshops are also included.

We cordially invite faculty, students and researchers in the fields of Statistics and Data Science in China and abroad to participate in the conference!

Conference Committees

Advisory Committee

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Co-Chairs:

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Niansheng Tang (Yunnan University)

List of Sponsors



雲南大學
YUNNAN UNIVERSITY

Yunnan University was founded in 1922, when it was Private Donglu University. In 1934, it was renamed as Provincial Yunnan University and in 1938 renamed as National Yunnan University. It is one of the earliest comprehensive universities in Southwest China. In 1937, when Xiong Qinglai, the well-known mathematician and educationist, served as the president, a large number of renowned scholars were employed to teach at the university, which laid foundation for its development and profound academic tradition, leading to the first glorious era in the history of Yunnan University. In 1940s, Yunnan University developed into one of the famous large universities in China with international influence and offered courses in arts, law, science, engineering, agriculture and medical science. In 1946, Yunnan University was listed by Concise Encyclopedia Britannica as one of the 15 world's famous universities in China.

In 1950s, when Yunnan University was under the direct administration of the Ministry of Education, the national faculty restructuring was introduced. Some important featured departments, like aeronautics, civil engineering, law, and railway spun off from Yunnan University and merged into colleges like Beijing Aeronautical and Astronautical Institute, Sichuan University, Southwest University of Political Science and Law and Changsha Railway Institute. Departments like engineering, medical science and agriculture were also divested from the University and gradually developed into today's Kunming University of Science and Technology, Kunming Medical University, Yunnan Agricultural University and Southwest Forestry University, etc. In 1958, the administrative management of Yunnan University was delegated from the central Ministry of Higher Education to Yunnan province. In 1978, it was ranked by the State Council as one of the 88 national key universities. The university boasts a large number of first-class and important scientific research facilities and platforms – such as the Laboratory Animal Center, the Advanced Computing Center, the Electron Microscope Center and the 1.6-meter multi-channel photometric sky survey telescope. Yunnan University is one of the first demonstration universities appointed by the Ministry of Education to deepen innovation and entrepreneurship education reform.

Since the reform and opening-up, Yunnan University has made huge progress. In 1996, it was among the first universities to win the membership of "Project 211". In 2001, it was listed as one of the higher education institutions to be intensively supported in China's development of its western region. In 2004, it became a key university to benefit from focused support from the People's Government of Yunnan and the Ministry of Education. In 2006, all its 19 secondary indicators were A-graded and it was rated as an excellent college for undergraduate education by the MOE. In 2012, it became a participant of the Central-western Chinese Universities Capacity-building Project, and a participant in the Central-western Chinese Universities Comprehensive Capacity Promotion Project. In 2017, it

became one of the first 42 first-class universities in China. In 2018, it became one of the 14 universities in central and western China that were jointly supported by the Ministry of Education and local provincial governments.

In recent years, Yunnan University has integrated itself into the national strategy by serving the economic and social development of Yunnan. It has committed to "taking a foothold in the southwestern frontiers, serving the people of Yunnan, promoting academic strengths, and developing distinct features" and "extraordinary and frog-leaping development from a higher starting point".

Its innovative strategy to meet those goals is to emphasize talent recruitment in a highly-focused and cooperative joint development context that includes the Talent Cultivation Plan and the Action Plan of Yunnan University to Serve Yunnan Province. The "go-global" approach will allow the university to reach new academic heights and a stronger competitive position.

Yunnan University has now gathered a galaxy of talents in liberal arts, science, law, technology, economics, agriculture, medicine, business administration, and fine arts, and has developed into a modern university featuring ethnology, biology, resource development and environmental protection, borderland research, and Southeast Asia and South Asia research.

Yunnan University consists of 28 schools, 10 research institutes, one affiliated hospital and a graduate school. There are over 3,000 teaching and research personnel in professional and technical positions, among whom nearly 1,500 have doctorates. The university has nearly 17,000 full-time undergraduate students, nearly 12,000 master's degree students, over 1,500 PhD students and nearly 1,500 international students. It has 84 majors in undergraduate programs, and 12 state-level featured majors. A total of 22 of its primary disciplines are authorized to offer PhDs, 42 primary disciplines offer master's degrees, and 26 disciplines offer professional master's degrees. The university has developed into a comprehensive academic institution with a full range of disciplines and a concentration of top-flight talent -- with ethnology, ecology, biology, resource development and environmental protection, as well as studies on frontier issues and international issues in Southeast and South Asia, seen as constituting its distinctive competitive advantages and chief characteristics. It has four national bases for talent cultivation, four national experiment teaching model centers, three national training programs for excellent engineers, one national educational training center for excellent practical and inter-disciplinary legal professionals, four national innovation experiment areas for talent cultivation model as well as one national pilot software school. At YNU, there is one national international joint center, two national maker spaces, and one national college students' cultural quality education base. The university has one key laboratory that was built by the Ministry of Education and Yunnan province, and one philosophy and social science laboratory built by the Ministry of Education. In addition, there are 14 Ministry of Education research centers, observation stations and education bases.

Yunnan University has 12 academicians, nearly 80 national high-level talents, eight chief scientists in the National Key Basic Research and Development Program, four members on the Academic Degree Committee of the State Council and two national model teachers. Some 14 people from the university were selected to participate in the talent training cultivation programs of the Ministry of Education, while another six were named as the Publicity Department of the CPC Central Committee

ideological and cultural publicity young talent.

The university's faculty, programs, student body and commitments come together in the various projects it undertakes.

In recent years, it has independently presided 6 projects of the 973 Plan, the 863 Plan, and 65 major bidding projects of the National Social Science Foundation and MOE humanities and social science milestone projects.

These projects have had practical effect. The university's report on the China-Myanmar Oil and Gas Pipeline helped the project start. Its achievements in Research on Cross-border Ecological Safety and International Rivers provided decision-making reference for solving issues related to water resources and the ecological health of rivers that flow across borders. Its research achievements in several projects, such as Dealing with Arsenic Pollution in Yangzonghai Lake, Ecological Rehabilitation and Dealing with Polluted Rivers and Investigation of Non-Point Source Pollution in Dianchi Lake and Controlling Measures have made key contributions to dealing with pollution in plateau lakes. A series of research papers on YNU's scientific achievements – including "research on paleontology and the origin of life", "research on conservation and utilization of biodiversity resources" and "perennial rice technology" – have directly served to solve major practical problems and made important contributions to the national strategy and local economic and social development.

In addition to generating important practical effects, the projects have garnered many awards for the university. It has been awarded several national prizes, such as a first prize for National Natural Science Award, another first prize recognizing a National Higher Institutional Humanities and Social Sciences Outstanding Achievement and a second prize for National Science and Technology Progress, among others.

Pursuit of excellence underlies all of Yunnan University's academics. A total of 20 papers by its professors have been published in world's famous academic publications, like Nature and Science. It has also sponsored academic publications in arts and sciences like Yunnan University Journal and Ideological Front, one of 11 publications listed by the MOE in its Famous Publications Program.

Yunnan university has taken full advantage of its unique location near South and Southeast Asia and has actively integrated into the "Belt and Road" Initiative and worked to increase Chinese influence in South and Southeast Asia.

The University has carried out cooperation and exchanges with more than 100 international universities and institutions, including 29 first-class universities and international academic organizations such as the University of Cambridge, the European Southern Observatory and Yale University. It has also carried out joint training projects with 33 prestigious foreign universities such as the University of Tokyo and the University of Windsor.

International students at the university come from 70 different countries, including most South and Southeast Asian countries. As a result, the university was among the first batch of "Innovation and Practice Bases for Training High-level International Talent" of the Ministry of Education. The compound "language + major" talent training system was established by the university based on 10 non-

common languages and international Chinese.

The university boasts a complete regional and national research system and a new and distinct think tank system covering Southeast Asia, South Asia, West Asia, Africa and countries involved in the "Belt and Road" Initiative. As the permanent secretary-general unit, Yunnan University initiated the "South and Southeast Asian University Network", which covers more than 120 universities in 16 South and Southeast Asian countries.

The University, covering an area of 300 hectares, is divided into Chenggong Campus and Donglu Campus, with a public floor area of more than 1,330,000 square meters, asset value of more than 1.5 billion yuan (\$209.67 million) for teaching and scientific research instruments and equipment, and a collection of more than 4 million books in the library. The campus network is the main node of CERNET in Yunnan.

Looking into the future, Yunnan University will stick to its spirit of "wisdom from many, justice for all", highlighting rule of law, establishment by virtue, developing by relying on academic research and talents. It will continue to explore the formation of modern university system, enhance its academic strengths, improve its education quality, strengthen its research capacity and social services, promoting its cultural inheritance and innovation capability. It is now working hard to become a regional first-class university that is "best in China, and famous throughout the world".

List of Sponsors



云南大学数学与统计学院
School of Mathematics and Statistics, Yunnan University

The School of Mathematics and Statistics of Yunnan University was established in December 2005. Its predecessor, the Mathematics Department, was founded in 1934, and the Statistics Department was established in 1989. It is one of the most long-standing mathematics and statistics departments of Chinese universities. The Mathematics Teaching Department of Yunnan University was established in 2018. Many famous mathematicians, such as Qinglai Xiong, Lu He, Luogeng Hua, Xingshen Chen, Yanxuan He, Shikui Wang, and Yintai Zhuang, have taught at the Mathematics Department of Yunnan University. They have all made outstanding contributions to the construction and development of the mathematics discipline at Yunnan University.

Over the years, the school has developed into a comprehensive school that specializes in teaching, research and social services, with the support of the university, and with the joint efforts of all teachers and students. The school offers five full-time undergraduate programs, including Mathematics and Applied Mathematics, Information and Computing Science, Statistics, Data Science and Big Data Technology, and Mathematics Basic Science Program-National Base Program in Mathematics and Physics (Mathematics). The school has two doctoral degree programs in Mathematics and Statistics, two master's degree programs in Mathematics and Statistics, two postdoctoral research stations in Mathematics and Statistics, a master's degree program in Quantitative Economics, a professional master's degree program in Applied Statistics, and a master's degree program in Big Data Statistics. The school has established a complete talent training system of undergraduate, master, PhD and post-doctoral. Among them, Probability Theory and Mathematical Statistics, and Basic Mathematics are provincial key disciplines; Statistics is listed as a key construction discipline of "Double First-class University" in Yunnan University. Two disciplines, including "Statistics" and "Mathematics and Applied Mathematics" are selected into the first batch of the National First-Class Undergraduate Majors Construction Sites; Information and Computing Science is a provincial-level First-Class Undergraduate Majors Construction Sites. Mathematical Analysis (I) and Applied Regression Analysis are national-level excellent courses. The textbook of Applied Regression Analysis won the second prize of the National Excellent Textbook Award (College Education Category). The school won the first prize of the ninth Yunnan Provincial Higher Education Teaching Achievement Award in 2022.

Now the school has the "Applied Mathematics Center of Yunnan Province", the "Xu Zongben Academician Workstation", the "Yunnan Institution of Higher Learning Postgraduate Education and Innovation Joint Training Base", the "Central-Local Joint Construction Laboratory of University's Characteristic Advantage Discipline - Statistical Modeling and Data Integration Laboratory of Yunnan University", the "Yunnan Key Laboratory of Statistical Modeling and Data Analysis", the "Statistical and Information Technology Key Laboratory of Yunnan Provincial Colleges and Universities", the "Innovative Team of Research on Complex Data Statistics and Inference Methods of Yunnan University", the "Provincial Operation Research Innovation Team of Yunnan University (in incubation)", the

"Yunling High-Level Innovation and Entrepreneurship Team of Yunnan Province", the "Computational Theory and Application Innovative Research Team of Yunnan Provincial Colleges and Universities", and the "Professional Teaching Team of Information and Computation Science of Yunnan Provincial Colleges and Universities". The school has more than 40 off-campus professional internships and training bases.

Through the efforts of several generations, the School of Mathematics and Statistics has formed five research directions with obvious advantages and features, represented by modern analysis, algebra, differential equations, combinatorial optimization and algorithm theory, and mathematical statistics. Now we have a teaching team with reasonable title, age, academic qualifications, professional structure, and obvious advantage, and its core members are young and middle-aged teachers. There are currently 99 full-time faculty members in the school (93 teachers), including 20 professors, 43 associate professors or senior experimental instructors, and 30 lecturers or assistant researchers. Among them, there are 80 teachers with doctoral degrees, 2 part-time academicians, and 8 part-time professors. We have 1 distinguished professor awarded with the "Changjiang Scholars Award Program", 2 chair professors awarded with the "Changjiang Scholars Award Program", 1 winner of the "National Science Fund for Distinguished Young Scholars", 1 national distinguished professor, 1 teacher of the "Million and Ten Million Talent Projects", 1 national famous teacher, 1 teacher awarded with the National Science Fund for Excellent Young Scientists, 1 teacher awarded with the National Science Fund for Excellent Young Scientists (Overseas), 1 member of the Academic Leadership Group of the Mathematics Tianyuan Fund of the National Natural Science Foundation, 1 member of the Teaching Guidance Committee of the Statistics Department of the Ministry of Education, 1 teacher of the Ministry of Education's New Century Excellent Talents Support Program, 1 Institute of Mathematical Statistics Fellow, 1 recommended member of the International Statistical Institute, 1 "Board of Directors" of International Chinese Statistical Association, 2 winners of the Fok Ying-Tong Young Teacher Award, 1 person of the Yunnan Science and Technology Leaders, 2 persons of Yunnan Distinguished Youth Science Foundation, 3 persons of "provincial sudden" or "provincial stickers", 2 persons of Yunnan High-Level Imported Talents, 3 persons of Yunnan Hundred-Person Plan, 36 persons of Yunnan Provincial Xingdian Young Talents, 3 contacted experts of Yunnan Provincial Party Committee, 4 persons of Yunnan Young and Middle-Aged Academic and Technical Leaders, 2 reserve talents of Yunnan Young and Middle-Aged Academic and Technical Leaders, and 3 distinguished teachers of Yunnan Province. More than 10 people serve as chairman, vice chairman, executive director and other positions in national and provincial associations.

In the past five years, the school has achieved remarkable achievements in teaching and scientific research, with a number of significant teaching and research results that have great influence domestically and abroad, including 12 textbooks/monographs and nearly 800 teaching/research papers. The school has undertaken more than 60 national-level projects, including the National Science Fund for Distinguished Young Scholars, the key projects of National Natural Science Foundation, the general, youth and special projects of National Natural Science Foundation, and the National Social Science Fund; it has also undertaken more than 10 horizontal projects for Yunnan Provincial Statistics Bureau, Kunming Municipal Statistics Bureau, the Second Research Institute of China Railway, and so on. The school has won 1 first prize, 4 second prizes, and 3 third prizes on provincial-level scientific

research awards.

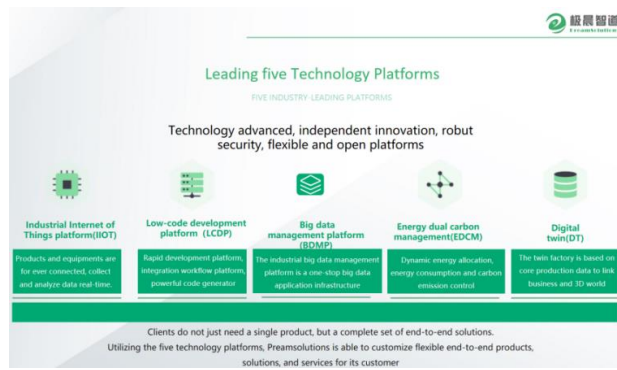
At present, there are 1037 undergraduates, 531 graduate students, and 51 doctoral students in the school. We have signed a joint doctoral training project with the University of Plymouth in the UK, and established substantive cooperation with high-level universities in the United States, the United Kingdom, Canada, Hong Kong, Taiwan of China, and other regions. Many graduate students participate in training or exchanging programs in relevant universities every year. Over the years, the graduation rate has always been above 99%, and more than 200 doctoral and master's students have been sent to Peking University and Nankai University, among other top universities. In recent years, students in our school have won numerous awards in national competitions, including the National Graduate Mathematical Modeling Competition, the National College Student Market Research and Analysis Competition, the National College Student Statistical Modeling Competition, the American College Student Mathematical Modeling Competition, the "Internet Plus" College Student Innovation and Entrepreneurship Competition, and the "Challenge Cup" National College Student Extracurricular Academic and Scientific Achievements Competition. The school has the Xiao Wencan Mathematics Education Fund, which awards a lecture professor with a prize of 200,000 RMB every two years, two excellent teachers with a prize of 50,000 RMB per person every year, and five students with a prize of 20,000 RMB per person every year. The Yunnan University Women's Festival and the series of activities of the Mathematics Culture Week have become the school's brand activities. The school has trained a large number of potential mathematics and statisticians for society, with some becoming well-known scholars, professors, or doctoral supervisors, as well as leaders or experts at all levels.

At the new historical starting point, teachers and students of the School of Mathematics and Statistics will continue to fulfill the motto of Yunnan University, "Self-Respect, Seeking Knowledge, Justice, and Action", strengthen talent training, and strive to build a teaching and research school with distinctive professional characteristics and significant domestic influence.

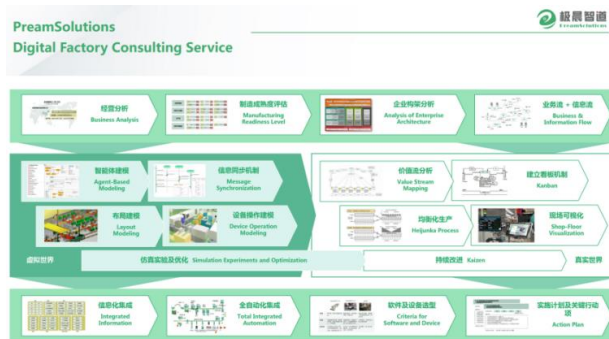
List of Sponsors



PreamSolutions was established in 2007. The headquarter of the company is located in the Zhongguancun Science and Technology Park in Beijing, China, PreamSolutions is a certified National High-Tech, National SRDI, and National software enterprise. With its rich industry experience, international vision and localization ability, the company is capable to build a complete information and digital service value chain.



The company's business involves intelligent manufacturing, digital intelligence transformation, carbon peaking and carbon neutrality, digital twin factory, IT consulting, system integration and implementation, application software design and development, process model optimization and other fields, to provide customers with a comprehensive end to end, one-stop total solution.



As the market leader in intelligence transformation and information services of petrochemical industry and lithium battery industry, PreamSolutions has developed hundreds of independent intellectual property rights and national patents.

PreamSolutions is your trusted partner in intelligent manufacturing, equipment management and industrial digital transformation solutions.

List of Exhibitors

Special Exhibitors (In Alphabetical Order by Pinyin)



云南云上云信息化有限公司
YUNNAN ON CLOUD INFORMATIZATION CO.,LTD

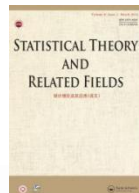


中国商业统计学会
COMMERCE STATISTICAL SOCIETY OF CHINA

Exhibitors (In Alphabetical Order by Pinyin)



*The above exhibitions are located at North Rest Area, July 12-14.



*The above exhibitions are located at South Rest Area, July 12-14.

Transportation

Conference Venue

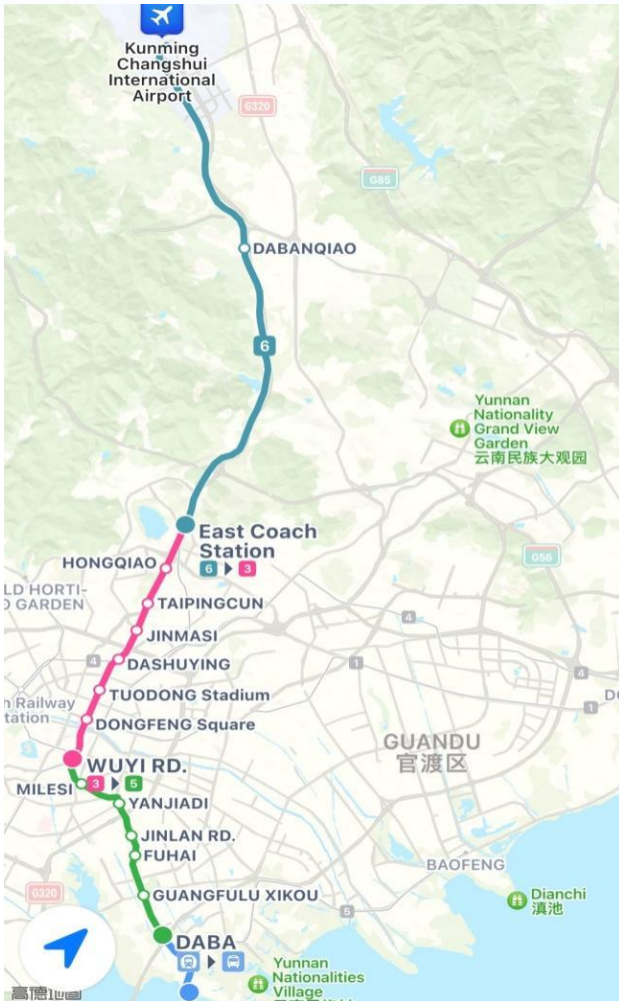
The 2nd Joint Conference on Statistics and Data Science in China will be held at **Haigeng Convention Center**. The address is No.6 Guanjiang Road, Dianchi National Tourism Resort, Kunming, Yunnan.

Pick up service

| Date | Time | Departing From | Destination |
|----------------------|------------------|---|---|
| July 11, Thursday | 10:00 - 23:00 | Kunming Changshui International Airport | Haigeng Hotel Dianchi Hotel WEISELECT WangHu Hotel |
| | | Kunming Railway Station | Xinhua International Holiday Hotel Howard Johnson LakeView Hotel Kunming Weapon Industry Kunming Sanatorium Century Dynasty Hotel |
| | | Kunming South Railway Station | Haiwei International Resort Hotel InterContinental Kunming Haigeng Convention Center |
| July 15, Monday | 8:00- 17:00 | Haigeng Hotel Dianchi Hotel WEISELECT WangHu Hotel | Kunming Changshui International Airport |
| | | Xinhua International Holiday Hotel Howard Johnson LakeView Hotel Kunming Weapon Industry Kunming Sanatorium Century Dynasty Hotel | Kunming Railway Station |
| | | Haiwei International Resort Hotel InterContinental Kunming | Kunming South Railway Station |

Transportation

Get From - Kunming Changshui International Airport



Public Transportation:

Walk to KUNMING CHANGSHUI International Airport Subway Station

Board the Line 6 train (To TANGZIXIANG)

Exit train at East Coach Station

Board the Line 3 train (Toward Western Hills Park)

Exit train at WUYI RD.

Board the Line 5 train (Toward BAOFENG)

Exit train at DABA.

Walk to Daba DiTieZhan (DianChi Lu) bus stop (200m, about 3 minutes)

Board the 171 or 183 bus

Get off at HaiGeng DaBa CheChang

Walk to Haigeng Convention Center (250m, about 4 minutes)

Taxi: About 110 RMB (+10 RMB road toll)

Transportation

Get From - Kunming South Railway Station



Public Transportation:

Walk to KUNMING South Railway Station Subway Station

Board the Line 1 train (Toward South Ring RD)

Exit train at RIXIN RD Station

Walk to YinYuan XiaoQu (RiXin Lu) bus stop (700m, about 10 minutes)

Board the 171 bus (Toward HaiGeng GongYuan)

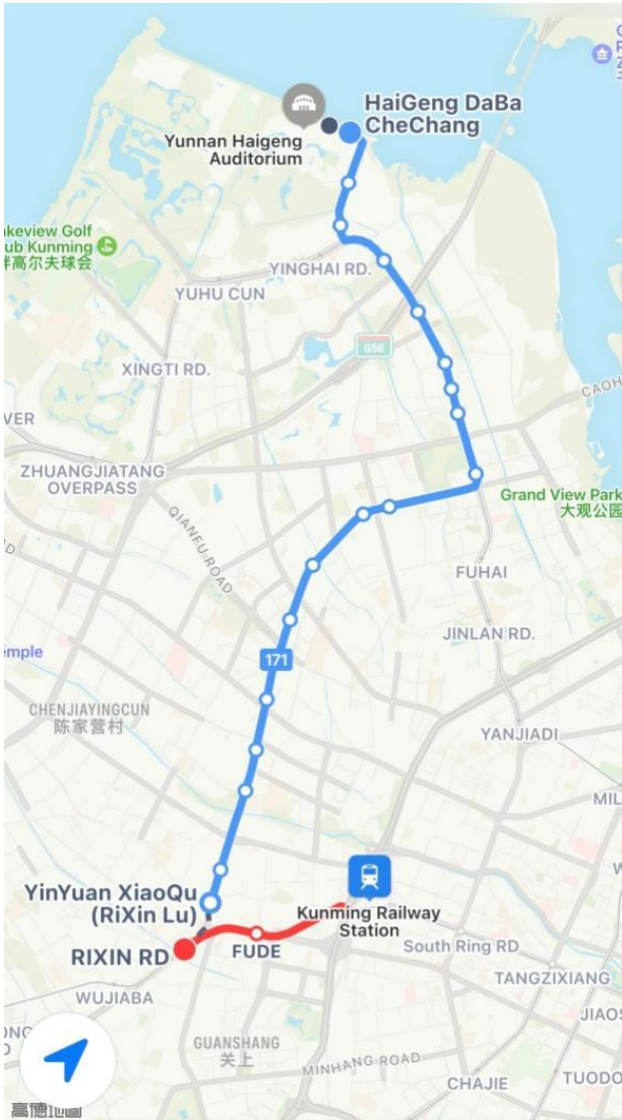
Get off at HaiGeng DaBa CheChang

Walk to Haigeng Convention Center (250m, about 4 minutes)

Taxi: About 85 RMB

Transportation

Get From - Kunming Railway Station



Public Transportation:

Walk to KUNMING Railway Station Subway Station

Board the Line 1 train (Toward University Town (South))

Exit train at RIXIN RD Station

Walk to YinYuan XiaoQu (RiXin Lu) bus stop (700m, about 10 minutes)

Board the 171 bus (Toward HaiGeng GongYuan)

Get off at HaiGeng DaBa CheChang

Walk to Haigeng Convention Center (250m, about 4 minutes)

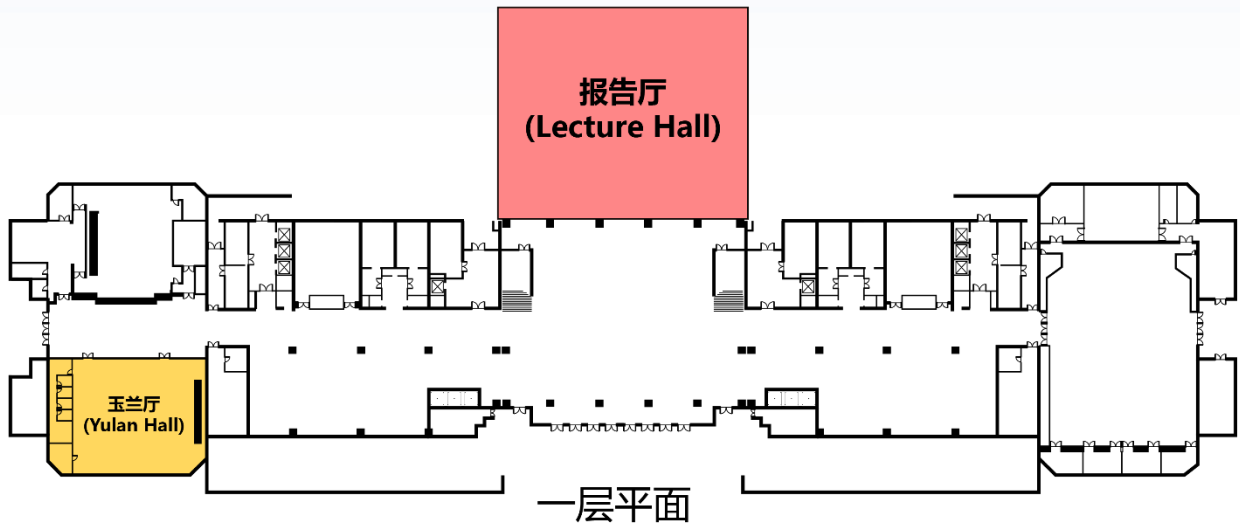
Taxi: About 25 RMB

Transportation

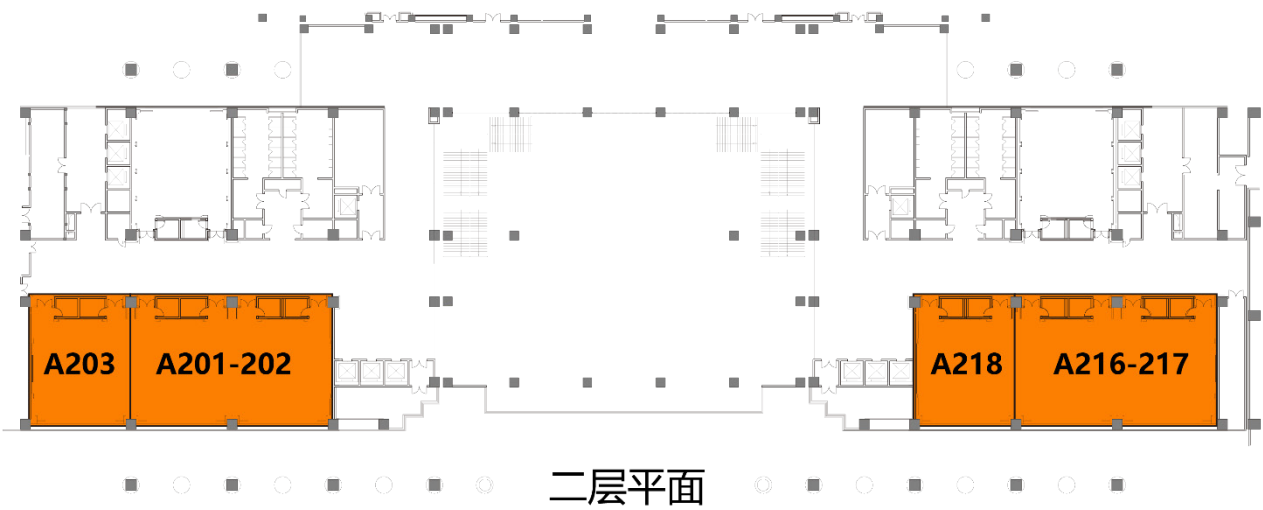
Shuttle Bus

| Date | Departure Time | Departing From | Destination |
|---------------------------------------|-----------------|--|--|
| July 12, Friday/ July 13, Saturday | 7:50 | Haigeng Hotel | Haigeng Convention Center |
| | | Haiwei International Resort Hotel | |
| | | Howard Johnson LakeView Hotel Kunming | |
| | | Weapon Industry Kunming Sanatorium Century Dynasty Hotel | |
| | 19:00/ 21:40 | Haigeng Convention Center | Haigeng Hotel |
| | | | Haiwei International Resort Hotel |
| | | | Howard Johnson LakeView Hotel Kunming |
| | | | Weapon Industry Kunming Sanatorium Century Dynasty Hotel |
| July 14, Sunday | 7:50 | Haigeng Hotel | Haigeng Convention Center |
| | | Haiwei International Resort Hotel | |
| | | Howard Johnson LakeView Hotel Kunming | |
| | | Weapon Industry Kunming Sanatorium Century Dynasty Hotel | |
| | 19:00 | Haigeng Convention Center | Haigeng Hotel |
| | | | Haiwei International Resort Hotel |
| | | | Howard Johnson LakeView Hotel Kunming |
| | | | Weapon Industry Kunming Sanatorium Century Dynasty Hotel |

Venue Map

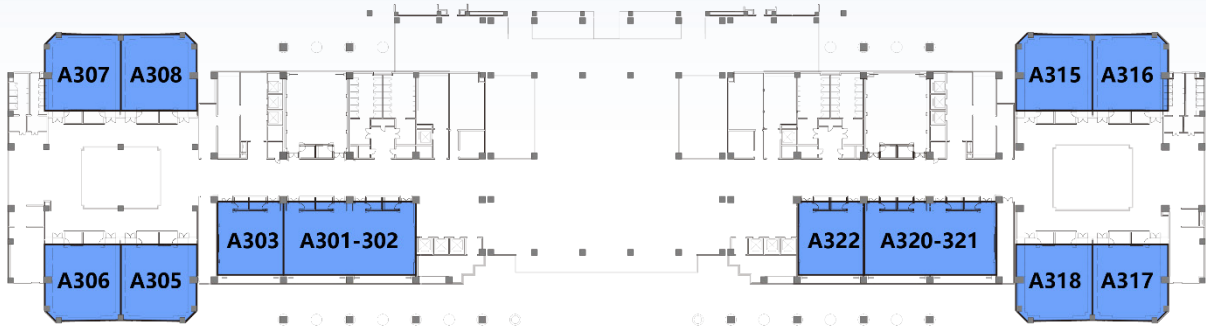


1st Floor



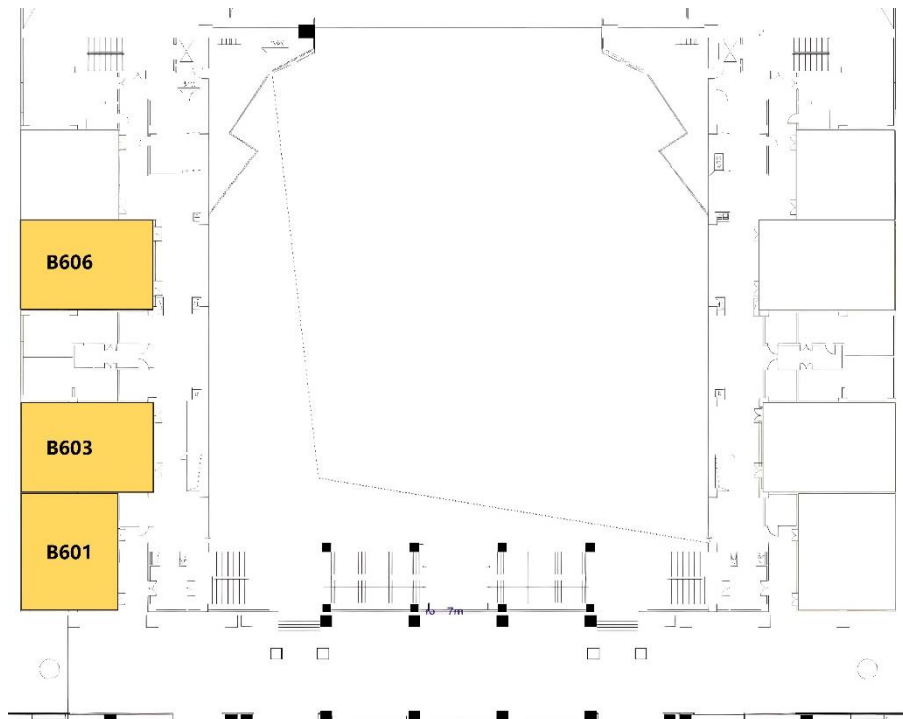
2nd Floor

Venue Map



三层平面

3rd Floor Area A



三楼夹层

3rd Floor Area B

Conference Registration

Haigeng Convention Center Registration

| Date | Time | Location |
|-------------------|-------------|-----------------------------------|
| July 11, Thursday | 11:00-21:00 | Grand Lobby 1 st Floor |
| July 12, Friday | 08:00-14:00 | Grand Lobby 1 st Floor |
| July 13, Saturday | 08:00-14:00 | Grand Lobby 1 st Floor |

Hotel Registration

| Date | Time | Hotel | Location |
|----------------------|-------------|---|--------------------------------------|
| July 11, Thursday | 11:00-21:00 | Haigeng Hotel | Grand Lobby 1 st Floor |
| | | WEISELECT WangHu Hotel | |
| | | Xinhua International Holiday Hotel | |
| | | Howard Johnson LakeView Hotel Kunming | |
| | | Dianchi Hotel | |
| | | Weapon Industry Kunming Sanatorium Century Dynasty Hotel | |
| | | Haiwei International Resort Hotel | |
| | | InterContinental Kunming | |

What You Need to Know

Dining

| Date | Meals | Time | Location |
|----------------------|--------|-------------|---|
| July 11, Thursday | Dinner | 18:00-20:00 | Haigeng Hotel |
| | | | WEISELECT WangHu Hotel |
| | | | Xinhua International Holiday Hotel |
| | | | Howard Johnson LakeView Hotel Kunming |
| | | | Dianchi Hotel |
| | | | Weapon Industry Kunming Sanatorium Century Dynasty Hotel |
| | | | Haiwei International Resort Hotel |
| | | | Haigeng Convention Center Caiyun Hall 3 rd Floor Roof Tea Room 4 th Floor |
| July 12, Friday | Lunch | 12:00-13:30 | Haigeng Convention Center Caiyun Hall 3 rd Floor Roof Tea Room 4 th Floor |
| | Dinner | 18:00-19:00 | |
| July 13, Saturday | Lunch | 11:40-13:10 | Haigeng Convention Center Caiyun Hall 3 rd Floor Roof Tea Room 4 th Floor |
| | Dinner | 18:00-19:00 | |
| July 14, Sunday | Lunch | 12:20-13:50 | Haigeng Convention Center Caiyun Hall 3 rd Floor Roof Tea Room 4 th Floor |
| | Dinner | 17:50-19:30 | |

Tea break

Tea, coffee and refreshments will be provided during the morning and afternoon tea breaks at the Grand Lobby 1st/2nd/3rd Floor within Haigeng Convention Center.

What You Need to Know

Name Badge

Conference participants will receive a name badge upon registration. This badge must be always worn to enter all meeting sessions and access conference services during the Conference.

Information Desk

| Date | Time | Location |
|-------------------|-------------|--|
| July 11, Thursday | 08:30-18:00 | Haigeng Convention Center Grand Lobby 1 st Floor |
| July 12, Friday | 08:30-18:00 | Haigeng Convention Center Grand Lobby 1 st Floor |
| July 13, Saturday | 08:30-18:00 | Haigeng Convention Center Grand Lobby 1 st Floor |
| July 14, Sunday | 08:30-18:00 | Haigeng Convention Center Grand Lobby 1 st Floor |

WiFi Access

WiFi Access with Chinese Mobile Phone Number

The participant can use free WiFi access by their mobile phones or laptops in Haigeng Convention Center, authentication via SMS in 10 seconds.

Step 1: Open WiFi Setup in your cell phone or laptop, and choose the network / SSID "YNHG-Hall" to connect.

Step 2: Open any webpage through any browser in your mobile phone or laptop to access Welcome page.

Step 3: Please choose Login via SMS.

Step 4: Please input your mobile phone number then click "Get Code". You will receive a Verification Code SMS in seconds. Then type in Verification Code and click the "log in" button to enjoy free WiFi.

WiFi Access without Chinese Phone Number

The free WiFi cannot be accessed without Chinese SMS authentication. But we provide volunteer assistance at the Information Desk. The volunteers will help you to have WiFi access.

What You Need to Know

Medical Service

We will provide medical service next to the 1st elevator in the Grand Lobby (1st Floor) at Haigeng Convention Center from 8:30 to 18:00 during the Conference everyday. If there is any medical emergency, we advice you to call 120 for ambulance directly.

Emergency Contacts

Ambulance 120

Police 110

Electricity

The voltage is 220V in China.

Weather

Kunming is located in the sub-tropical latitude, monsoon climate zone, with non-extreme and relatively comfortable weather throughout the year. The daily high temperatures are generally between 21°C (70°F) and 27°C (80°F) in July. It's the rainy season, and the difference in temperature between day and night is big. All participants are suggested to bring an umbrella or raincoat all day and wear a coat at night.

Series of Activities

01 Short Course of 2nd JCSDS & Yunnan Key Laboratory of Statistical Modeling and Data Analysis Summer School

Time: July 6-July 11

Place: Room 2115, Chemical Building, Chenggong Campus, Yunnan University

02 Bernoulli Young Researcher Reception

Time: July 12, 19:30-21:30

Place: Room A216-217 (2nd Floor), Haigeng Convention Center

03 Reception by Department of Statistics and Data Science, Tsinghua University

Time: July 12, 19:30-21:30

Place: Room A201-202 (2nd Floor), Haigeng Convention Center

04 Reception by Center for Statistical Science, Peking University

Time: July 13, 19:30-21:30

Place: Roof Tea Room (4th Floor), Haigeng Convention Center

05 School of Statistics, East China Normal University Reception Joint with Statistical Theory and Related Fields

Time: July 13, 19:30-21:30

Place: Roof Tea Room (4th Floor), Haigeng Convention Center

06 Reception by Sichuan-Chongqing Statistical Dialogue

Time: July 13, 19:30-21:30

Place: Roof Tea Room (4th Floor), Haigeng Convention Center

Keynote Lectures



Jianqing Fan, Princeton University

Jianqing Fan, is a statistician, financial econometrician, and data scientist. He is Frederick L. Moore' 18 Professor of Finance, Professor of Statistics, and Professor of Operations Research and Financial Engineering at the Princeton University, where he chaired the department from 2012 to 2015. He is the winner of The 2000 COPSS Presidents' Award, Morning-side Gold Medal for Applied Mathematics (2007), Guggenheim Fellow (2009), Pao-Lu Hsu Prize (2013), Guy Medal in Silver (2014), Noether Distinguished Scholar (2018), Le Cam Award and Lectures (2021). He got elected to Academician from Academia Sinica in 2012 and Royal Flemish Academy of Belgium in 2023.

Title: Neural Causal AI: Adversarial Invariance Learning from Heterogeneous Environments

Location and Time:

Lecture Hall, 1st Floor
July 12, Friday, 09:00-09:50

Chair: Fang Yao, Peking University

Abstract:

This talk develops nonparametric invariance and causal learning from multiple environments regression models in which data from heterogeneous experimental settings are collected. The joint distribution of the response variable and covariate may vary across different environments. Yet, the conditional expectation of outcome given the unknown set of important or quasi-causal variables is invariant across environments. Our idea of invariance and causal learning is to find a set of variables as exogenous as possible across multiple environments to minimize the empirical loss. To realize this idea, we proposed a Neural Adversarial Invariant Learning (NAIL) framework, in which the unknown regression is represented by a Relu network, and invariance across multiple environments is tested using adversarial neural networks. Leveraging the representation power of neural networks, we introduce neural causal networks based on a focus adversarial invariance regularization (FAIR) and its novel training algorithm. It is shown that FAIR-NN can find the invariant variables and quasi-causal variables and that the resulting procedure is adaptive to low-dimensional composition structures. The combinatorial optimization problem is implemented by a Gumbel approximation with decreased temperature and stochastic approximations. The procedures are convincingly demonstrated using simulated examples. (Joint work with Cong Fang, Yihong Gu, and Peter Bühlmann.)

Keynote Lectures



Kathryn Roeder, Carnegie Mellon University

Kathryn Roeder is the UPMC Professor of Statistics and Life Sciences in the Departments of Statistics & Data Science and Computational Biology. She earned her Ph.D. in statistics at Pennsylvania State University, after which she was on the faculty at Yale University for the six years before coming to Carnegie Mellon University in 1994. In 1997 she received the COPSS Presidents' Award for the outstanding statistician under age 40. In 2020 she was awarded the COPSS Distinguished Achievement Award and Lectureship. In 2019 she was inducted into the National Academy of Sciences. Her research group develops statistical tools applied to genetic and genomic data to understand the workings of the human brain, and the

interplay with genetic variation. These methods rely on various statistical and machine learning methods, causal inference, latent space embedding, sparse PCA and high dimensional nonparametric techniques.

Title: Genomic Testing in the Presence of Unmeasured Confounding and Missing Data

Location and Time:

Lecture Hall, 1st Floor

July 12, Friday, 09:50-10:40

Chair: Jing Lei, Carnegie Mellon University

Abstract:

When aiming to identify differential genomic outcomes such as gene expression or protein abundance, thousands of simultaneous hypothesis tests are routinely performed. These tests can be biased by the presence of unmeasured confounders and missing data. Recent advances in scRNA-Seq and CRISPR technologies have allowed for the study of case vs. control and the characterization of experimental perturbations at single-cell resolution, further exacerbating these challenges. We develop a large-scale hypothesis testing solution for multivariate generalized linear models in the presence of confounding effects. Next, realizing that a number of advantages can be accrued by taking a causal inference approach, we expand this solution by exploring doubly robust and proximal inference options as well.

As genomic studies progress from studying transcriptomic to proteomic readouts, new challenges have arisen, most notably large numbers of missing values. A common strategy to address this issue is to rely on an imputed dataset, which often introduces systematic bias into downstream analyses. By contrast, we develop a statistical framework inspired by doubly robust estimators that offers valid and efficient inference for proteomic data. Our framework relies on powerful machine learning tools, such as variational autoencoders, to augment the imputation quality with high-dimensional peptide data.

Keynote Lectures



Jianfeng Feng, Fudan University

Jianfeng Feng is the Chair Professor of Shanghai National Center for Mathematic Sciences, the Dean of Brain-Inspired AI Institute in Fudan University, and the Dean of the School of Data Science. He has made considerable contributions on developing brain-inspired AI algorithms and applying them to tackle challenges raised in neuroscience and mental health with many publications in Nature Medicine, Nature Human Behaviour, Nature Aging, Nature Mental Health etc. He led a team to implement for the first time in the world the digital twin brain which has 86B neurons and 100T parameters. He was awarded the 2023 Humboldt Research Award, the prestigious Royal Society Wolfson Research Merit Award, and

invited to deliver 2019 Paykel Lecture at the Cambridge University.

Title: Multi-Scale Spatial-Temporal Data in Brain Science: Data, Model and Theory

Location and Time:

Lecture Hall, 1st Floor

July 12, Friday, 11:00-11:50

Chair: Xueqin Wang, University of Science and Technology of China

Abstract:

In brain science, we have accumulated many huge datasets spanned from subcellular, cellular and tissue level data with multi-spatial structures and evolving with multi-temporal scales. How to first develop statistical approaches to tackle these structured and often noncontinuous data (point processes or point fields) is a challenging issue. We will first review some of the existing methods to analyze the data. Many novel applications are included to explain the challenging issues we are facing at the moment. We then introduce the digital twin approach to model the whole human brain with 86B neurons and 100T parameters being estimated. Finally using the first principle, a new type of neural network, the moment neuronal network approach, is covered to better approximate the biological neuron network and potentially lead to AGI. Our talk serves as a typical showcase of how we as an applied mathematician can contribute and help the development of a data rich area.

Keynote Lectures



Xihong Lin, Harvard University

Xihong Lin is Professor and former Chair of Biostatistics, and Coordinating Director of the Program in Quantitative Genomics at Harvard School of Public Health, and Professor of Statistics at Harvard University. Dr. Lin works on the development and application of statistical and machine learning methods for the analysis of big and complex genomic and health data, such as large scale whole genome sequencing (WGS) studies and multi-ethnic biobanks, Electronic Health Records, and whole genome variant functional annotations. The methods and tools her lab has developed have been widely used in analyzing large scale WGS and biobank data, including the NHLBI Trans-Omics Precision Medicine Program (TOPMed), the

UK Biobank, and the NIH All of Us Program. Dr. Lin was an elected member of the US National Academy of Sciences and the US National Academy of Medicine. She received the 2002 Mortimer Spiegelman Award from the American Public Health Association, the 2006 Presidents' Award from the Committee of Presidents of Statistical Societies (COPSS). She also received the 2017 COPSS FN David Award, the 2022 National Institute of Statistical Sciences Sacks Award for Outstanding Cross-Disciplinary Research, and the 2022 Zelen Leadership in Statistical Science Award, and the 2024 Founder Award of the Statistical Genomics and Genetics Section of the American Statistical Association. She is an elected fellow of American Statistical Association, Institute of Mathematical Statistics, and International Statistical Institute. Dr. Lin's statistical research has been supported by the MERIT Award (2007-2015) and the Outstanding Investigator Award (2015-2029) from the National Institute of Health. Dr. Lin is the former Chair of COPSS and the former Editor of several biostatistical journals. She has served on several US National Academies Committees.

Title: Build an End-to-End Scalable and Interpretable Data Science Ecosystem by Integrating Statistics, ML, and Domain Sciences

Location and Time:

Lecture Hall, 1st Floor

July 13, Saturday, 08:30-09:20

Chair: Ke Deng, Tsinghua University

Abstract:

The data science ecosystem encompasses data fairness, statistical, ML methods and tools, interpretable data analysis, and trustworthy decision-making. Rapid advancements in ML have revolutionized data utilization and enabled machines to learn from data more effectively. Statistics, as the science of learning from data while accounting for uncertainty, plays a pivotal role in addressing complex real-world problems and facilitating trustworthy decision-making. In this talk, I will discuss the challenges and opportunities involved in building an end-to-end scalable and interpretable data science ecosystem that integrates statistics, ML, and domain science. I will illustrate key points using the analysis of whole genome sequencing data and electronic health records by discussing a few scalable and interpretable statistical and ML methods, tools and data science resources. This talk aims to ignite proactive and thought-provoking discussions, foster collaboration, and cultivate open-minded approaches to advance scientific discovery.

Keynote Lectures



Alicia Carriquiry, Iowa State University

Alicia Carriquiry joined the faculty in Statistics at Iowa State in 1990. She is currently Distinguished Professor of Liberal Arts and Sciences and President's Chair in Statistics, and is Director of the Center for Statistics and Applications in Forensic Evidence (CSAFE), a NIST Center of Excellence. She is an elected member of the National Academy of Medicine and of the American Academy of Forensic Science, and is also a Fellow of the American Association for the Advancement of Science, the American Statistical Association, the Institute of Mathematical Statistics, the International Society for Bayesian Analysis and the International Statistical Institute. Carriquiry's research interests include Bayesian

methods, sampling, study design, and application of machine learning approaches in biological and forensic problems. She has worked extensively on problems in human nutrition and in the last several years has established an active research program in forensic statistics. She has published about 160 peer-reviewed articles and has mentored 22 doctoral students, about 40 MS students, six post-doctoral researchers, and many brilliant undergraduates.

Title: Statistics and Its Applications in Forensic Science and the Criminal Justice System

Location and Time:

Lecture Hall, 1st Floor
July 13, Saturday, 09:20-10:10

Chair: Yumou Qiu, Peking University

Abstract:

Statistical thinking should play a critical role in the civil and criminal justice systems in the United States, yet many forensic methods that are still admitted in US courts have no scientific or statistical justification.

Forensic applications present unique challenges for statisticians. For example, much of the data that arise in forensics are non-standard, so even defining analytical variables may require out-of-the-box thinking. As a result, the usual statistical approaches may not enable addressing many of the questions of interest to jurors, legal professionals and forensic practitioners.

Today's presentation introduces some of the statistical and algorithmic methods proposed by CSAFE [Center for Statistics and Applications in Forensic Evidence www.forensicstats.org] researchers that have the potential to impact forensic practice in the US. Two examples are used for illustration: the analysis of questioned handwritten documents and of marks imparted by firearms on bullets or cartridge cases. In both examples, the question we address is one of source: do two or more items have the same source? In the first case, we apply "traditional" statistical modeling methods, while in the second case, we resort to algorithmic approaches. Much of the research carried out in CSAFE is collaborative and while mission-driven, is also academically rigorous and novel.

Keynote Lectures



Huazhen Lin, Southwestern University of Finance and Economics

Huazhen Lin is the Chair Professor at the Southwestern University of Finance and Economics (SWUFE) and the Director of the Center of Statistical Research at SWUFE. She is a New Cornerstone Investigator, a fellow of the Institute of Mathematical Statistics, and a recipient of the National Science Fund for Distinguished Young Scholars. Huazhen Lin's main research interests include deep learning, nonparametric method, functional data analysis, factor model, survival data analysis, and transformation model. She has published numerous research papers in internationally renowned statistics journals, including *Annals of Statistics*, *Journal of the American Statistical Association*, *Journal of the Royal Statistical Society: Series B*, and *Biometrika*. Huazhen Lin serves as an associate editor for *Journal of the American Statistical Association*. And she has served as an associate editor for many journals, including *Biometrics*, the *Scandinavian Journal of Statistics*, the *Journal of Business & Economic Statistics*, the *Canadian Journal of Statistics*, *Statistics and Its Interface*, and *Statistical Theory and Related Fields*. She also serves on the editorial boards of various Chinese journals, such as the English Series of *Acta Mathematica Sinica*, the *Chinese Journal of Applied Probability and Statistics*, the *Journal of Systems Science and Mathematical Sciences*, and the *Journal of Applications of Statistics and Management*. Additionally, she is a board member of the International Chinese Statistical Association (ICSA), an associate director of the Chinese Association for Applied Statistics (CAAS), the director of the Data Science and Artificial Intelligence Chapter at CAAS, and an associate chair of the Chinese Association for Industrial Statistics Teaching.

Title: Generative Adversarial Learning with Optimal Input Dimension and Its Adaptive Generator Architecture

Location and Time:

Lecture Hall, 1st Floor

July 13, Saturday, 10:30-11:20

Chair: Jinyuan Chang, Southwestern University of Finance and Economics

Abstract:

In this talk, we investigate the impact of the input dimension on the generalization error in generative adversarial networks (GANs). We first provide both theoretical and practical evidence to validate the existence of an optimal input dimension (OID) that minimizes the generalization error. Then, to identify the OID, we introduce a novel framework called generalized GANs (G-GANs), which includes existing GANs as a special case. By incorporating the group penalty and the architecture penalty developed in the paper, the proposed G-GANs have several intriguing features. First, our framework offers adaptive dimensionality reduction from the initial dimension to a dimension necessary for generating the target distribution. Second, this reduction in dimensionality also shrinks the required size of the generator network architecture, which is automatically identified by the proposed architecture

penalty. Both reductions in dimensionality and the generator network significantly improve the stability and the accuracy of the estimation and prediction. Theoretical support for the consistent selection of the input dimension and the generator network is provided. Third, the proposed algorithm involves an end-to-end training process, and the algorithm allows for dynamic adjustments between the input dimension and the generator network during training, further enhancing the overall performance of the G-GANs. Extensive experiments conducted with simulated and benchmark data demonstrate the superior performance of the proposed G-GANs. Moreover, the features generated based on the input dimensions identified by G-GANs align with visually significant features. (Joint work with Zhiyao Tan and Ling Zhou.)

Scientific Program

July 12, 08:30-09:00

Opening Ceremony

Room: Lecture Hall (1st Floor)

Chair: Niansheng Tang, Yunnan University

July 12, 09:00-10:40

Plenary Talk 1

Room: Lecture Hall (1st Floor)

Chair: Fang Yao, Peking University

- 09:00 Neural Causal AI: Adversarial Invariance Learning from Heterogeneous Environments
Jianqing Fan, Princeton University

Plenary Talk 2

Room: Lecture Hall (1st Floor)

Chair: Jing Lei, Carnegie Mellon University

- 09:50 Genomic Testing in the Presence of Unmeasured Confounding and Missing Data
Kathryn Roeder, Carnegie Mellon University

July 12, 11:00-11:50

Plenary Talk 3

Room: Lecture Hall (1st Floor)

Chair: Xueqin Wang, University of Science and Technology of China

- 11:00 Multi-Scale Spatial-Temporal Data in Brain-Science: Data, Model and Theory
Jianfeng Feng, Fudan University

July 12, 14:00-15:40

Panel Discussion on Developing Statistics in China

Room: Yulan Hall (1st Floor)

Chair: Fang Yao, Peking University

- 14:00 History of Statistics in China
Wei Yuan, Renmin University of China

Invited Session IS016: Exploring the Frontiers of Machine Learning: Algorithms, Theoretical Insights and Applications

Room: A201-202 (2nd Floor)

Chair: Chendi Wang, University of Pennsylvania

Organizer: Weijie Su, University of Pennsylvania

- 14:00 A Very Dutch Scandal: Did Overhyped Stats Ruin Dutch Appetites?
Fengnan Gao, University College Dublin

- 14:25 A Statistical Framework of Watermarks for Large Language Models: Pivot, Detection Efficiency and Optimal Rules

Xiang Li, University of Pennsylvania

- 14:50 Understanding the Implicit Bias of Stochastic Gradient Descent: A Dynamical Stability Perspective

Lei Wu, Peking University

- 15:15 Algorithms and Incentives in Statistics

Haifeng Xu, University of Chicago

Invited Session IS095: Modern Statistical Learning for High-Dimensional Data

Room: A216-217 (2nd Floor)

Chair: Jingyuan Liu, Xiamen University

Organizer: Jingyuan Liu, Xiamen University

- 14:00 Adaptive Shrinkage Estimation for High-Dimensional Change Point Detection
Yingxing Li, Xiamen University

- 14:25 A Unifying Dependent Combination Framework with Applications to Association Tests

Xiufan Yu, University of Notre Dame

- 14:50 Communication-Efficient and Distributed Oracle Estimation for High-Dimensional Quantile Regression

Songshan Yang, Renmin University of China

- 15:15 Efficient Learning of Directed Acyclic Graphs in Heavy-Tailed Data

Wei Zhou, Southwestern University of Finance and Economics

Invited Session IS005: AI and Machine Learning in Complex Biomedical Data

Room: A301-302 (3rd Floor)

Chair: Hongzhe Li, University of Pennsylvania

Organizer: Hongzhe Li, University of Pennsylvania

- 14:00 Tackling Biased, Incomplete Data in Electronic Health Records

Qi Long, University of Pennsylvania

- 14:25 Bias Correction Models for Electronic Health Records Data in the Presence of Non-random Sampling

Judy Zhong, New York University

- 14:50 Federated Efficient Estimation of Average Treatment Effects

Rui Duan, Harvard University

Invited Session IS026: Innovative Statistical Methods for Data with Complex Structures

Room: A320-321 (3rd Floor)

Chair: Jiming Jiang, University of California, Davis

Organizer: Lan Wang, University of Miami

- 14:00 A Stability Approach for Feature Selection with False Discovery Rate Control
Wei Zhong, Xiamen University
- 14:25 High-Dimensional Scale Invariant Discriminant Analysis
Shurong Zheng, Northeast Normal University
- 14:50 On Functional Processes with Multiple Discontinuities
Yaguang Li, University of Science and Technology of China
- 15:15 Structured Feature Ranking for Genomic Marker Identification Accommodating Multiple Types of Networks
Xingdong Feng, Shanghai University of Finance and Economics

Invited Session IS012: Data Science Methods for Complex Data with Endogeneity and Heterogeneity

Room: A203 (2nd Floor)

Chair: Linda Zhao, University of Pennsylvania

Organizer: Linda Zhao, University of Pennsylvania

- 14:00 BELIEF in Dependence: Leveraging Atomic Linearity in Data Bits for Rethinking Generalized Linear Models
Kai Zhang, University of North Carolina, Chapel Hill
- 14:25 A Scalable, Interpretable, and Data-Driven Approach to Analyzing Unstructured Information
Wu Zhu, Tsinghua University
- 14:50 Regularizing BELIEF for Smooth Dependency
Wan Zhang, University of North Carolina, Chapel Hill
- 15:15 Personalized Reinforcement Learning for Healthcare: With Applications to Sepsis Management in ICU
Linda Zhao, University of Pennsylvania

Invited Session IS004: Advancing Statistical Frontiers in Data Privacy Protection

Room: A218 (2nd Floor)

Chair: Linjun Zhang, Rutgers University

Organizer: Weijie Su, University of Pennsylvania

- 14:00 Gaussian Differential Privacy on Riemannian Manifolds
Linglong Kong, University of Alberta
- 14:25 Unveiling Enhanced Privacy in Data Science via Statistical Methods
Chendi Wang, University of Pennsylvania
- 14:50 Differentially Private Estimation and Inference in High-Dimensional Regression with FDR Control
Zhanrui Cai, The University of Hong Kong
- 15:15 Online Local Differential Private Quantile Inference via Self-Normalization
Bei Jiang, University of Alberta

Invited Session IS101: Statistical Inference and Computation for Complex Data

Room: A303 (3rd Floor)

Chair: Yanbo Pei, Capital University of Economics and Business

Organizer: Baoxue Zhang, Capital University of Economics and Business

- 14:00 Statistical Analysis of Averaged Weighted Gradient Descent Algorithm for Decentralized Federated Learning
Yue Chen, Capital University of Economics and Business
- 14:25 Hypothesis Testing in High Dimensional Linear Regression via Wild Bootstrapping
Wenjuan Hu, Capital University of Economics and Business
- 14:50 Sequential Quantile Regression for Stream Data by Least Squares
Ye Fan, Capital University of Economics and Business
- 15:15 Summary Statistics-Based Association Test for Identifying the Pleiotropic Effects with Set of Genetic Variants
Deliang Bu, Capital University of Economics and Business

Invited Session IS031: Machine Learning Methods: Theory and Applications

Room: A305 (3rd Floor)

Chair: Kai Kang, Sun Yat-sen University

Organizer: Xinyuan Song, The Chinese University of Hong Kong

- 14:00 Towards Non-Asymptotic Convergence for

Diffusion-Based Generative Models

Gen Li, The Chinese University of Hong Kong

14:25 Dual-Directed Algorithm Design for Efficient Pure Exploration

Wei You, The Hong Kong University of Science and Technology

14:50 Inference for High-Dimensional Proportional Hazards Model with Streaming Survival Data

Haijin He, Shenzhen University

15:15 Screen Then Select: A Strategy for Correlated Predictors in High-Dimensional Quantile Regression

Xuejun Jiang, Southern University of Science and Technology

Zenan Ling, Huazhong University of Technology

14:50 Simulation Learning Methodology: Theory, Algorithms, and Applications

模拟学习方法论: 理论, 算法和应用

Jun Shu, Xi'an Jiaotong University

15:15 Understanding and Improving LLM Training: Insights into Adam and Advent of Adam-Mini

Ruoyu Sun, The Chinese University of Hong Kong (Shenzhen)

Invited Session IS097: Statistical Learning for Threshold Models and Applications

Room: A306 (3rd Floor)

Chair: Chuang Wan, Nankai University

Organizer: Wei Zhong, Xiamen University

14:00 Lasso and Post-Lasso Inference for Multiple Threshold Regressions with an Application to Return Predictability

Chenchen Ma, Peking University

14:25 Multi-Threshold Regression with Endogeneity

Chuang Wan, Nankai University

14:50 Robust Estimation of Structural Instability in the Large-Dimensional Factor Model

Wei Wang, Shandong University of Finance and Economics

15:15 Common Threshold Estimation in Large Heterogeneous Panels with a Multifactor Error Structure

Yimeng Xie, Xiamen University

Invited Session IS075: Statistical Learning for Large Foundation Models

Room: A307 (3rd Floor)

Chair: Junxiong Jia, Xi'an Jiaotong University

Organizer: Shurong Zheng, Northeast Normal University

14:00 Learning Prediction Function of Prior Measures for Statistical Inverse Problems of Partial Differential Equations

Junxiong Jia, Xi'an Jiaotong University

14:25 Advancements in understanding Over Parameterized Deep Equilibrium Models: Bridging Theory and Practice

Invited Session IS080: Theoretical Foundations for Machine Learning

Room: A308 (3rd Floor)

Chair: Wen Zhou, New York University

Organizer: Tracy Ke, Harvard University

14:00 Enhanced Topic Modeling Using Entry-Wise Eigenvector Analysis

Tracy Ke, Harvard University

14:25 Network Tight Community Detection

Huimin Cheng, Boston University

14:50 Is Your Data Alignable? A Geometric Approach to Single-Cell Data Integration

Rong Ma, Harvard University

Invited Session IS015: Experimental Design and Big Data Subsampling

Room: A315 (3rd Floor)

Chair: Mingyao Ai, Peking University

Organizer: Niansheng Tang, Yunnan University

14:00 Optimal Designs for Order-of-Addition Two-Level Factorial Experiments

Fasheng Sun, Northeast Normal University

14:25 An Improved K-Farthest Neighbor Detection Methodology for Covariate Shift

Yu Tang, Soochow University

14:50 Model-Free Subsampling Method for Massive Data Based on Uniform Designs

Yongdao Zhou, Nankai University

15:15 Focus Subsampling: A More Efficient Subsampling Method for Large-Scale Linear Classification

Jun Yu, Beijing Institute of Technology

Special Session SS2: Bernoulli Session on Stochastic Methods for Data Science

Room: A316 (3rd Floor)

Chair: Ajay Jasra, The Chinese University of Hong Kong

(Shenzhen)

Organizer: Ajay Jasra, The Chinese University of Hong Kong (Shenzhen)

14:00 Multilevel Particle Filters for Partially Observed McKean-Vlasov Stochastic Differential Equations

Ajay Jasra, The Chinese University of Hong Kong (Shenzhen)

14:25 Bayesian Fixed-Domain Asymptotics for Covariance Parameters in Spatial Gaussian Process Models

Cheng Li, National University of Singapore

14:50 Bootstrap-Assisted Inference for Weakly Stationary Time Series

Yunyi Zhang, The Chinese University of Hong Kong

Invited Session IS090: Intersection Research of Statistics and Computer Science (统计学与计算机科学的交叉研究)

Room: A317 (3rd Floor)

Chair: Fan Zhou, Shanghai University of Finance and Economics

Organizer: Xingdong Feng, Shanghai University of Finance and Economics

14:00 Optimal One-Pass Nonparametric Estimation under Memory Constraint

Zhenhua Lin, National University of Singapore

14:25 Evaluating Dynamic Conditional Quantile Treatment Effects with Applications in Ridesharing

Ting Li, Shanghai University of Finance and Economics

14:50 Inverse Constrained Reinforcement Learning: from Theory to Practice

Guiliang Liu, The Chinese University of Hong Kong (Shenzhen)

15:15 Reinforcement Learning for Precision Medicine in HIV

Yanxun Xu, Johns Hopkins University

Invited Session IS028: Interface Between Statistics and Neuro and Cognitive Science

Room: A318 (3rd Floor)

Chair: Lei Shi, Yunnan University of Finance and Economics

Organizer: Song Xi Chen, Tsinghua University

14:00 Impact of Zealots on Cooperation: A Study

Based on the Behavioral Experiments of One-Shot Prisoner's Dilemma Games

Lei Shi, Yunnan University of Finance and Economics

14:25 Lifespan Connectome Growth Modeling

Yong He, Beijing Normal University

14:50 Learning Network-Structured Dependence from Non-Stationary Multivariate Point Process Data

Chunming Zhang, University of Wisconsin Madison

15:15 Debiased Estimation and Inference for Spatial-Temporal EEG/MEG Source Imaging

Peifeng Tong, Peking University

Contributed Session CS003: Recent Advances in Mixture Model

Room: A322 (3rd Floor)

Chair: Wei Lin, Peking University

14:00 A Gaussian Mixture Model for Multiple Instance Learning with Partially Subsampled Instances

Baichen Yu, Peking University

14:20 Semi-Implicit Variational Inference via Score Matching

Longlin Yu, Peking University

14:40 Estimating IRT Models under Gaussian Mixture Modelling of Latent Traits: An Application of MSAEM Algorithm

Siyao Cheng, Northeast Normal University

15:00 Gaussian Mixture Model with Rare Events

Xuetong Li, Peking University

15:20 Mixed Models for Longitudinal Binary Outcomes with Crossed Random Effects

Shi Zhang, University of Manitoba

Contributed Session CS004: Statistical Hypothesis Testing in Complex Data

Room: B601 (3rd Floor)

Chair: Yushan Xue, Central University of Finance and Economics

14:00 Hypothesis Testing in Gaussian Graphical Models: Goodness-of-Fit and Conditional Randomization Tests

Xiaotong Lin, National University of Singapore

14:20 Robust Estimation and Testing for GARCH Models via Exponentially Tilted Empirical Likelihood

- Yashuang Li*, Yunnan University
- 14:40 A Bayesian Phase I/II Platform Design for Multiple Indications with Mixed Types of Endpoints of Toxicity and Efficacy
Xian Shi, East China Normal University
- 15:00 Elevating Federated Clustering: Deep Generative Models and Contrastive Learning Strategies
Jie Yan, Central University of Finance and Economics
- 15:20 The Lose-Lose or All-Lose Consequences: Assessing the International Economic Impact of Sino-U.S. Technological Decoupling
Yutao Jiang, Anhui University of Finance and Economics

Contributed Session CS001: Recent Advances in Reinforcement Learning

Room: B603 (3rd Floor)

Chair: Xiaodong Yan, Shandong University

- 14:00 Strategy Evaluation in Non-Stationary Reinforcement Learning Environment
非平稳强化学习环境下的策略评估
Wei Wang, Shandong University
- 14:20 Reinforcement Learning in Interval-Censored Data
Zhimiao Cao, Shandong University
- 14:40 Unobserved Structural Changes in the Factor-Augmented Panel Quantile Model
Fanyu Meng, Shandong University
- 15:00 Reinforcement Learning for Survival Analysis
Jianqi Feng, Shandong University
- 15:20 A Fast Optimal Hyperparameter Selection Based on Bandits for Streaming Data
Zhang Yu, Shandong University

Contributed Session CS006: Interdisciplinary and Applied Research: Statistical Analysis on Medical Data and Models

Room: B606 (3rd Floor)

Chair: Shanjun Mao, Hunan University

- 14:00 Research on Convex Clustering for Multi Source Data
Jianxi Zhao, Beijing Information Science and Technology University
- 14:20 Generalization Analysis of Deep CNNs under Maximum Correntropy Criterion
Zhiying Fang, Shenzhen Polytechnic Univer-

sity

- 14:40 Construction and Validation of an Imaging Omics Prediction Model for the Efficacy of Methylprednisolone in the Treatment of Radiation-Induced Brain Injury
甲基强的松龙治疗放射性脑损伤疗效的影像组学预测模型构建与验证
Xiaohuang Zhuo, Tianjin Huanhu Hospital
- 15:00 A Copula-Based Approach on Optimal Allocation of Hot Standbys in Series Systems
Jiandong Zhang, Northwest Normal University
- 15:20 A Monte Carlo Classification Method Based on Partial Variables and Its Application in Clinical Data
Shanjun Mao, Hunan University

July 12, 16:00-18:05

Invited Session IS072: Statistical Interdisciplinary Studies I

Room: Yulan Hall (1st Floor)

Chair: Song Xi Chen, Tsinghua University

Organizer: Song Xi Chen, Tsinghua University

- 16:00 Solving Large-Scale Sparse Equations with Tree Structures and Its Applications to Optical Fiber Networks
Bingyi Jing, Southern University of Science and Technology
- 16:25 Integrating Statistical Learning and Deep Learning for Efficient and Interpretable Analysis of Complex Unstructured Data
Ke Deng, Tsinghua University
- 16:50 Exploring Novel Uncertainty Quantification through Forward Intensity Function Modeling
Chengyong Tang, Temple University
- 17:15 Dynamic Synthetic Control Method for Semi-parametric Time-Varying Additive Autoregression Model
Shouxia Wang, Peking University

Invited Session IS050: Recent Advances in Functional and Complex Data

Room: A201-202 (2nd Floor)

Chair: Fang Yao, Peking University

Organizer: Fang Yao, Peking University

- 16:00 Functional Principal Component Analysis of Spatially and Temporally Indexed Point Processes
Yehua Li, University of California, Riverside

- 16:25 Functional Neural Networks
Jiguo Cao, Simon Fraser University
- 16:50 Causal Mediation Analysis for Multilevel and Functional Data
Xi Luo, University of Texas Health Science Center at Houston
- 17:15 Frequent-Voting Independence Screening for Data of Different Types or Different Dimensions
Kehui Chen, University of Pittsburgh

Invited Session IS071: Statistical Inference for High-Dimensional Data

- Room: A216-217 (2nd Floor)
 Chair: Tracy Ke, Harvard University
 Organizer: Tracy Ke, Harvard University
- 16:00 Some Recent Results for P-Value Free FDR Controls
Jun Liu, Harvard University
 - 16:25 Enhancing Integrative Association Tests: Optimal Weighting Approaches in Whole-Genome Sequencing Studies
Zheyang Wu, Worcester Polytechnic Institute
 - 16:50 Detection and Statistical Inference on Informative Core and Periphery Structures in Weighted Directed Networks
Wen Zhou, New York University

Invited Session IS006: AI and Machine Learning in Single Cell Genomic

- Room: A301-302 (3rd Floor)
 Chair: Rong Ma, Harvard University
 Organizer: Hongzhe Li, University of Pennsylvania
- 16:00 Integrating Transcriptomic and Pathomic Features to Reconstruct 3D Tissue Maps with Super-Resolution
Mingyao Li, University of Pennsylvania
 - 16:25 A Hybrid Approach for Selecting Highly Variable Genes in Single-Cell RNA-Seq
Hongkai Ji, Johns Hopkins University
 - 16:50 Supervised Deep Learning with Gene Annotation for Cell Classification
Wei Sun, Fred Hutchinson Cancer Center

Invited Session IS054: Recent Advances in Statistical Machine Learning

- Room: A320-321 (3rd Floor)
 Chair: Zhenhua Lin, National University of Singapore

- Organizer: Zhenhua Lin, National University of Singapore
- 16:00 A Bayesian Framework for Leveraging Pre-trained Large Diffusion Models
Jian Huang, The Hong Kong Polytechnic University
 - 16:25 Unsupervised Federated Learning: A Federated Gradient EM Algorithm for Heterogeneous Mixture Models with Robustness Against Adversarial Attacks
Yang Feng, New York University
 - 16:50 Directional Diffusion Models
Fan Zhou, Shanghai University of Finance and Economics
 - 17:15 Taming "Data-Hungry" Reinforcement Learning? Stability in Continuous State-Action Spaces
Yaqi Duan, New York University

Invited Session IS060: Recent Developments in Complex Time Series Analysis

- Room: A203 (2nd Floor)
 Chair: Hui Zhi, The University of Hong Kong
 Organizer: Linda Zhao, University of Pennsylvania
- 16:00 Matrix Denoising and Completion Based on Kronecker Product Approximation
Han Xiao, Rutgers University
 - 16:25 Simultaneous Decorrelation of Matrix Time Series
Yuefeng Han, University of Notre Dame
 - 16:50 Tensor Factor Model Estimation by Iterative Projection
Dan Yang, The University of Hong Kong

Invited Session IS045: Recent Advancements in Large Network and Tensor Data Analysis

- Room: A218 (2nd Floor)
 Chair: Yumou Qiu, Peking University
 Organizer: Tracy Ke, Harvard University
- 16:00 Statistical Foundations of Deep Generative Models
Lizhen Lin, University of Maryland
 - 16:25 Autoregressive Networks with Dependent Edges
Qiwei Yao, London School of Economics
 - 16:50 Analysis of Large Networks
Jiashun Jin, Carnegie Mellon University
 - 17:15 High-Order Singular Value Decomposition in

Tensor Analysis
Anru Zhang, Duke University

Invited Session IS083: Limit Theory of Large Dimensional Random Matrices (大维随机矩阵极限理论)

Room: A303 (3rd Floor)

Chair: Xiaoyi Wang, Beijing Normal University, Zhuhai
Organizer: Shurong Zheng, Northeast Normal University

- 16:00 Nonlinear Principal Component Analysis with Random Bernoulli Features for Process Monitoring
Dandan Jiang, Xi'an Jiaotong University
- 16:25 An Integrative Multi-Context Mendelian Randomization Method for Identifying Risk Genes Across Human Tissues
Fan Yang, Tsinghua University
- 16:50 Limit Theorems for U-Statistics of Determinantal Point Process via Cumulant Estimates
Dong Yao, Jiangsu Normal University
- 17:15 Quantitative Tracy-Widom Laws for Wigner and Sample Covariance Matrices
Yuanyuan Xu, Chinese Academy of Sciences

Invited Session IS099: Economic Statistics and Research on High-Quality Development (经济统计与高质量发展研究)

Room: A305 (3rd Floor)

Chair: Jing Zhang, Zhongnan University of Economics and Law

Organizer: Hu Zhang, Zhongnan University of Economics and Law

- 16:00 Research on the Construction of Industrial Chain and Supply Chain Network and Resilience Evaluation
产业链供应链关联网络构建及韧性评估研究
Shaohua Ge, Zhongnan University of Economics and Law
- 16:25 ESG Performance, Financing Cost, and High-Quality Development of Enterprises
ESG 表现、融资成本与企业高质量发展
Yating Gui, Zhongnan University of Economics and Law
- 16:50 Discussion on the Statistical Monitoring System of Financial Security
金融安全统计监测体系探讨
Zihuan Gao, Zhongnan University of Economics

ics and Law

- 17:15 Influencing Factors and Potential Measurement of China's Export Trade under the "Belt and Road" Vision
“一带一路”视域下中国出口贸易影响因素及潜力测度
Qinqin Zhu, Zhongnan University of Economics and Law
- 17:40 The Mechanism and Impact of Returning Home to Start a Business on Improving County-Level Total Factor Productivity: Based on the Investigation of the Pilot Policy of Returning Home to Start a Business
返乡创业提升县域全要素生产率的作用机制与影响效应——基于返乡创业试点政策的考察
Huicong Wang, Zhongnan University of Economics and Law

Invited Session IS091: Model Averaging and Related Topics

Room: A306 (3rd Floor)

Chair: Xinyu Zhang, Academy of Mathematics and Systems Science, Chinese Academy of Sciences

Organizer: Xinyu Zhang, Academy of Mathematics and Systems Science, Chinese Academy of Sciences

- 16:00 Model Averaging for Decomposed Data
Yuying Sun, Academy of Mathematics and Systems Science, Chinese Academy of Sciences
- 16:25 Model Averaging in Multivariate Spatial Autoregressive Model for Social Network Analysis
Fang Fang, East China Normal University
- 16:50 Averaging Method of Poisson Regression Model with Divergent Dimensions
发散维度的 Poisson 回归模型平均方法
Jiahui Zou, Capital University of Economics and Business
- 17:15 Optimal Distributed Prediction by Model Averaging
Jun Liao, Renmin University of China
- 17:40 Optimal Weighted Random Forests
Dalei Yu, Xi'an Jiaotong University

Invited Session IS079: The Interplay Between Statistical Inference and Data-Driven Decision Making

Room: A307 (3rd Floor)

Chair: Zhimei Ren, University of Pennsylvania

- Organizer: Zhimei Ren, University of Pennsylvania
- 16:00 Controlling the False Discovery Rate in Transformations: Split Knockoffs
Yuan Yao, The Hong Kong University of Science and Technology
- 16:25 Balancing Personalization and Pooling: Decision-Making and Statistical Inference with Limited Time Horizons
Yongyi Guo, University of Wisconsin-Madison
- 16:50 Conformal Alignment: Knowing When to Trust Foundation Models with Guarantees
Ying Jin, Stanford University
- 17:15 Large Covariance Matrix Estimation with Factor-Assisted Variable Clustering
Cheng Yu, Tsinghua University
- 17:40 Enhancing Decision Making with Causal Inference and Unmeasured Confounders in a Bayesian Framework
Yanxun Xu, Johns Hopkins University

Invited Session IS011: Data Science and Engineering

- Room: A308 (3rd Floor)
Chair: Qingpei Hu, Chinese Academy of Sciences
Organizer: Jian Shi, Chinese Academy of Sciences
- 16:00 Active Machine Learning for Surrogate Modeling in Complex Engineering Systems
Xiaowei Yue, Tsinghua University
- 16:25 Nonparametric Statistical Inference via Metric Distribution Function in Metric Spaces
Wenliang Pan, Chinese Academy of Sciences
- 16:50 Subsampling and Rare Events Data Beyond Binary Responses
Haiying Wang, University of Connecticut
- 17:15 Kernel Function Packet Decomposition: From State Space Models to Compact Support Bases
核函数包分解: 从状态空间模型到紧支撑基底
Liang Ding, Fudan University
- 17:40 A Class of Partition-Based Bayesian Optimization Algorithms for Stochastic Simulations
Songhao Wang, Southern University of Science and Technology

Invited Session IS051: Recent Advances in High-Dimensional and Heterogeneous Data Analysis

- Room: A315 (3rd Floor)
Chair: Xiangnan Feng, Fudan University
Organizer: Xinyuan Song, The Chinese University of

- Hong Kong
- 16:00 A General Framework to Extend Sufficient Dimension Reductions to the Cases of the Mixture Multivariate Elliptical Distributions
Fei Chen, Yunnan University of Finance and Economics
- 16:25 Quantile Regression and Homogeneity Detection of a Semiparametric Panel Data Model
Rui Li, Shanghai University of International Business and Economics
- 16:50 A Bayesian Mixture of Exponential Family Factor Models for Uncovering Disease Progression Subtypes
Kai Kang, Sun Yat-sen University
- 17:15 Linking Brain-Wide Gene Expression and Neuroimaging Data
Shuixia Guo, Hunan Normal University

Invited Session IS062: Recent Developments in the Analysis of High-Dimensional and Complex Data

- Room: A316 (3rd Floor)
Chair: Jinyuan Chang, Southwestern University of Finance and Economics
Organizer: Jinyuan Chang, Southwestern University of Finance and Economics
- 16:00 Edge Differentially Private Estimation in the Beta-Model via Jittering and Method of Moments
Fengting Yi, Yunnan University
- 16:25 Modelling Matrix Time Series via a Tensor CP-Decomposition
Jing He, Southwestern University of Finance and Economics
- 16:50 High-Dimensional Knockoff-Assisted False Discovery Rate Control
Chenlong Li, Taiyuan University of Technology
- 17:15 Online Bootstrap Inference for the Geometric Median
Guanghui Cheng, Guangzhou University

Contributed Session CS007: Precision Medicine and Survival data

- Room: A317 (3rd Floor)
Chair: Shishun Zhao, Jilin University
- 16:00 Flexible Regression Methods for Estimating Optimal Individualized Treatment Regimes with Scalar and Functional Covariates

- Kaidi Kong*, Beijing University of Technology
16:20 A Doubly Robust Estimation in Learning Optimal Individualized Treatment Regimes with Survival Outcomes
- Rujia Zheng*, Northeast Normal University
16:40 Generalized Linear Mixed-Effects Joint Model for Longitudinal and Bivariate Survival Data
- Jiming Chen*, Yunnan University
17:00 A New and Unified Method for Regression Analysis of Interval-Censored Failure Time Data under Semiparametric Transformation Models with Missing Covariates
- Yichen Lou*, Jilin University
17:20 Bayesian Transformation Model for Spatial Partly Interval-Censored Data
- Mingyue Qiu*, Capital Normal University

Contributed Session CS008: Factor Models and Bayesian Analysis

- Room: A318 (3rd Floor)
Chair: Feng Xie, Beijing Technology and Business University
- 16:00 Forecasting Midprice Movement of HFT Data with Bayesian Stochastic Attention-Based Neural Bag of Implicit Feature Models
Xu Liu, Shandong University of Finance and Economics
- 16:20 Forecasting Using Nonlinear Factor Models with Nonparametrically Targeted Predictors
Siwei Wang, Hunan University
- 16:40 Sparse Multicategory Generalized Distance Weighted Discrimination in Ultra-High Dimensions
Tong Su, Yunnan University
- 17:00 Efficient and Flexible LLMs-Generated Content Detection
Wan Tian, Beihang University
- 17:20 An Algorithm to Assess Importance of Predictors in Systematic Review of Prediction Models: A Case Study with Simulations
Ruohua Yan, Beijing children's hospital

Contributed Session CS009: Statistical Machine Learning: Methodology and Applications

- Room: A322 (3rd Floor)
Chair: Xu Guo, Beijing Normal University
- 16:00 Adaptive Split Balancing for Optimal Random Forest

- Yuqian Zhang*, Renmin University of China
16:20 Split-and-Merge Based Simultaneous Input and State Filter for Nonlinear Dynamic Systems
Sanfeng Hu, Yunnan University
- 16:40 Alteration Detection of Tensor Dependence Structure via Sparsity-Exploited Reranking Algorithm
Li Ma, Xiamen University
- 17:00 Mini-Batch Gradient Descent with Buffer
Haobo Qi, Beijing Normal University
- 17:20 Testing Non-inferiority of a New Treatment in Three-Arm Clinical Trials with Binary Endpoints
Bin Yu, Yunnan University

Contributed Session CS010: Recent Advances in Statistical Learning Methods

- Room: B601 (3rd Floor)
Chair: Zhonghua Li, Nankai University
- 16:00 Efficient and Provable Online Reduced Rank Regression via Online Gradient Descent
Xiao Liu, Shanghai Jiao Tong University
- 16:20 Acceleration of Stochastic Gradient Descent with Momentum by Averaging: Finite-Sample Rates and Asymptotic Normality
Kejie Tang, Shanghai Jiao Tong University
- 16:40 An Adaptive ABC-MCMC with Global-Local Proposals
Xuefei Cao, Nankai University
- 17:00 Large Deviation Algorithms for the Thresholding Bandit Problem
Shan Dai, The Chinese University of Hong Kong (Shenzhen)
- 17:20 Computationally Efficient Methods for Estimating Co-heritability of Multivariate Phenotypes Using Biobank Data
Yuhao Deng, University of Michigan

Contributed Session CS011: Causal Inference and Applications

- Room: B603 (3rd Floor)
Chair: Weijuan Wang, Renmin University of China
- 16:00 Efficient Nonparametric Inference of Causal Mediation Effects with Nonignorable Missing Confounders
Jiawei Shan, Renmin University of China
- 16:20 Multiply Robust Estimation for General Multivalued Treatment Effects with Missing

Outcomes

Xiaorui Wang, Southern University of Science and Technology

16:40 Matching-Based Policy Learning with Observational Data

Xuqiao Li, Sun Yat-sen University

17:00 Prospective and Retrospective Causal Inferences Based on the Potential Outcomes Framework

Chao Zhang, Beijing Technology and Business University

17:20 Causal Attribution with Confidence

Ping Zhang, Peking University

Contributed Session CS012: Recent Advances in Statistical Inference

Room: B606 (3rd Floor)

Chair: Sheng Fu, Nankai University

16:00 Statistical Inference for Power Autoregressive Conditional Duration Models with Stable Innovations

Yuxin Tao, Tsinghua University

16:20 Exploring Causal Effects of Hormone- and Radio-Treatments in an Observational Study of Breast Cancer under Semi-Competing Risks Setting

Tonghui Yu, Nanyang Technological University

16:40 A Statistical Review on the Optimal Fingerprinting Approach in Climate Change Studies

Hanyue Chen, Peking University

17:00 A Novel Approach for Identifying Genetic Associations with Heterogeneous Cancer Subtypes Risk

Sheng Fu, Nankai University

17:20 Transfer Learning with General Estimating Equations

Han Yan, Peking University

July 13, 08:30-10:10

Plenary Talk 4

Room: Lecture Hall (1st Floor)

Chair: Ke Deng, Tsinghua University

08:30 Build an End-to-End Scalable and Interpretable Data Science Ecosystem by Integrating Statistics, ML, and Domain Sciences

Xihong Lin, Harvard University

Plenary Talk 5

Room: Lecture Hall (1st Floor)

Chair: Yumou Qiu, Peking University

09:20 Statistics and Its Applications in Forensic Science and the Criminal Justice System

Alicia Carriquiry, Iowa State University

July 13, 10:30-11:20

Plenary Talk 6

Room: Lecture Hall (1st Floor)

Chair: Jinyuan Chang, Southwestern University of Finance and Economics

10:30 Generative Adversarial Learning with Optimal Input Dimension and Its Adaptive Generator Architecture

Huazhen Lin, Southwestern University of Finance and Economics

July 13, 14:00-15:40

Invited Session IS053: Recent Advances in Statistical Learning

Room: Yulan Hall (1st Floor)

Chair: Tony Cai, University of Pennsylvania

Organizer: Tony Cai, University of Pennsylvania

14:00 Dynamic Prediction with Individualized Feature Selection

Lu Tian, Stanford University

14:25 High-Order Statistical Expansion in Functional Estimation

Cun-Hui Zhang, Rutgers University

14:50 Navigating the Societal Landscape of Generative AI: Opportunities and Challenges from a Statistical Perspective

Weijie Su, University of Pennsylvania

15:15 Network Regression and Supervised Centrality Estimation

Haipeng Shen, The University of Hong Kong

Invited Session IS022: Frontier of Statistics Machine Learning

Room: A201-202 (2nd Floor)

Chair: Annie Qu, University of California, Irvine

Organizer: Annie Qu, University of California, Irvine

14:00 An Adaptive Transfer Learning Framework for Functional Classification

Yang Bai, Shanghai University of Finance and Economics

- 14:25 Modeling Spatio-Temporal Extremes with Conditional Variational Autoencoders
Likun Zhang, University of Missouri
- 14:50 Bayesian Biclustering and Its Application in Education Data Analysis
Weining Shen, University of California, Irvine
- 15:15 Topological Analysis of Seizure-Induced Alterations in the Causal Pathways of Effective Brain Connectivity
Anass El Yaagoubi, King Abdullah University of Science & Technology

Invited Session IS036: New Advances in Complex Data Analyses

- Room: A216-217 (2nd Floor)
Chair: Jin Zhou, University of California, Los Angeles
Organizer: Peter Song, University of Michigan
- 14:00 Federated Learning of Robust Individualized Decision Rules with Application to Heterogeneous Multi-Hospital Sepsis Population
Lu Tang, University of Pittsburgh
- 14:25 Fixed and Random Covariance Regression Analyses
Tao Zou, The Australian National University
- 14:50 Latent Subgroup Analysis with Observational Data
Xin Zhou Guo, The Hong Kong University of Science and Technology

Invited Session IS037: New Statistical Methods for Causal Inference and Hidden Factor Learning

- Room: A301-302 (3rd Floor)
Chair: Yumou Qiu, Peking University
Organizer: Fang Yao, Peking University
- 14:00 Online Statistical Inference for Low-Rank Tensor Learning
Wei Sun, Purdue University
- 14:25 Semi-Confirmatory Factor Analysis for High-Dimensional Data with Interconnected Community Structures
Shuo Chen, University of Maryland
- 14:50 Assumption Matters: A Semiparametric Analysis of the Average Treatment Effect on the Treated
Jiwei Zhao, University of Wisconsin-Madison
- 15:15 Mendelian Randomization Analysis with Pleiotropy-Robust Log-Linear Models for Binary Outcomes

Jin Zhu Jia, Peking University

Invited Session IS063: Recent Topics in Machine Learning

- Room: A320-A321 (3rd Floor)
Chair: Matteo Bonvini, Rutgers University
Organizer: Zijian Guo, Rutgers University
- 14:00 A Statistical Analysis of an Image Classification Problem
Juntong Chen, University of Twente
- 14:25 Inference with Adaptively Collected Data
Koulik Khamaru, Rutgers University
- 14:50 Holdout Predictive Checks for Bayesian Model Criticism
Gemma Moran, Rutgers University
- 15:15 Wasserstein F-Tests for the Fréchet Regression on the Bures-Wasserstein Manifold
Hongzhe Li, University of Pennsylvania

Invited Session IS025: Independence Test and Association Analysis

- Room: A203 (2nd Floor)
Chair: Liping Zhu, Renmin University of China
Organizer: Liping Zhu, Renmin University of China
- 14:00 Test of Conditional Independence in Factor Models via Hilbert-Schmidt Independence Criterion
Qing Cheng, Southwestern University of Finance and Economics
- 14:25 Testing the Effects of High-Dimensional Covariates via Aggregating Cumulative Covariances
Kai Xu, Anhui Normal University
- 14:50 A Distribution Free Conditional Independence Test with Applications to Causal Discovery
Yaowu Zhang, Shanghai University of Finance and Economics
- 15:15 Rank-Based Indices for Testing Independence between Two High-Dimensional Vectors
Yeqing Zhou, Tongji University

Invited Session IS066: Semiparametric Modeling for Complex Survival Data

- Room: A218 (2nd Floor)
Chair: Xuejun Jiang, Southern University of Science and Technology
Organizer: Xinyuan Song, The Chinese University of Hong Kong

- 14:00 Privacy Preserving Survival Analysis Based on Federated Gradient Boosted Trees
Hong Wang, Central South University
- 14:25 Bayesian Estimation of Partial Functional Tobit Censored Quantile Regression Model
Chunjie Wang, Changchun University of Technology
- 14:50 Factor-Augmented Transformation Models for Interval-Censored Failure Time Data
Shuwei Li, Guangzhou University

Invited Session IS070: Statistical Inference for Biological and Medical Data

- Room: A303 (3rd Floor)
Chair: Zhengwu Zhang, University of North Carolina, Chapel Hill
Organizer: Qizhai Li, Academy of Mathematics and Systems Science
- 14:00 Microbial Causal Mediation Inference with Microbiome/Metagenomic Data
Huilin Li, New York University
- 14:25 Adaptive Estimation in Multivariate Response Regression with Hidden Variables
Yang Ning, Cornell University
- 14:50 Manifold Learning for Noisy and High-Dimensional Datasets
Xiucui Ding, University of California, Davis
- 15:15 Sensitivity Analysis for Quantiles of Hidden Biases in Matched Observational Studies
Xinran Li, University of Chicago

Invited Session IS078: Statistics in Earth Science Applications

- Room: A305 (3rd Floor)
Chair: Song Xi Chen, Tsinghua University
Organizer: Song Xi Chen, Tsinghua University
- 14:00 Detection and Attribution Analysis with Estimating Equations
Tianying Wang, Colorado State University
- 14:25 Detecting Marine Heatwaves Below the Sea Surface Globally Using Physics-Informed Statistical Learning
Furong Li, Ocean University of China
- 14:50 A Bayesian Nonstationary Model for Spatial Binary Data with Application to Characterizing Surface Marine Heatwaves
Bohai Zhang, Beijing Normal University-Hongkong Baptist University

- 15:15 Global Carbon Flux Estimated Using EnKF with In-situ and Satellite CO₂ Observations
Wu Su, Peking University

Invited Session IS065: Robust Inference in High-Dimensional Complex Data

- Room: A306 (3rd Floor)
Chair: Zhanrui Cai, The University of Hong Kong
Organizer: Zhanrui Cai, The University of Hong Kong
- 14:00 Two-Way Homogeneity Pursuit for Quantile Network Vector Autoregression
Xuening Zhu, Fudan University
- 14:25 Bellman Conformal Inference: Calibrating Prediction Intervals for Time Series
Lihua Lei, Stanford University
- 14:50 Transfer Learning for Spatial Autoregressive Models
Hao Zeng, Xiamen University/Southern University of Science and Technology
- 15:15 CP Factor Model for Dynamic Tensors
Rong Chen, Rutgers University

Invited Session IS052: Recent Advances in Sequencing and Imaging Data Analysis

- Room: A307 (3rd Floor)
Chair: Anru Zhang, Duke University
Organizer: Anru Zhang, Duke University
- 14:00 Latent Subgroup Identification in Image-on-Scalar Regression
Yajuan Si, University of Michigan
- 14:25 Biomarker Identification Using High Dimensional Inference with An Application in CAR-T Cell Immunotherapy
Vicky Wu, Fred Hutchinson Cancer Center
- 14:50 Functional Tensor Regression
Tongyu Li, Peking University
- 15:15 Streaming Tensor Factorization
Xiwei Tang, University of Virginia

Invited Session IS085: Industrial Big Data and Intelligent Statistical Analysis (工业大数据和智能化统计分析)

- Room: A308 (3rd Floor)
Chair: Jianping Zhu, Xiamen University
Organizer: Jianping Zhu, Xiamen University
- 14:00 Application of Intelligent Statistical Analysis in Biotechnology and Medical Treatment
智能化统计分析在生技医疗上之应用
Bangchang Xie, Fu Jen Catholic University

- 14:25 Statistical Measurement and Application of Industrial Big Data
工业大数据统计测度及其应用
Yong Li, Chengdu University of Information Technology
- 14:50 Promote Sign Consistency in Cure Rate Model for Credit Scoring
Chenlu Zheng, Fu Jian Police College
- 15:15 Industrial Intelligence and Corporate Environmental Performance: An Industry-Linked Perspective
Jinfang Tian, Shandong University of Finance and Economics

Invited Session IS076: Statistical Learning on Multi-Source and Complicated Data

- Room: A315 (3rd Floor)
Chair: Zhongyi Zhu, Fudan University
Organizer: Niansheng Tang, Yunnan University
- 14:00 Decentralized Learning of Quantile Regression: A Smoothing Approach with Two Bandwidths
Zhongyi Zhu, Fudan University
- 14:25 Tuning-Free Sparse Clustering via Alternating Hard-Thresholding
Niansheng Tang, Yunnan University
- 14:50 Orthogonality Specification Testing with Complex Survey Data
Puying Zhao, Yunnan University
- 15:15 Communication-Efficient Distributed Subgroup Learning
Wensheng Zhu, Northeast Normal University

Special Session SS1: Bernoulli Session on Statistical Methodology & Theory

- Room: A316 (3rd Floor)
Chair: Jeff Yao, The Chinese University of Hong Kong (Shenzhen)
Organizer: Jeff Yao, The Chinese University of Hong Kong (Shenzhen)
- 14:00 Enhancing High-Dimensional Statistical Learning Through Random Matrix Theory: Reviving Pseudo-Inverses
Nestor Parolya, Delft University of Technology
- 14:25 Operations with Concentration Inequalities
Cosme Louart, The Chinese University of Hong Kong (Shenzhen)

- 14:50 Asymptotic Properties of K-means and Its Modification under High Dimensional Settings
Kento Egashira, Tokyo University of Science

Invited Session IS056: Recent Advances in Statistical Network Analysis - Methodology and Applications

- Room: A317 (3rd Floor)
Chair: Yunpeng Zhao, Colorado State University
Organizer: Ji Zhu, University of Michigan
- 14:00 Autoregressive Networks: Node Heterogeneity, Homophily, and Beyond
Binyan Jiang, The Hong Kong Polytechnic University
- 14:25 A Sparse Latent Space Model for Text Network
Xiaoyue Maggie Niu, The Pennsylvania State University
- 14:50 A Latent Space Model for Weighted Keyword Co-occurrence Networks with Applications in Knowledge Discovery in Statistics
Rui Pan, Central University of Finance and Economics
- 15:15 Semiparametric Analysis of Directed Network Formations
Ting Yan, Central China Normal University

Invited Session IS102: Statistical Measurement, Evaluation and Decision (统计测度、评价与决策)

- Room: A318 (3rd Floor)
Chair: Weihua Su, Zhejiang Gongshang University
Organizer: Weihua Su, Zhejiang Gongshang University
- 14:00 Theory, Optimization and Application of Policy Evaluation Methods: Case Studies of DID, SCM, RDD and PSM
政策评估方法的理论、优化与应用:以 DID、SCM、RDD 和 PSM 为例
Facang Zhu, Zhejiang Gongshang University
- 14:25 Employer Brand Evaluation Method Based on Online Emotional Analysis and LDA-Kano Model
Shouzhen Zeng, Ningbo University
- 14:50 Online Commodity Recommendation Model for Interaction between User Ratings and Intensity-Weighted Hierarchical Sentiment: A Case Study of LYCOM
Chonghui Zhang, Zhejiang Gongshang University

Contributed Session CS019: Statistical Applications in

Economics and Medicine

Room: A322 (3rd Floor)

Chair: Mingjing Chen, Chongqing Technology and Business University

14:00 “The Belt and Road” Network Analysis and Spatial Spillover Effect

“一带一路”网络分析及空间溢出效应

Anqi Zhao, Chongqing Technology and Business University

14:20 Network Analysis and Spatial Correlation of Common Prosperity

共同富裕的网络分析与空间关联

Jinhai Li, Chongqing Technology and Business University

14:40 Statistical Measurement and Spatial Difference of Chinese Path to Modernization Level Based on Provincial Dimension

基于省域维度中国式现代化水平的统计测度及空间差异

Zhiyang Yu, North Minzu University

15:00 Using the NP-UNet Model to Automatically Quantify the Non Perfusion Area of Retinal UWF-SS-OCTA in Patients with Ischemic Retinal Disease

利用 NP-UNet 模型自动量化缺血性视网膜疾病患者视网膜 UWF-SS-OCTA 的无灌注区

Yuting Liao, Sun Yat-sen University

Contributed Session CS016: Statistical Inference in Complex Data Analysis

Room: B601 (3rd Floor)

Chair: Yuan Gao, Peking University

14:00 Penalized Sparse Covariance Regression with High Dimensional Covariates

Yuan Gao, Peking University

14:20 Quantile Forward Regression in High-Dimensional Distributional Counterfactual Analysis

Hongqi Chen, Hunan University

14:40 A Tuning-Free Robust Approach for High-Dimensional Regression with Missing Covariates

Wenjun Wang, Yunnan University

15:00 Parameter Identification of Random Wing Model Based on Deep Feature Fusion

基于深度特征融合的随机机翼模型参数辨识

Xiaolong Wang, Shaanxi Normal University

15:20 A Distribution Factor Clustering Method Based on Gaussian Mixture Model

基于高斯混合模型的分布因子聚类方法

Yingqiu Zhu, University of International Business and Economics

Contributed Session CS017: Statistical Modeling for Complex Networks

Room: B603 (3rd Floor)

Chair: Shuixia Guo, Hunan Normal University

14:00 Atypical Dynamic Network Reconfiguration and Genetic Mechanisms in Patients with Major Depressive Disorder

Hairong Xiao, Hunan Normal University

14:20 Citation Counts Prediction of Statistical Publications Based on Multi-Layer Academic Networks via Neural Network Model

Tianchen Gao, Xiamen University

14:40 A Community Detection Algorithm Based on Spectral Co-clustering and Weight Self-Adjustment in Attributed Stochastic Co-block Models

Yuxin Zhang, University of Science and Technology of China

15:00 Two-Step Estimation Procedure for Copula-Based Parametric Regression Models for Semi-Competing Risks Data

Qingmin Zhang, Yunnan University

15:20 Constructing a Three-Dimensional Eddy-Resolving Hydrographic Dataset in West Pacific Ocean Using Ensemble Kalman Filter

Binghao Wang, Peking University

Contributed Session CS018: Complex Data Analysis

Room: B606 (3rd Floor)

Chair: Xia Chen, Shaanxi Normal University

14:00 Estimation of Non-Gaussian Factors Using Higher-Order Multi-Cumulants in Weak Factor Models

Guanglin Huang, Southwestern University of Finance and Economics

14:20 One-Way and Two-Way Matrix Factor Models for Matrix Sequences

Mingjing Chen, Chongqing Technology and Business University

14:40 Structural Dimension Reduction in Bayesian Networks

Yi Sun, Xinjiang University

- 15:00 Two-Stage Gene Selection of Prior Information Fusion and Its Application in Omics Data Mining
融合先验信息的两阶段基因选择及其在组学数据挖掘中的应用
Pei Wang, Henan University
- 15:20 Power-Enhanced Projection Test for High-Dimensional Mean Vectors
Xia Chen, Shaanxi Normal University

July 13, 16:00-18:05

Invited Session IS048: Recent Advances in Deep Learning Theory (深度学习理论最新进展)

- Room: Yulan Hall (1st Floor)
Chair: Yuling Jiao, Wuhan University
Organizer: Huazhen Lin, Southwestern University of Finance and Economics
- 16:00 Self-Supervised Transfer Learning
Yuling Jiao, Wuhan University
- 16:25 A Statistical Theory of Regularization-Based Continual Learning
Wei Lin, Peking University
- 16:50 Towards a Statistical Understanding of Deep Neural Network: Beyond the Neural Tangent Kernel Theory
Qian Lin, Tsinghua University
- 17:15 Deep Nonlinear Sufficient Dimension Reduction
Zhou Yu, East China Normal University

Invited Session IS082: Trustworthy AI

- Room: A201-202 (2nd Floor)
Chair: Yanqing Zhang, Yunnan University
Organizer: Annie Qu, University of California, Irvine
- 16:00 A Network-Based Decentralization Scheme for Recommender Systems
Xuan Bi, University of Minnesota
- 16:25 Is Knowledge All Large Language Models Needed for Causal Reasoning?
Hengrui Cai, University of California, Irvine
- 16:50 On Tracking Structural Changes in Dynamic Heterogeneous Networks
Junhui Wang, The Chinese University of Hong Kong
- 17:15 PhiBE: A Physics-Informed Bellman Equation for Continuous Time Reinforcement Learning
Yuhua Zhu, University of California, Los Angeles

Invited Session IS021: Foundation Models in Large-Scale Biomedical Studies

- Room: A216-217 (2nd Floor)
Chair: Ting Li, Shanghai University of Finance and Economics
Organizer: Ting Li, Shanghai University of Finance and Economics
- 16:00 RWE-GPT: A Large Scale Pretrained Foundation Model with Negative Control Outcomes for Debiased Real-World Evidence Generation
Yong Chen, University of Pennsylvania
- 16:25 Integrated Analysis and Mining of Large-Scale Biomedical Data
Xueqin Wang, University of Science and Technology of China
- 16:50 Development of A Large Language Model for Electronic Health Record Information Extraction
Sheng Yu, Tsinghua University

Invited Session IS077: Statistical Theory and Learning

- Room: A301-302 (3rd Floor)
Chair: Chuanhai Liu, Purdue University
Organizer: Chinese Society for Probability and Statistics
- 16:00 Enveloped Huber Regression
Le Zhou, Hong Kong Baptist University
- 16:25 Implicit Generative Prior for Bayesian Neural Networks
Xiao Wang, Purdue University
- 16:50 Estimation of Over-Parameterized Models from an Auto-Modeling Perspective
Chuanhai Liu, Purdue University

Invited Session IS027: Innovative Statistical Methods for Heterogeneous Data

- Room: A320-A321 (3rd Floor)
Chair: Jiming Jiang, University of California, Davis
Organizer: Lan Wang, University of Miami
- 16:00 Observed Best Prediction for Small Area Counts
Jiming Jiang, University of California, Davis
- 16:25 Estimation of Low Rank High-Dimensional Multivariate Linear Models for Multi-Response Data
Wenyang Zhang, University of Macau
- 16:50 Minimax Regret Learning for Data with Heterogeneous Sub-populations
Weibin Mo, Purdue University

17:15 BinomialRF: Interpretable Combinatoric Efficiency of Random Forests to Identify Biomarker Interactions
Helen Zhang, University of Arizona

Less Known Genes and Their Unknown Interactions as Highest-Performed Biomarkers for Colorectal Cancer
Zhengjun Zhang, University of Chinese Academy of Sciences

Invited Session IS040: Novel Applications in Biostatistics

Room: A203 (2nd Floor)

Chair: Annie Qu, University of California, Irvine

Organizer: Annie Qu, University of California, Irvine

16:00 Kernel Ordinary Differential Equation
Xiaowu Dai, University of California, Los Angeles

16:25 Estimation of Individualized Combination Treatment Rule
Qi Xu, University of California, Irvine

16:50 Optimal Transport for Latent Integration with an Application to Heterogeneous Neuronal Activity Data
Annie Qu, University of California, Irvine

17:15 Estimating Heritability of Time-to-Event Traits Using Censored Multiple Variance Component Model
Jin Zhou, University of California, Los Angeles

Invited Session IS073: Statistical Interdisciplinary Studies II

Room: A218 (2nd Floor)

Chair: Song Xi Chen, Tsinghua University

Organizer: Song Xi Chen, Tsinghua University

16:00 A New Statistic That Integrates Statistical Significance and Clinical Significance for Assessing the Progression of Pulmonary Nodules
Jing Zhou, Renmin University of China

16:25 Correlation Trilogity of UWF-Based Myopia Prediction: Copula, OU, and Large Model
Catherine Liu, The Hong Kong Polytechnic University

16:50 Powerful, Scalable and Resource-Efficient Meta-Analysis of Rare Variant Associations in Large Whole Genome Sequencing Studies
Zilin Li, Northeast Normal University

17:15 Construction and Application of Crime Prediction Effectiveness Index
犯罪预测效果指数构建与应用
Yaofeng Zhang, Hubei University of Economics

17:40 Towards Precision Oncology Discovery: Four

Invited Session IS087: Data Science and Business Intelligence Statistical Analysis (数据科学与商业智能统计分析)

Room: A303 (3rd Floor)

Chair: Jianping Zhu, Xiamen University

Organizer: Jianping Zhu, Xiamen University

16:00 New Thinking and Development in Data Analysis
数据分析的新思维与新发展
Jianping Zhu, Xiamen University

16:25 From Specific Models to LLMs: Revolutionizing Problem Solving with Generative AI
Jialin Hua, Jiangxi University of Finance and Economics

16:50 Predicting Total Retail Sales of Consumer Goods Based on Web Search Data and Deep Neural Networks
基于网络搜索数据和深度神经网络的社会消费品零售总额预测研究
Kaiming Cheng, Zhejiang Gongshang University

17:15 A Study on Empowering High Quality Development and Efficiency Improvement Path of Industrial Industry with New Productivity: Empirical Analysis Based on Random Forest Algorithm
新质生产力赋能工业行业高质量发展及其效率提升路径研究—基于随机森林算法的实证分析
Min Zhang, Chongqing Technology and Business University

Invited Session IS013: Design and Modeling for Computer Experiments (计算机试验的设计与建模)

Room: A305 (3rd Floor)

Chair: Mingyao Ai, Peking University

Organizer: Niansheng Tang, Yunnan University

16:00 Robust Design for Order-of-Addition Experiments
Jianfeng Yang, Nankai University

16:25 Physical Parameter Calibration
Shifeng Xiong, Chinese Academy of Sciences

- 16:50 Adaptive Grid Designs for Classifying Monotonic Binary Computer Simulations
Xu He, Chinese Academy of Sciences
- 17:15 Construction of Orthogonal-Maxpro Latin Hypercube Designs
Yaping Wang, East China Normal University

Invited Session IS001: Advanced Estimation Methods and Machine Learning

- Room: A306 (3rd Floor)
Chair: Xingqiu Zhao, The Hong Kong Polytechnic University
Organizer: Xingqiu Zhao, The Hong Kong Polytechnic University
- 16:00 General Pairwise Comparison Models
Ruijian Han, The Hong Kong Polytechnic University
- 16:25 RMA: Ranking Based on Model Averaging
Baihua He, University of Science and Technology of China
- 16:50 Demographic Parity-Aware Individualized Treatment Rules
Wen Su, City University of Hong Kong
- 17:15 An Optimal Two-Step Estimation Approach for Two-Phase Studies
Kin Yau Wong, The Hong Kong Polytechnic University

Invited Session IS003: Advancements in Statistical Inference of Point Processes and Their Applications

- Room: A307 (3rd Floor)
Chair: Jiancang Zhuang, The Institute of Statistical Mathematics, Japan
Organizer: Jiancang Zhuang, The Institute of Statistical Mathematics, Japan
- 16:00 Filtering and Estimating the Renewal Hawkes Process
Jiancang Zhuang, The Institute of Statistical Mathematics, Japan
- 16:25 Nonparametric Second-Order Estimation for Spatiotemporal Point Patterns
Jialing Liu, Sun Yat-sen University
- 16:50 Fitting Multivariate Hawkes Process with Interval Count Data
Feng Chen, The University of New South Wales
- 17:15 Bayesian Nonparametric Learning for Point Processes with Spatial Homogeneity: A

- Spatial Analysis of NBA Shot Locations
Guanyu Hu, University of Texas Health Science Center at Houston

Invited Session IS007: Asymptotic Theory and High-Dimensional Statistics

- Room: A308 (3rd Floor)
Chair: Yuta Koike, The University of Tokyo
Organizer: Takeru Matsuda, The University of Tokyo & RIKEN Center for Brain Science
- 16:00 High-Dimensional Bootstrap and Asymptotic Expansion
Yuta Koike, The University of Tokyo
- 16:25 Central Limit Theorem in Exponential Graphs
指数图中心极限定理
Songhao Liu, Southern University of Science and Technology
- 16:50 Large Dimensional Robust Spiked Covariance Matrix and Order Estimation
Mengxi Yi, Beijing Normal University
- 17:15 Double Shrinkage Priors for a Normal Mean Matrix
Takeru Matsuda, The University of Tokyo & RIKEN Center for Brain Science

Invited Session IS092: Statistical Network Analysis and Its Application

- Room: A315 (3rd Floor)
Chair: Jingnan Zhang, University of Science and Technology of China
Organizer: Jialiang Li, National University of Singapore
- 16:00 Modularity Based Methods for Network Data
Yuguo Chen, University of Illinois Urbana-Champaign
- 16:25 Distribution-Free Matrix Prediction under Arbitrary Missing Pattern
Yuan Zhang, The Ohio State University
- 16:50 ReHLine: Regularized Composite ReLU-ReHU Loss Minimization with Linear Computation and Linear Convergence
Ben Dai, The Chinese University of Hong Kong
- 17:15 Efficient Estimation for Longitudinal Networks via Adaptive Merging
Haoran Zhang, Southern University of Science and Technology

Invited Session IS009: Complex Data, Geometry and

Related Fields

Room: A316 (3rd Floor)

Chair: Zhigang Yao, National University of Singapore

Organizer: Zhigang Yao, National University of Singapore

16:00 Regression Analysis of Neuroimaging Data Leveraging Deep Neural Networks

Jian Kang, University of Michigan

16:25 Interpretable Super-Resolution Dimension Reduction of Spatial Transcriptomics Data by DeepFuseNMF

Ruibin Xi, Peking University

16:50 Algorithms for Ridge Estimation with Convergence Guarantees

Wanli Qiao, George Mason University

17:15 Manifold Fitting: The Next Frontier in Single-Cell RNA Clustering and Its Potential Applications

Bingjie Li, National University of Singapore

Invited Session IS067: Statistical Analysis with Complex Data

Room: A317 (3rd Floor)

Chair: Qihua Wang, Chinese Academy of Sciences

Organizer: Qihua Wang, Chinese Academy of Sciences

16:00 Local Clustering for Functional Data

Qingzhao Zhang, Xiamen University

16:25 Gaussian Approximation for Thresholding Statistics

Yumou Qiu, Peking University

16:50 Distribution-Free Prediction Intervals under Covariate Shift, with an Application to Causal Inference

Yukun Liu, East China Normal University

17:15 Knockoff-Based Statistics for the Identification of Putative Causal Genes in Genetic Studies

Shiyang Ma, Shanghai Jiao Tong University

Invited Session IS102: Statistical Measurement, Evaluation and Decision (统计测度、评价与决策)

Room: A318 (3rd Floor)

Chair: Weihua Su, Zhejiang Gongshang University

Organizer: Weihua Su, Zhejiang Gongshang University

16:00 Interval-Valued Functional Clustering Based on the Wasserstein Distance Considering the Interval Distribution Information with Application to Air Quality Data

Lirong Sun, Zhejiang Gongshang University

16:25 Research on the Measurement of Income Distribution of Data Value Chain Balance Fairness and Efficiency

Wenjin Zuo, Shanghai University of Finance and Economics Zhejiang College

16:50 Multidimensional Cloud Model Based Assessment and Its Application to the Risk of Supply Chain Financial Companies

Jinming Zhou, Anhui Polytechnic University

17:15 Integrated Optimization of Kernel Correlation Filtering Algorithm Based on the Benefit of Doubt Method

Sibo Chen, Anhui Polytechnic University

Contributed Session CS021: Matrix Theory and Sufficient Dimension Reduction

Room: A322 (3rd Floor)

Chair: Binghui Liu, Northeast Normal University

16:00 Multi Angle Subgroup Ensemble Learning Based on Tensor Decomposition
基于张量分解的多角度亚组集成学习

Xun Zhao, Southwestern University of Finance and Economics

16:20 Dynamic Matrix Recovery
动态矩阵恢复

Ziyuan Chen, Peking University

16:40 An Improved Principal Hessian Directions Method for Dimension Reduction

Zheng Li, Northeast Normal University

17:00 A Novel Method for Synthetic Controls with Interference

Peiyu He, Peking University

17:20 Identifying Causal Effects Using Instrumental Variables From the Auxiliary Dataset

Kang Shuai, Peking University

Contributed Session CS022: Asymptotic Theory in Probability and Statistics

Room: B601 (3rd Floor)

Chair: Pengkun Yang, Tsinghua University

16:00 Stochastic Dynamical Analysis for Renewable Power System Excited by Multiplicative Fractional Gaussian Noise Based on Graph Neural Network

Huifei Li, North Minzu University

16:20 Limit Theorems for Continuous State Nonhomogeneous Markov Chain

- Chengjun Ding*, Yunnan University
- 16:40 Green Matching: An Efficient Parameter Estimation Method for Complex Dynamical Systems
格林匹配: 复杂动力系统的一种高效参数估计方法
Guoyu Zhang, Peking University
- 17:00 Stratified Permutational Berry-Esseen Bounds
Pengfei Tian, Tsinghua University
- 17:20 Using Synthetic Data to Regularize Maximum Likelihood Estimation
Weihao Li, National University of Singapore

Contributed Session CS023: Recent Advances in Graphical Models and Image

Room: B603 (3rd Floor)

Chair: Xiaochao Xia, Chongqing University

- 16:00 Empowering Mental Health Insights: The Synergy of Knowledge Graphs and Large Language Models
Shan Gao, Yunnan University
- 16:20 Total Variation Regularized Multi-Matrices Weighted Schatten P-Norm Minimization for Image Denoising
Zuoxun Tan, Chongqing University
- 16:40 Applying a Collaborative Learning Framework Based on Pyramid Shaped Visual Transformers for Uncertainty Information in Fundus Image Classification, Segmentation, and Object Detection Tasks 将基于金字塔型视觉变换器的不确定性信息共学习框架用于眼底图像的分类, 分割以及目标检测任务
Xingshu Chen, Sun Yat-sen University
- 17:00 Aggregate Spectral Clustering for Multi-Layer Popularity Adjusted Block Model
Jun Dai, University of Science and Technology of China
- 17:20 Information-Theoretic Thresholds for the Alignments of Partially Correlated Graphs
Dong Huang, Tsinghua University

Contributed Session CS024: Statistical Modeling for Complex Data

Room: B606 (3rd Floor)

Chair: Tuo Liu, Xiamen University

- 16:00 Fast and Stable Estimation for Structural Break Models with Endogenous Regressors
Changwei Zhao, Xiamen University

- 16:20 Simultaneous Outlier Detection and Prediction for Kriging with True Identification
Youjie Zeng, University of Science and Technology of China
- 16:40 Time-Varying Mediation Analysis for Incomplete Data with Application to DNA Methylation Study for PTSD
Kecheng Wei, Fudan University
- 17:00 Time-Varying Home Advantage in the English Premier League: A Causal Discovery Method for Non-Stationary Causal Processes
Minhao Qi, Shanghai University of Finance and Economics
- 17:20 A Semiparametric Gaussian Mixture Model for Chest CT-based 3D Blood Vessel Reconstruction
Qianhan Zeng, Peking University

July 14, 8:30-10:10

Invited Session IS023: Deep Generative Models

Room: Yulan Hall (1st Floor)

Chair: Jian Huang, The Hong Kong Polytechnic University

Organizer: Jian Huang, The Hong Kong Polytechnic University

- 8:30 Efficient Training Algorithms for Neural Networks
神经网络的高效训练算法
Jianfei Chen, Tsinghua University
- 8:55 Conditional Stochastic Interpolation for Generative Learning
Guohao Shen, The Hong Kong Polytechnic University
- 9:20 Score Identity Distillation: Exponentially Fast Distillation of Pretrained Diffusion Models for One-Step Generation
Mingyuan Zhou, University of Texas, Austin
- 9:45 Gaussian Denoising for Generative Learning
Yuan Gao, The Hong Kong Polytechnic University

Invited Session IS096: New Statistical and Machine Learning Methods for Complex Data

Room: A201-202 (2nd Floor)

Chair: Depeng Jiang, University of Manitoba

Organizer: Depeng Jiang, University of Manitoba

- 8:30 A Parsimonious Joint Model of Survival Outcomes and Time-Varying Biomarkers

Zhiyang Zhou, University of Wisconsin-Milwaukee

8:55 A Bayesian Approach to Response Optimization on Data with Multistratum Structure

Po Yang, University of Manitoba

9:20 Machine Learning-Driven Data Integration for Precision Medicine

Pingzhao Hu, Western University

9:45 Improved Joint Modeling of Longitudinal and Survival Data Using a Poisson Regression Approach

Depeng Jiang, University of Manitoba

Invited Session IS024: High-Dimensional Statistical Learning

Room: A216-217 (2nd Floor)

Chair: Changliang Zou, Nankai University

Organizer: Chinese Society for Probability and Statistics

8:30 Kernel Variable Importance Measure

Lihua Peng, The University of Melbourne

8:55 Distribution-Free Prediction Bands for Clustered Data with Missing Responses

Yanlin Tang, East China Normal University

9:20 Integrative Nearest Neighbor Classifiers for Block-Missing Multi-Modal Data

Guan Yu, University of Pittsburgh

9:45 Residual Importance Weighted Transfer Learning for High-Dimensional Linear Regression

Junlong Zhao, Beijing Normal University

Invited Session IS019: Financial Machine Learning

Room: A301-302 (3rd Floor)

Chair: Xinghua Zheng, The Hong Kong University of Science and Technology

Organizer: Xinghua Zheng, The Hong Kong University of Science and Technology

8:30 Corporate Risk Disclosures, Stock Price Comovement, and Expected Returns

Hai Feng You, The Hong Kong University of Science and Technology

8:55 Mitigating Estimation Risk in High Dimensional Portfolio Selection

Ming Yuan, Columbia University

9:20 Learning the Stochastic Discount Factor

Xinghua Zheng, The Hong Kong University of Science and Technology

Invited Session IS008: Causal Inference in Observational Studies

Room: A320-A321 (3rd Floor)

Chair: Wang Miao, Peking University

Organizer: Chinese Society for Probability and Statistics

8:30 Debiased Estimating Equation Method for Versatile and Efficient Mendelian Randomization Using Large Numbers of Correlated and Invalid SNPs with Weak Effects

Ruoyu Wang, Harvard University

8:55 Policy Learning with Distributional Welfare

Yifan Cui, Zhejiang University

9:20 The Promises of Parallel Outcomes

Linbo Wang, University of Toronto

9:45 Few-Shot Multi-Task Learning with MetaSP

Lin Liu, Shanghai Jiao Tong University

Invited Session IS002: Advancements in Integrative Statistical Inference

Room: A203 (2nd Floor)

Chair: Wenguang Sun, Zhejiang University

Organizer: Wenguang Sun, Zhejiang University

8:30 Guided Adversarial Robust Transfer Learning with Source Mixing

Zijian Guo, Rutgers University

8:55 Aggregating Dependent Signals with Heavy-Tailed Combination Tests

Jingshu Wang, University of Chicago

9:20 An Integrative Multi-Context Mendelian Randomization Method for Identifying Risk Genes Across Human Tissues

Fan Yang, Tsinghua University

Invited Session IS047: Recent Advances in Data Integration in Survey Sampling

Room: A218 (2nd Floor)

Chair: Jae-Kwang Kim, Iowa State University

Organizer: Jae-Kwang Kim, Iowa State University

8:30 Issues with Inverse Probability Weighting and Model-Based Prediction for Non-probability Samples

Changbao Wu, University of Waterloo

8:55 Combining Data from Mobile Network Operators and Others for Official Statistics

Li-Chun Zhang, University of Southampton

9:20 A New Class of Robust Linear Estimators

Zhonglei Wang, Xiamen University

9:45 Inductive Matrix Completion through Transfer

Learning
Hengfang Wang, Fujian Normal University

Invited Session IS049: Recent Advances in Efficient and Fair Machine Learning

Room: A303 (3rd Floor)

Chair: Anru Zhang, Duke University

Organizer: Anru Zhang, Duke University

8:30 Network-Guided Covariates for Community Detection
Wanjie Wang, National University of Singapore

8:55 Data-Driven Minimax Optimization with Expectation Constraints
Xudong Li, Fudan University

9:20 Fair Risk Control: A Generalized Framework for Calibrating Multi-group Fairness Risks
Linjun Zhang, Rutgers University

9:45 Optimal and Efficient Thompson Sampling Algorithms for Bandits and Reinforcement Learning
Pan Xu, Duke University

Invited Session IS057: Recent Advances in Statistical Network Analysis - Theory and Methodology

Room: A305 (3rd Floor)

Chair: Xiaoyue Maggie Niu, The Pennsylvania State University

Organizer: Ji Zhu, University of Michigan

8:30 Hypothesis Test of General Network Models
 一般网络模型的假设检验
Jianwei Hu, Central China Normal University

8:55 Transfer Learning in High-Dimensional Network Regression Model
Danyang Huang, Renmin University of China

9:20 Community Detection in Weighted Networks
Binghui Liu, Northeast Normal University

9:45 Community Detection with the Heterogeneous Block Covariance Model
Yunpeng Zhao, Colorado State University

Invited Session IS017: Financial and Macroeconometrics

Room: A306 (3rd Floor)

Chair: Zhijie Xiao, Boston College

Organizer: Zhijie Xiao, Boston College

8:30 Panel Quantile GARCH Models under Homogeneity
Qianqian Zhu, Shanghai University of Finance

and Economics

8:55 Sign-Based Tests for Structural Changes in Multivariate Volatility

Jilin Wu, Xiamen University

9:20 Robust M-Estimation for Additive Single-Index Cointegrating Time Series Models

Chaohua Dong, Zhongnan University of Economics and Law

9:45 A Consistent Specification Test for Expectile Models

Xiaojun Song, Peking University

Invited Session IS020: Foundation Models in Modern Industries

Room: A307 (3rd Floor)

Chair: Ting Li, Shanghai University of Finance and Economics

Organizer: Jinhan Xie, University of Alberta

8:30 Current Status and Prospects of Statistics and AI in Industry

统计学、AI 在业界的现状和展望

Kaixian Yu, Insilicom

8:55 Applications and Developments of Artificial Intelligence in Medical Imaging and Clinical Practice

人工智能在医学影像及临床中的应用与发展

Xiaohuan Cao, ShanghaiTech University

9:20 AI for Drug Discovery - Virtual Screening and Foundation Model

Zheng Wang, Alibaba

Invited Session IS029: Interface of Functional Data Analysis and Dynamic Models

Room: A308 (3rd Floor)

Chair: Jiguo Cao, Simon Fraser University

Organizer: Jiguo Cao, Simon Fraser University

8:30 Privacy-Preserving Community Detection for Locally Distributed Multiple Networks

Shujie Ma, University of California, Riverside

8:55 Dynamic Models Augmented by Hierarchical Data

Le Bao, The Pennsylvania State University

9:20 An SPDE Approach to Variational Inference for Log-Gaussian Cox Process

Nan Zhang, Fudan University

Invited Session IS033: Modeling and Statistical Inference

of Medical Big Data

Room: A315 (3rd Floor)

Chair: Xiuhua Guo, Capital Medical University

Organizer: Chinese Society for Probability and Statistics

8:30 A Distributed Ensemble Algorithm for Learning Causal Bayesian Network Structure from Large-Scale Data

Fuzhong Xue, Shandong University

8:55 Multidimensional Aging Prediction Model Based on Proteomics

基于蛋白质组学的多维度衰老预测模型研究

Yongyue Wei, Peking University

9:20 Study on Causal Association between Abnormal Renal Function Indicators and Carotid Plaque Formation

肾功能指标异常与颈动脉斑块发生的因果关联研究

Lixin Tao, Capital Medical University

9:45 Mid-to Late-Life Trajectories of Depressive Symptoms and Risk of Cardiovascular Disease Mortality: A Joint Latent Class Mixed Models

Haibin Li, Beijing Chaoyang Hospital of Capital Medical University

Contributed Session CS002: Recent Advances in Deep Learning

Room: A316 (3rd Floor)

Chair: Feifei Wang, Renmin University of China

8:30 Auxiliary Learning and Its Statistical Understanding

Hanchao Yan, Renmin University of China

8:50 A Multi-Feature Fusion Deep Learning Prediction Method for Production of Tight Gas Reservoirs

Chunlan Zhao, Southwest Petroleum University

9:10 An Analysis of Switchback Designs in Reinforcement Learning

Qianglin Wen, Yunnan University

9:30 Unlocking the Power of AI: Deep Learning of Volatility is Indispensable

Wenxuan Ma, Renmin University of China

9:50 Production Prediction of Tight Gas Reservoirs Based on Deep Learning BWO-TFT Model

Shaodan Hou, Southwest Petroleum University

Contributed Session CS025: Complex Data Modeling

Room: A317 (3rd Floor)

Chair: Zeng Li, Southern University of Science and Technology

8:30 Calibration for Computer Models with Time-Varying Parameter

Yang Sun, Peking University

8:50 Large-Scale Metric Objects Filtering for Binary Classification

Shuaida He, Southern University of Science and Technology

9:10 Penalized Exponentially Tilted Likelihood for Growing Dimensional Models with MAR Missing Data

Xiaoming Sha, Yunnan University

9:30 A Novel Integration Method for Single Cell Transcriptomics and Proteomics Data Based on Transformer

基于 Transformer 的单细胞转录组学与蛋白质组学数据新型整合方法

Jiankang Xiong, Chinese Academy of Sciences

9:50 Estimation of Spatial Weight Matrix in Spatial Error Autocorrelation Models with Non-zero Autocorrelation Random Perturbations

具有非零自协方差随机扰动的空间误差自相关模型中的空间权重矩阵的估计

Zhaohui Man, Ningxia University

Contributed Session CS026: Change-Points Detection

Room: A318 (3rd Floor)

Chair: Decai Liang, Nankai University

8:30 Filtrated Common Functional Principal Component Analysis of Multi-Group Functional Data

Shuhao Jiao, City University of Hong Kong

8:50 Change-Points Detection and Support Recovery for Spatiotemporal Functional Data

Decai Liang, Nankai University

9:10 Moment Selection and Generalized Empirical Likelihood Estimation in High-Dimensional Unconditional Moment Conditions

Zhihuang Yang, Yunnan University

9:30 On Robust Estimation of Hidden Semi-Markov Regime-Switching Models

Shanshan Qin, Tianjin University of Finance and Economics

9:50 Interaction Tests with Covariate-Adaptive

Randomization
Likun Zhang, Renmin University of China

Contributed Session CS027: Nonparametric Statistical Inference

Room: A322 (3rd Floor)

Chair: Jiyuan Tu, Shanghai University of Finance and Economics

- 8:30 Nonparametric Estimation of Regression Function and Error Covariance Function with Unknown Correlation Structure
Sisheng Liu, Hunan Normal University
- 8:50 Complex Representation Matrix of Third-Order Quaternion Tensors with Application to Video Inpainting
Fengsheng Wu, Yunnan University
- 9:10 Generalized Rank Regression with Multiplier Bootstrap
Jiyuan Tu, Shanghai University of Finance and Economics
- 9:30 Bayesian Generalized Method of Moments Inference for Clustered Samples with Missing Values
Gen Ye, Yunnan University
- 9:50 Bayesian INLA estimation and Application of Generalized VCSA Model
 广义 VCSA 模型的 Bayesian-INLA 估计及应用
Lijun Meng, Xinjiang University of Finance & Economics

Contributed Session CS028: Recent Advances in Large-Scale Data

Room: B601 (3rd Floor)

Chair: Shaoping Jiang, Yunnan Minzu University

- 8:30 Moment-Assisted Subsampling Method for Maximum Likelihood Estimator with Large-Scale Data
Miaomiao Su, Beijing University of Posts and Telecommunications
- 8:50 Subsampling and Jackknifing: A Practically Convenient Solution for Large Data Analysis with Limited Computational Resources
Shuyuan Wu, Shanghai University of Finance and Economics
- 9:10 A Case Study on the Share Holder Network Effect of Stock Market Data: An SARMA Approach

Rong Zhang, Yunnan University

- 9:30 Study on Fractional Random Drug-Resistant Tuberculosis Kinetic Model
 分数阶随机耐药结核病动力学模型研究
Shaoping Jiang, Yunnan Minzu University
- 9:50 Identification and Estimation of the Bi-Directional MR with Some Invalid Instruments
Zhen Yao, Beijing Technology and Business University

Contributed Session CS029: Interdisciplinary and Applied Research: Statistical Analysis on Medical and Economic Data

Room: B603 (3rd Floor)

Chair: Jia Liu, Inner Mongolia Finance and Economics College

- 8:30 Dual Cox Model Theory and Its Application in Oncology Research
 对偶 Cox 模型理论及其在肿瘤学研究的应用
Haojin Zhou, Xi'an Jiaotong-Liverpool University
- 8:50 A Study on the Light Variation of Active Galactic Nuclei Based on Probability Theory and Statistical Methods
 基于概率论统计方法对活动星系核光变的研究
Haiyun Zhang, Yunnan University
- 9:10 Static and Dynamic Connectivity Patterns of White Matter Functional Networks in the Adult Life Cycle
 成人生命周期中白质功能网络的静态和动态连通模式
Zeqiang Linli, Guangdong University of Foreign Studies
- 9:30 The Direct Impact and Spatial Effect of Digital Economy Driving Rural Residents' Service Consumption under the Background of Rural Revitalization
 乡村振兴背景下数字经济驱动农村居民服务消费的直接影响和空间效应
Jia Liu, Inner Mongolia Finance and Economics College
- 9:50 Inference for ARMA Time Series with Mildly Varying Trend
Yinghuai Yi, Tsinghua University

Contributed Session CS030: Statistical Modeling and Its

Applications

Room: B606 (3rd Floor)

Chair: Bing Guo, Sichuan University

- 8:30 MLEce: Statistical Inference for Asymptotically Efficient Closed-Form Estimators in R
Jun Zhao, Ningbo University
- 8:50 Economic Forecasts Using Many Noises
Zhentao Shi, The Chinese University of Hong Kong
- 9:10 Standard Representation of Order of Addition Design and Rapid Isomorphism Comparison
Bing Guo, Sichuan University
- 9:30 Survival Mixed Membership Block Model
Fangda Song, The Chinese University of Hong Kong (Shenzhen)
- 9:50 Cox Proportional Hazards Regression with Compositional Covariates
协变量含成分变量时 Cox 比例风险回归模型的统计推断
Xiaobo Wang, Yunnan University

July 14, 10:30-12:10

Invited Session IS038: New Statistical Methods for Complex Imaging and Genetics Data

Room: Yulan Hall (1st Floor)

Chair: Xi Luo, University of Texas Health Science Center at Houston

Organizer: Fang Yao, Peking University

- 10:30 Cortical Surface Alignment Based on Continuous Structural Connectivity
Zhengwu Zhang, University of North Carolina, Chapel Hill
- 10:55 TCRpred: Incorporating T-Cell Receptor Repertoire for Clinical Outcome Prediction
Qianchuan He, Fred Hutchinson Cancer Center
- 11:20 Brain Aging Chart for Understanding Complex Aging Process via Multimodal Data Integration
Haochang Shou, University of Pennsylvania
- 11:45 LP-Micro: Explainable Longitudinal Prediction Using Machine Learning Methods on Disease Outcomes from Microbiome Data
Di Wu, University of North Carolina, Chapel Hill

Invited Session IS035: Network Analysis and Cluster Analysis

Room: A201-202 (2nd Floor)

Chair: Anderson Zhang, University of Pennsylvania

Organizer: Anderson Zhang, University of Pennsylvania

- 10:30 Multi-Modal Data Integration via Orchestrated Approximate Message Passing
Zongming Ma, Yale University
- 10:55 Eigenvectors Fluctuations and Limit Results for Graphon Estimation
Minh Tang, North Carolina State University
- 11:20 Pseudo-labeling for Kernel Ridge Regression under Covariate Shift
Kaizheng Wang, Columbia University

Invited Session IS014: Dynamic and Reinforcement Learning

Room: A216-217 (2nd Floor)

Chair: Yaguang Li, University of Science and Technology of China

Organizer: Jialiang Li, National University of Singapore

- 10:30 Multi-Objective Tree-Based Reinforcement Learning for Estimating Tolerant Dynamic Treatment Regimes
Lu Wang, University of Michigan
- 10:55 Interim Analysis in Sequential Multiple Assignment Randomized Trials for Survival Outcomes
Yu Cheng, University of Pittsburgh
- 11:20 Functional Linear Operator Quantile Regression for Sparse Longitudinal Data
Xingcai Zhou, Nanjing Audit University

Invited Session IS043: Panel Data and Microeconometrics

Room: A301-302 (3rd Floor)

Chair: Zhijie Xiao, Boston College

Organizer: Zhijie Xiao, Boston College

- 10:30 On the Inconsistency of Cluster-Robust Inference and How Subsampling Can Fix It
Yulong Wang, Syracuse University
- 10:55 Three-Dimensional Heterogeneous Panel Data Models with Multi-Level Interactive Fixed Effects
Xun Lu, The Chinese University of Hong Kong
- 11:20 DeepMed: Semiparametric Causal Mediation Analysis with Debiased Deep Learning
Zhonghua Liu, Columbia University
- 11:45 Smoothed Quantile Regression for Panel Data

with Mixed Group Structure
Haiqi Li, Hunan University

Invited Session IS034: Modern Statistical Methods for Causal Inference

Room: A320-A321 (3rd Floor)

Chair: Wang Miao, Peking University

Organizer: Jae-Kwang Kim, Iowa State University

- 10:30 Multiply Robust off-Policy Evaluation and Learning under Truncation by Death
Shu Yang, North Carolina State University
- 10:55 Combining Probability and Non-probability Samples Using Semi-parametric Quantile Regression and a Non-parametric Estimator of the Participation Probability
Cindy Yu, Iowa State University
- 11:20 Discovery and Inference of Possibly Bi-directional Causal Relationships with Invalid Instrumental Variables
Wei Li, Renmin University of China
- 11:45 Generalized Entropy Calibration for Doubly Robust Estimation under Missing at Random
Jae-Kwang Kim, Iowa State University

Invited Session IS018: Financial Big Data

Room: A203 (2nd Floor)

Chair: Xinghua Zheng, The Hong Kong University of Science and Technology

Organizer: Xinghua Zheng, The Hong Kong University of Science and Technology

- 10:30 The Fine Structure of Volatility Dynamics
Carsten Chong, The Hong Kong University of Science and Technology
- 10:55 Estimating the Efficient Frontier
Yingying Li, The Hong Kong University of Science and Technology
- 11:20 Can Machines Learn Weak Signals?
Dacheng Xiu, University of Chicago
- 11:45 Estimation of Out-of-Sample Sharpe Ratio for High Dimensional Portfolio Optimization
Weicheng Wang, The University of Hong Kong

Invited Session IS069: Statistical Inference Beyond Euclidean Spaces

Room: A218 (2nd Floor)

Chair: Xueqin Wang, University of Science and Technology of China

Organizer: Xueqin Wang, University of Science and Technology of China

- 10:30 Multiple Sample Studentized Tests: Random-Lifter Approach
Rouling Wang, East China Normal University
- 10:55 Variational Bayesian Logistic Tensor Regression with Application in Image Recognition
Yanqing Zhang, Yunnan University
- 11:20 Functional Clustering for Longitudinal Associations between Social Determinants of Health and Stroke Mortality in the US
Hui Huang, Renmin University of China
- 11:45 Multiple Threshold Detection and Subgroup Identification
Baisuo Jin, University of Science and Technology of China

Invited Session IS041: Omics and Big Data in Medical Research (组学与医学大数据)

Room: A303 (3rd Floor)

Chair: Feng Chen, Nanjing Medical University

Organizer: Feng Chen, Nanjing Medical University

- 10:30 Deconvoluting Cell State Distribution from Bulk RNA-Seq Data
Jian Yang, Westlake University
- 10:55 Conditional Transcriptome-Wide Association Study for Fine-Mapping Candidate Causal Genes
Zhongshang Yuan, Shandong University
- 11:20 Statistical Inference on Road Traffic Injury Based on the Media Data
 基于媒体报道的道路交通伤害伤亡数据的统计推断
Guoqing Hu, Central South University
- 11:45 A Study of Confounder Adjusting Methods in ITE Estimation Based on CF under High Dimensions
Yang Zhao, Nanjing Medical University

Invited Session IS042: Optimality Consideration in Modern Statistical Inference

Room: A305 (3rd Floor)

Chair: Arlene Kim, Korea University

Organizer: Arlene Kim, Korea University

- 10:30 Residual Permutation Test for High-Dimensional Regression Coefficient Testing
Tengyao Wang, London School of Economics and Political Science

- 10:55 Inference for Changing Periodicity, Smooth Trend and Covariate Effects in Nonstationary Time Series
Lucy Xia, The Hong Kong University of Science and Technology
- 11:20 Community Extraction of Network Data under Stochastic Block Models
Danning Li, Northeast Normal University

Invited Session IS061: Recent Developments in Conformal Inference and Causal Inference

- Room: A306 (3rd Floor)
Chair: Wenguang Sun, Zhejiang University
Organizer: Wenguang Sun, Zhejiang University
- 10:30 An Adaptive Null Proportion Estimator for False Discovery Rate Control
Zijun Gao, University of Southern California
- 10:55 Conformal Inference, Covariate Shift, and Debiased Two-Sample U-Statistics
Jing Lei, Carnegie Mellon University
- 11:20 False Discovery Rate Control for Structured Multiple Testing: Asymmetric Rules and Conformal Q-Values
Zinan Zhao, Zhejiang University
- 11:45 Confidence on the Focal: Conformal Prediction with Selection-Conditional Coverage
Zhimei Ren, University of Pennsylvania

Invited Session IS039: Nonlinear Probability and Statistics for Machine Learning

- Room: A307 (3rd Floor)
Chair: Zengjing Chen, Shandong University
Organizer: Zengjing Chen, Shandong University
- 10:30 Strategic Statistical Learning
策略统计学习
Xiaodong Yan, Shandong University
- 10:55 Nonlinear Central Limit Theorem for the Gambling Machine Problem
赌博机问题的非线性极限定理
Guodong Zhang, Shandong University
- 11:20 Application of Quantum Technology in Reinforcement Learning
量子技术在强化学习中的应用
Chengzhi Xing, Shandong University
- 11:45 Strong Law of Number and Ergodic Properties under Sublinear Expectation
次线性期望下的强大数定律与遍历性
Yongsheng Song, Chinese Academy of Sciences

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Invited Session IS010: Data Privacy and Statistical Modeling

- Room: A308 (3rd Floor)
Chair: Guogen Shan, University of Florida
Organizer: Zhigang Li, University of Florida
- 10:30 Learning from Vertically Distributed Data across Multiple Sites: An Efficient Privacy-Preserving Algorithm for Cox Proportional Hazards Model with Variable Selection
Samuel Wu, University of Florida
- 10:55 New Composite Score to Detect Disease Progression in Alzheimer's Disease
Guogen Shan, University of Florida
- 11:20 Differentially Private Data Collection with Matrix Masking
Adam Ding, Northeastern University
- 11:45 Joint Modeling in Presence of Informative Censoring on the Retrospective Time Scale with Application to Palliative Care Research
Zhigang Li, University of Florida

Invited Session IS058: Recent Development in Complex Data Analysis

- Room: A315 (3rd Floor)
Chair: Xin He, Shanghai University of Finance and Economics
Organizer: Xingdong Feng, Shanghai University of Finance and Economics
- 10:30 Linear Discriminant Regularized Regression
Xin Bing, University of Toronto
- 10:55 Tracy-Widom Law of Ridge-Regularized F-Matrix and Applications
Haoran Li, Auburn University
- 11:20 Gradient Synchronization for Multivariate Functional Data, with Application to Brain Connectivity
Yaqing Chen, Rutgers University
- 11:45 High-Dimensional Latent Semiparametric Mixture Model for Clustering Large Non-Gaussian Data
Lvou Zhang, Shanghai University of Finance and Economics

Contributed Session CS015: High Dimensional Statistical Inference

- Room: A316 (3rd Floor)

Chair: Feiyu Jiang, Fudan University

10:30 Beyond Detection Boundary: Minimax Deficiency for Two-Sample Mean Tests in High Dimensions

Jingkun Qiu, Peking University

10:50 Mediation Analysis in Longitudinal Study with High-Dimensional Methylation Mediators

Yidan Cui, Shanghai Jiao Tong University

11:10 Estimation and Inference for High-Dimensional Quantile Regression with Knowledge Transfer under Distribution Shift

Ruiqi Bai, Fudan University

11:30 Enhancing High-Dimensional Dynamic Covariance Estimation Model Based on GARCH Family and Comparative Performance Analysis

11:50 *Zhangshuang Sun*, Shanghai University of Engineering Science

Invariance-Based Inference in High-Dimensional Regression with Finite-Sample Guarantees

Wenxuan Guo, University of Chicago

Contributed Session CS031: Advance in Statistical Methods for Large and Complex Data

Room: A317 (3rd Floor)

Chair: Changcheng Li, Dalian University of Technology

10:30 A New Model Free High-Dimensional Variable Selection Method

一种新的免模型高维变量选择方法

Changcheng Li, Dalian University of Technology

10:50 Probabilistic Embedding, Clustering, and Alignment for Integrating Spatial Transcriptomics Data with PRECAST

Wei Liu, Sichuan University

11:10 Local False Discovery Rate Estimation with Competition-Based Procedures for Variable Selection

Xiaoya Sun, Chinese Academy of Sciences

11:30 Placebo Tests for Difference-in-Differences

Qiang Chen, Shandong University

11:50 Tobit Models for Count Time Series

Fukang Zhu, Jilin University

Contributed Session CS032: Complex Data Analysis

Room: A318 (3rd Floor)

Chair: Anmin Tang, Yunnan University

10:30 Bayesian Semiparametric Joint Model of Multivariate Longitudinal and Survival Data with Dependent Censoring

Anmin Tang, Yunnan University

10:50 Construction and Evaluation of Large Language Models for Pediatrics

儿科大语言模型的构建与评估

Ximing Xu, Children's Hospital of Chongqing Medical University

11:10 Improving Cell-Type-Specific Cis-EQTLs Prioritization by Integrating Bulk RNA-Seq and ScRNA-Seq Data

Jiashun Xiao, Shenzhen Research Institute of Big Data

11:30 Gmcode: Graphical Model for Multiple Compositional Vectors in Microbiome Studies

Huaying Fang, Capital Normal University

11:50 Real-Time Inference for Streaming Survival Data from Multiple Heterogeneous Studies with a Cure Fraction

Bo Han, Yunnan University

Contributed Session CS033: Statistical Modeling and Application of Complex Data

Room: A322 (3rd Floor)

Chair: Yuehan Yang, Central University of Finance and Economics

10:30 Integration Problem of Probability and Non Probability Samples Based on Large-Scale Interpolation

基于大规模插补的概率与非概率样本的整合问题

Xiaoning Wang, Communication University of China

10:50 Monitoring and Application of Several Types of Binary Integer Time Series Models

几类二元整数值时间序列模型的监控及其应用

Cong Li, Jilin University

11:10 Equivalence Assessment via the Difference Between Two AUCs in a Matched-Pair Design with Nonignorable Missing Endpoints

Yunqi Zhang, Yunnan University

11:30 Modeling Cluster Dynamics in Panel Data via Time-Varying Mixture Models

Youquan Pei, Shandong University

11:50 Dimension Reduction of High-Dimension

Categorical Data with Two or Multiple Responses Considering Interactions between Responses

Yuehan Yang, Central University of Finance and Economics

Contributed Session CS034: Statistical Applications in Interdisciplinary Research

Room: B601 (3rd Floor)

Chair: Zhenguo Gao, Shanghai Jiao Tong University

10:30 Ensemble LDA via the Modified Cholesky Decomposition

Zhenguo Gao, Shanghai Jiao Tong University

10:50 4D Trajectory Modeling and Prediction Based on Conditional Markov Process

基于条件式马尔可夫过程的4D航迹建模与预测

Yao Rong, Yunnan University

11:10 Signal Plus Noise Models in the Log Proportional Regime: When Does Debiasing Help?

Yicheng Zeng, Shenzhen Research Institute of Big Data

11:30 Riemann Lp Centroid for Estimating Divergence Matrix under Complex Ellipsoidal Distribution

复椭球分布下散度矩阵估计的黎曼 Lp 质心

Mengjiao Tang, Yunnan University
11:50 Innovating Grass Seed Sampling and Analysis with AI and Robotics
Yanming Di, Oregon State University

Contributed Session CS035: Model Averaging/Cross Disciplinary Research in Statistics

Room: B603 (3rd Floor)

Chair: Jing Lv, Southwest University

10:30 Spectrally-Corrected and Regularized LDA for Spiked Model

Hua Li, Chang Chun University.

10:50 Synchronization of Delayed Neural Networks via Intermittent Sampled-Data Control

Ying Yang, Yunnan University

11:10 Robust Probabilistic Principal Component Analysis with Mixture of Exponential Power Distributions

Zhenghui Feng, Harbin Institute of Technology (Shenzhen)

11:30 Evaluating Distortion Between as-Designed and as-Built Geometries from a Superposition

of Resonant Mode Shapes

Qing Li, Iowa State University

11:50 Optimal Conditional Quantile Prediction via Model Averaging of Partially Linear Additive Models

Jing Lv, Southwest University

Contributed Session CS036: Feature Screening and High Dimensional Data

Room: B606 (3rd Floor)

Chair: Wei Liang, Xiamen University

10:30 Feature Screening for Metric Space Valued Responses Based on Fréchet Regression

Bing Tian, Xiamen University

10:50 Stability eBH: A Unified Stability Approach to False Discovery Rate Control

Jiajun Sun, Xiamen University

11:10 Robust Online Control Experiments for Multivariate Tests

Shaohua Xu, Nankai University

11:30 ARTree: A Deep Autoregressive Model for Phylogenetic Inference

Tianyu Xie, Peking University

11:50 Profiled Transfer Learning for High Dimensional Linear Model

Ziqian Lin, Peking University

July 14, 14:00-15:40

Invited Session IS032: Model-Agnostic Statistical Inference

Room: Yulan Hall (1st Floor)

Chair: Lilun Du, City University of Hong Kong

Organizer: Changliang Zou, Nankai University

14:00 Multiple Testing of Linear Forms for Noisy Matrix Completion

Lilun Du, City University of Hong Kong

14:25 CAP: A General Algorithm for Online Selective Conformal Prediction with FCR Control

Yajie Bao, Shanghai Jiao Tong University

14:50 Real-Time Selection under General Constraints via Predictive Inference

Haojie Ren, Shanghai Jiao Tong University

15:15 Algorithm-Agnostic Inference after Change Point Detection

Guanghui Wang, East China Normal University

Invited Session IS089: Statistical Research on the Digital

Economy and Its Impact (数字经济及其影响的统计研究)

Room: A201-202 (2nd Floor)

Chair: Xiuying Ma, Jilin University of Finance and Economics

Organizer: Xiuying Ma, Jilin University of Finance and Economics

14:00 Compilation Methods for Input-Output Tables in the Digital Economy
数字经济投入产出表编制方法

Yafei Wang, Beijing Normal University

14:25 Internet Usage and Economic Resilience of Low-Income Households

互联网使用与低收入群体家庭经济韧性

Gang Peng, Southwestern University of Finance and Economics

14:50 International Progress and Implications of Research on Statistical Measurement of the Digital Economy

数字经济统计测度的国际进展及对中国的启示

Meihui Zhang, Shandong University of Finance and Economics

15:15 Analysis of Industrial Correlation Effect of Digital Economy in Northeast China

东北地区数字经济产业关联效应分析

Guorong Li, Jilin University of Finance and Economics

Invited Session IS046: Recent Advances in Causal Inference

Room: A216-217 (2nd Floor)

Chair: Zijian Guo, Rutgers University

Organizer: Zijian Guo, Rutgers University

14:00 Principled Random Forests: Uncertainty Quantification for Tree Structure Models with Robustness to Stratification Errors

Zhenyu Wang, Rutgers University

14:25 Engression: Extrapolation for Nonlinear Regression?

Xinwei Shen, Swiss Federal Institute of Technology Zurich

14:50 On the Possibility of Doubly-Robust Root-n Inference

Matteo Bonvini, Rutgers University

15:15 Long-Term Causal Inference under Persistent Confounding via Data Combination

Yuhao Wang, Tsinghua University

Invited Session IS093: Mathematical Foundations in AI

Room: A301-302 (3rd Floor)

Chair: Qian Lin, Tsinghua University

Organizer: Qian Lin, Tsinghua University

14:00 Two Phases of Scaling Laws for Nearest Neighbor Classifiers

Pengkun Yang, Tsinghua University

14:25 Accelerated Gradient Algorithms with Adaptive Subspace Search for Instance-Faster Optimization

实例更快的加速梯度下降算法

Cong Fang, Peking University

14:50 Constrained Policy Optimization with Explicit Behavior Density for Offline

Reinforcement Learning

Wenjia Wang, The Hong Kong University of Science and Technology (Guangzhou)

15:15 Understanding the In-context Learning Capabilities of Large Language Models

Yong Liu, Renmin University of China

Invited Session IS059: Recent Developments in Causal Learning (因果学习最新进展)

Room: A320-A321 (3rd Floor)

Chair: Peng Ding, University of California, Berkeley

Organizer: Huazhen Lin, Southwestern University of Finance and Economics

14:00 Principal Stratification with Continuous Post-Treatment Variables: Nonparametric Identification and Semiparametric Estimation

Zhichao Jiang, Sun Yat-sen University

14:25 Extreme-Based Causal Effect Learning (EXCEL) with Unmeasured Light-Tailed Confounding

Wang Miao, Peking University

14:50 Covariate Adjustment in Randomized Experiments with Missing Outcomes and Covariates

Anqi Zhao, Duke University

15:15 Flexible Sensitivity Analysis for Causal Inference in Observational Studies Subject to Unmeasured Confounding

Peng Ding, University of California, Berkeley

Invited Session IS030: Large-Scale Inference and Private Statistical Analysis

Room: A203 (2nd Floor)

Chair: Qihua Wang, Chinese Academy of Sciences

Organizer: Qihua Wang, Chinese Academy of Sciences

- 14:00 A Distribution-Free Empirical Bayes Approach to Multiple Testing with Side Information
Wenguang Sun, Zhejiang University
- 14:25 Evidence Transportation with Aggregate Summary Information
Ying Sheng, Chinese Academy of Sciences
- 14:50 Learning Invariant Representations for Algorithmic Fairness and Domain Generalization with Minimax Optimality
Sai Li, Renmin University of China
- 15:15 Model-Free Variable Importance Testing with Machine Learning Methods
Xu Guo, Beijing Normal University

- 14:25 Growth Curve Mixture Model with Toeplitz Structured Covariance
Yating Pan, Yunnan University of Finance and Economics
- 14:50 Modeling Heat Transfer Properties in an ORC Direct Contact Evaporator Using RBF Neural Network Combined with EMD
Qingtai Xiao, Kunming University of Science and Technology
- 15:15 Joint Mean-Angle Model for Spatial Binary Data
Renwen Luo, BNU-HKBU United International College

Invited Session IS068: Statistical Applications in Behavioral Decision and Behavioral Experiments (统计学在行为决策及行为实验中的应用)

Room: A218 (2nd Floor)

Chair: Lei Shi, Yunnan University of Finance and Economics

Organizer: Lei Shi, Yunnan University of Finance and Economics

- 14:00 The Symbiosis of Prosocial Behavior and Network Groups
亲社会行为与网络群体的共生性
Danyang Jia, Tsinghua University
- 14:25 Inequality Shapes Strategies in the Infinite Repeated Prisoner's Dilemma Games
Xiaogang Li, Yunnan University of Finance and Economics
- 14:50 Research on Traceability of Social Network Communication
社交网络传播溯源研究
Chao Gao, Northwestern Polytechnical University
- 15:15 A New Framework for the Study of Multi-Label Classification
Wenchen Liu, Shanghai Lixin University of Accounting & Finance

Invited Session IS074: Statistical Learning for Complex and Challenging Data

Room: A303 (3rd Floor)

Chair: Haiming Lin, Guangzhou Huashang College

Organizer: Jianxin Pan, Beijing Normal University

- 14:00 Unique Solution and Significance Test of Solution in Factor Analysis

Invited Session IS081: Theory, Method and Application for Major Problems in Statistical Modernization of China

Room: A305 (3rd Floor)

Chair: Yanyun Zhao, Renmin University of China

Organizer: Yanyun Zhao, Renmin University of China

- 14:00 Path Selection for Achieving "One Network" Economic Statistical Accounting from the Source of Methodology, System, and Technology Application
从方法制度与技术应用源头实现经济统计核算“一网统”的路径选择
Xinhong Yang, Statistics Bureau of Guangdong Province
- 14:25 Research on Modernization and Innovation in Cultural and Tourism Statistics
文化和旅游统计现代化发展问题与创新研究
Xiang Li, Beijing Union University
- 14:50 Measurement, Identification and Response Mechanism of China's Economic Growth Risk under High Dimensional Data
高维数据下中国经济增长风险的测度、识别与应对机制
Xiaobin Tang, University of International Business and Economics
- 15:15 Literature Review and Development Prospect of Economic Statistics Papers
经济统计论文文献评析及发展展望
Jingping Li, Renmin University of China

Invited Session IS084: Statistical Modeling and Inference of High-Dimensional Complex Data (高维复杂数据的统

计建模与推断)

Room: A306 (3rd Floor)

Chair: Qianqian Zhu, Shanghai University of Finance and Economics

Organizer: Xingdong Feng, Shanghai University of Finance and Economics

14:00 High-Dimensional Covariance Matrix under Dynamic Volatility Models: Asymptotics and Shrinkage Estimation

Yi Ding, University of Macau

14:25 Robust Estimation of Number of Factors in High Dimensional Factor Modeling via Spearman's Rank Correlation Matrix

Zeng Li, Southern University of Science and Technology

14:50 An Efficient Multivariate Volatility Model for Many Assets

Wenyu Li, The University of Hong Kong

15:15 Online Change-Point Detection for Matrix-Valued Time Series with Latent TwoWay Factor Structure

Long Yu, Shanghai University of Finance and Economics

Contributed Session CS005: Recent Advances in Bayesian Analysis

Room: A307 (3rd Floor)

Chair: Huiqiong Li, Yunnan University

14:00 Variational Bayesian Approach for Analyzing Interval-Censored Data under the Proportional Hazards Model

Wenting Liu, Yunnan University

14:20 Bayesian Analysis of Partial Functional Linear Additive Regression Model for Censored Data Based on Heavy-Tailed Distributions

Zhexin Lu, Changchun University of Technology

14:40 Bayesian Regression Analysis for Elliptical Dependent Variables

Yan Yu, Southern University of Science and Technology

15:00 Emotions Heard: Unveiling the Influence of Broadcasters' Emotional Dynamics and Gender on Live Streaming Conversion

Ziyu Xiong, Peking University

15:20 Bayesian Analysis of Nonlinear Structured Latent Factor Models Using a Gaussian Process Prior

Yimang Zhang, Southern University of Science and Technology

Contributed Session CS037: Recent Advances in Quantile Regression

Room: A308 (3rd Floor)

Chair: Xiaohui Liu, Jiangxi University of Finance and Economics

14:00 Model Averaging Based Semiparametric Modelling for Conditional Quantile Prediction

Chaohui Guo, Chong Qing Normal University

14:20 Bootstrapping the Double-Weighted Predictability Test for Predictive Quantile Regression

Xiaohui Liu, Jiangxi University of Finance and Economics

14:40 Recent Developments of A General Minimum Lower-Order Confounding

Criterion

Zhiming Li, Xinjiang University

15:00 Enhancing the Power of OOD Detection via Sample-Aware Model Selection

Falong Tan, Hunan University

15:20 Unconditional Quantile Regression for Streaming Data Sets

Rong Jiang, Shanghai Polytechnic University

Contributed Session CS038: Advance in Statistical Methods for Complex Data

Room: A315 (3rd Floor)

Chair: Peng Sun, Shanghai University of Engineering Science

14:00 On the Target-Kernel Alignment: A Unified Analysis with Kernel Complexity

Chao Wang, Shanghai University of Finance and Economics

14:20 Smooth Tests for the Equality of Conditional Distributions

Peiwen Jia, Peking University

14:40 Reliable Multivariate Deep Regression using Moment-Matching Prior Networks

Qingyi Pan, Tsinghua University

15:00 Inference of Heterogeneous Effects in Single-Cell Genetic Perturbation Screens

Zichu Fu, Tsinghua University

15:20 Estimation of Production Frontiers Based on Additive Models to Enhanced Robustness against Outliers: A Relaxed Support Vector Regression Approach

Yuting Zhou, Shanghai University of Engineering Science

Contributed Session CS039: Advance in Missing Data and Treatment Effects

Room: A316 (3rd Floor)

Chair: Yibo Yan, East China Normal University

- 14:00 Semiparametric Estimation with Reduced Dimension for the Treatment Effect under Missing Data
Tao Tan, East China Normal University
- 14:20 Semi-Supervised Inference for Means under MAR without Inverse Propensity Weighting
Jin Su, East China Normal University
- 14:40 Improving the Efficiency of Estimating Treatment Effects with External Control Data
Zhisong Zhao, East China Normal University
- 15:00 Smoothed Estimation on Optimal Treatment Regime under Semi-supervised Setting in Randomized Trials
Xiaoqi Jiao, East China Normal University
- 15:20 Semiparametric Efficient Fusion of Individual and Summary Data
Wenjie Hu, Peking University

Contributed Session CS040: Bayesian and Machine Learning

Room: A317 (3rd Floor)

Chair: Qixian Zhong, Xiamen University

- 14:00 Construction and Application of Quantile Factor Augmented Quantile Regression Neural Network Model
Yuting Huang, Lanzhou University of Finance and Economics
- 14:20 Hypothesis Testing for the Deep Cox Model
Qixian Zhong, Xiamen University
- 14:40 Testing Causal Effects in Observational Survival Data using Propensity Score Matching Design
Dingjiao Cai, Henan University of Economics and Law
- 15:00 Combining Dimensionality Reduction Methods with Neural Networks for Realized Volatility Forecasting
Lidan He, Nanjing University of Information Science and Technology

Contributed Session CS014: Ultrahigh Dimensional

Statistical Inference

Room: A318 (3rd Floor)

Chair: Xianpeng Zong, Beijing University of Technology

- 14:00 Mixture Conditional Regression with Ultrahigh Dimensional Text Data for Estimating Extralegal Factor Effects
Jiixin Shi, Peking University
- 14:20 Variation of Conditional Mean and Its Application in Ultrahigh Dimensional Feature Screening
Zhentao Tian, Beijing University of Technology
- 14:40 Feature Screening for Ultra High Dimensional Data via Adapted Sliced Wasserstein Correlation Coefficient
Juan Li, Yunnan University
- 15:00 A Sequential Feature Selection Procedure for High Dimensional Cox Proportional Hazards Model with Main and Interaction Effects
Ke Yu, Shanghai Jiao Tong University
- 15:20 High-Dimensional Ensemble Kalman Filter with Localization, Inflation and Iterative Updates
Hao-Xuan Sun, Peking University

Contributed Session CS042: Bayesian and Nonparametric Statistical Inferences

Room: A322 (3rd Floor)

Chair: Mingan Yang, University of New Mexico

- 14:00 Flow Annealed Kalman Inversion with Sequential Monte Carlo for Gradient-Free Bayesian Inference
Richard Grumitt, Tsinghua University
- 14:20 A Tree-Based Method for Bootstrapping in Data Envelopment Analysis
Yu Zhao, Tokyo University of Science
- 14:40 Statistical Summaries for Bayesian Analysis in EoR Science
Tom Binnie, Tsinghua University
- 15:00 Bayesian Test Equality of Binary Data for a 4×4 Crossover Trial under a Latin-Square Design
Mingan Yang, University of New Mexico
- 15:20 Asymptotic Inference Theory of the Hawkes Process with Time-Varying Baseline Intensity and a General Excitation Kernel
Jeffrey Kwan, University of New South Wales

Contributed Session CS043: Recent Advances in Differentially Private and Complex Data Model

Room: B603 (3rd Floor)

Chair: Songshan Yang, Renmin University of China

- 14:00 Causal Inference in Randomized Experiments for Dyadic Data
Yilin Li, Peking University
- 14:20 Optimal Locally Private Nonparametric Classification with Public Data
Yuheng Ma, Renmin University of China
- 14:40 A Data-Driven Weighted Combination Approach for Wind Speed Distribution Estimation Based on Curve Clustering
Dan Zhuang, Fujian Normal University
- 15:00 Two-Sample Distribution Tests in High Dimensions via Max-Sliced Wasserstein Distance and Bootstrapping
Xiaoyu Hu, National University of Singapore
- 15:20 Differentially Private Top-K Selection and Its Application
Yaxuan Wang, Sichuan University

Contributed Session CS044: Complex Data Model

Room: B606 (3rd Floor)

Chair: Jingru Zhang, Fudan University

- 14:00 Distributed Linear Regression with Compositional Covariates
Xuejun Ma, Soochow University
- 14:20 A Study on the Causal Relationship Between Abnormal Renal Function Indicators and the Occurrence of Carotid Artery Plaques
肾功能指标异常与颈动脉斑块发生的因果关联研究
Lixin Tao, Capital Medical University
- 14:40 Integration of Longitudinal Physical Activity Data from Multiple Sources
Jingru Zhang, Fudan University
- 15:00 Transfer Learning Accounting for Time-Varying Heterogeneity in Mixture Cox Model
Wei Zhao, Shandong University
- 15:20 How to Analyze Adverse Events Data from Different Trials to Support A New Drug Application
Yankun Gong, Pfizer

July 14, 16:00-17:40

Invited Session IS064: Research on the Statistics and Development of Networked Economic and Social Systems

in the Context of Digital Intelligence Technology

Room: Yulan Hall (1st Floor)

Chair: Yanyun Zhao, Renmin University of China

Organizer: Yanyun Zhao, Renmin University of China

- 16:00 Research on the Construction of Theoretical Framework of Intelligent Academic Evaluation
智能学术评价的理论框架构建研究
Liping Yu, Zhejiang Gongshang University
- 16:25 Government Attention Index for National Governance Modernization with Its Application — Measurement Based on News Text
国家治理现代化政府注意力指数构建及其应用
Kuangnan Fang, Xiamen University
- 16:50 Statistical Analysis Methods and Applications in Financial Networks under the Background of Digital Intelligence
数智化背景下金融网络统计分析方法与应用研究
Zisheng Ouyang, Hunan Normal University
- 17:15 Network Statistics of Economic and Social Systems in the Age of Data Intelligence
数智化时代经济社会系统网络统计
Guobin Fang, Anhui University of Finance & Economics

Invited Session IS055: Recent Advances in Statistical Machine Learning: Theory and Applications

Room: A201-202 (2nd Floor)

Chair: Rong Ma, Harvard University

Organizer: Rong Ma, Harvard University

- 16:00 Combinatorial Inference on the Optimal Assortment in Multinomial Logit Models
Junwei Lu, Harvard University
- 16:25 A Statistical Perspective of LLMs: Geometry of Embeddings in Transformers
Yiqiao Zhong, University of Wisconsin-Madison
- 16:50 Tightness of SDP and Burer-Monteiro Factorization for Phase Synchronization in High Noise Regime
Anderson Zhang, University of Pennsylvania
- 17:15 Dyadic Reinforcement Learning
Shuangning Li, University of Chicago

Invited Session IS044: Progress in Best Subset Selection

Room: A216-217 (2nd Floor)

Chair: Xueqin Wang, University of Science and Technology of China

Organizer: Xueqin Wang, University of Science and Technology of China

16:00 Best-Subset Selection in Generalized Linear Models: A Fast and Consistent Algorithm via Splicing Technique

Junxian Zhu, Sun Yat-sen University

16:25 Minimax Optimal Methods for High-Dimensional Doubly Sparse Linear Regression

高维双稀疏线性回归的极小极大最优方法

Yanhang Zhang, Renmin University of China

16:50 Subset Selection EM Algorithm: Statistical Analysis and Applications

Ning Wang, Beijing Normal University

17:15 Simultaneous Dimension Reduction and Variable Selection for Multinomial Logistic Regression

Canhong Wen, University of Science and Technology of China

16:00 Decoupled Convergence of Two-Time-Scale Stochastic Approximation

Yuze Han, Peking University

16:25 Trustworthy Reinforcement Learning: Safety Constraints and Uncertainty Quantification

Liangyu Zhang, Peking University

16:50 Distributed Statistical Inference under Heterogeneity

Jia Gu, Peking University

Invited Session IS088: Special Topic on Data Asset Accounting (数据资产核算专题)

Room: A203 (2nd Floor)

Chair: Haiqi Lv, National Bureau of Statistics

Organizer: Haiqi Lv, National Bureau of Statistics

16:00 The Value of Data - Exploratory Measurement Based on Platform Companies

数据的价值--基于平台公司的探索性测算

Jingping Li, Renmin University of China

16:25 Estimation of Data Asset Value: International Experience and China's Exploration

数据资产价值估算: 国际经验与中国探索

Xiuhua Xiao, Weiying Ping,

Jiangxi University of Finance and Economics

16:50 Research on the Reconstruction of Production Function under Data Asset Accounting

数据资产核算下的生产函数重构问题研究

Kewei Ma, Shanxi University of Finance and Economics

17:15 How the Capitalization of Data Elements Affects GDP: Theoretical Basis and Real Evidence

数据要素资本化核算何以影响 GDP: 理论基础与现实证据

Kaike Wang, Shandong University of Finance and Economics

Invited Session IS098: Spatial and Network Econometrics

Room: A301-302 (3rd Floor)

Chair: Wei Lan, Southwestern University of Finance and Economics

Organizer: Xingbai Xu, Xiamen University

16:00 Estimation and Selection of High Order Spatial Autoregressive Models with Adaptive Elastic Net

Tuo Liu, Xiamen University

16:25 Applications of Functional Dependence to Spatial Econometrics

Xingbai Xu, Xiamen University

16:50 Testing the Number of Network Communities Using the Eigengap Ratio

Wei Lan, Southwestern University of Finance and Economics

17:15 Dynamic Spatial Panel Data Models with Interactive Fixed Effects: M-Estimation and Inference under Fixed or Relatively Small T

Liyao Li, East China Normal University

Invited Session IS100: Doctoral Dissertation in Statistical Machine Learning

Room: A320-A321 (3rd Floor)

Chair: Zhihua Zhang, Peking University

Organizer: Zhihua Zhang, Peking University

Invited Session IS086: Business Big Data Analysis and Application (商务大数据分析与应用)

Room: A218 (2nd Floor)

Chair: Xiuying Ma, Jilin University of Finance and Economics

Organizer: Xiuying Ma, Jilin University of Finance and Economics

16:00 Streamer Dynamics in Live Streaming Commerce

Shaohui Wu, Harbin Institute of Technology

16:25 Data-Driven Intelligence: Promoting the

Evaluation and Optimization of the Business Environment

数据智能驱动: 促进营商环境的评估与优化

Liangke Cao, 吉林省格远市场调研咨询有限公司

16:50 Measurement of Node Importance in Social Networks

社会网络中节点的重要性度量

Li Zhai, Jilin University of Finance and Economics

Financial Risks, and High-Quality Economic Development

经济政策不确定性、系统性金融风险与经济高质量发展

Zhixin He, Xinjiang University of Finance & Economics

17:00 Research on Patent Value Evaluation Based on Entity Recognition

基于实体识别的专利价值评估研究

Ruoyu Yao, Shanghai University of Engineering Science

Contributed Session CS013: Statistical Inference for Functional/Time Series Data

Room: A303 (3rd Floor)

Chair: Lin Hou, Tsinghua University

16:00 Unified Principal Components Analysis of Irregularly Observed Functional Time Series

Zerui Guo, Sun Yat-sen University

16:20 Factor Modelling for Matrix-Variate Functional Time Series in High Dimensions

Zihan Wang, Tsinghua University

16:40 Functional Data Analysis with Covariate-Dependent Mean and Covariance Structures

Chenlin Zhang, Southwestern University of Finance and Economics

17:00 Differential Inference for scATAC-Seq Data

Jiasheng Li, The Chinese University of Hong Kong (Shenzhen)

17:20 Revisiting the Poisson Autoregressive Model: Structure and Statistical Inference

重访泊松自回归模型: 结构与统计推断

Chenxiao Dai, Tsinghua University

Contributed Session CS041: Biostatistics and Industrial Statistics

Room: A305 (3rd Floor)

Chair: Lijun Meng, Xinjiang University of Finance & Economics

16:00 Deep Neural Network for Partially Linear Subdistribution Hazard Model

Nengjie Zhu, Shanghai Jiao Tong University

16:20 Fault Diagnosis of Rolling Bearings based on WOA-ART and Improved DenseNet

基于 WOA-ART 和改进的 DenseNet 的滚动轴承故障诊断

Cheng Shi, Chengdu University of Technology

16:40 Economic Policy Uncertainty, Systemic

Contributed Session CS053: Complex Statistical Models and Its Applications

Room: A306 (3rd Floor)

Chair: Zhichuan Zhu, Liaoning University

16:00 Parsimonious Generative Machine Learning for Non-Gaussian Tail Modeling and Risk-Neutral Distribution Extraction

Nan Yang, Renmin University of China

16:20 A Generalization Sample Learning Method of Deep Learning for Semantic Segmentation of Remote Sensing Images

Jingying Li, Henan University

16:40 EWMA Control Chart for Simultaneously Detecting Dual Parameters of Beta Distribution

同时检测 Beta 分布双参数的 EWMA 控制图

Qiuhan Chen, Liaoning University

17:00 Tensor Quantile Regression Based on Elastic Net Penalty with Its Applications

Yan Gao, Liaoning University

17:20 Research on the Impact of Financial Accessibility on the Value of Ecosystem Services

金融可得性对生态系统服务价值的影响研究

Wanmeng Gui, Anhui University of Finance and Economics

Contributed Session CS045: Bayesian and Casual Inference

Room: A307 (3rd Floor)

Chair: Yingying Zhang, Yunnan University

16:00 The Empirical Bayes Estimators of the Variance Parameter of the Normal

Distribution with a Conjugate Inverse Gamma Prior under Stein's Loss Function

Yingying Zhang, Yunnan University

- 16:20 Local Causal Structure Learning and Causal Effect Estimating in the Presence of Latent Variables
Feng Xie, Beijing Technology and Business University
- 16:40 Multiply Robust Causal Inference in the Presence of an Error-Prone Treatment
Shaojie Wei, Beijing Technology and Business University
- 17:00 Causal Effect of Functional Treatment
Ruoxu Tan, Tongji University
- 17:20 Statistical Learning Estimation of Treatment Effect Under Covariate-Adaptive Randomization
Jun Wang, Yunnan University

Contributed Session CS046: Recent Advances in Large Models and Artificial Intelligence (大模型和人工智能的最近研究)

- Room: A308 (3rd Floor)
Chair: Jieyi Liao, Yunnan Shupai Technology Co., Ltd
- 16:00 Shupai Big Model Platform (A Large Model Platform Based on AI Computing Power Management, Helping You Create Private Large Models In 30 Minutes)
数派大模型平台(一款基于 AI 算力管理的大模型平台,帮您 30 分钟创建私有大模型)
Jieyi Liao, Yunnan Shupai Technology Co., Ltd
- 16:20 Computing Power Drive, Data Empowerment, Build a New Pattern of Digital Economy Development
算力驱动,数据赋能,构建数字经济发展新格局
Qiqiang Fan, Yunnan Provincial Digital Economy Industry Investment Group Co., Ltd
- 16:40 Application Practice and Reflection of Artificial Intelligence Technology in Life Sciences
人工智能技术在生命科学的应用实践及思考
Yuedong Gao, Kunming Institute of Zoology, Chinese Academy of Sciences
- 17:00 Industry Empowerment Based on the Nine Day Model
基于九天大模型的行业赋能
Chen Yan, China Mobile Research Institute
- 17:20 Ascending AI Accelerates the Deepening of Artificial Intelligence Towards Reality

昇腾 AI 加速人工智能走深向实
Zhipeng Yang, Huawei

Contributed Session CS047: Statistical Inference in Complex Data

- Room: A315 (3rd Floor)
Chair: Xingjie Shi, East China Normal University
- 16:00 Accommodating Space Heterogeneity in Geographically Weighted Regression with Group Penalty
Tengdi Zheng, Beijing University of Technology
- 16:20 A Conditional Distribution Function-Based Measure for Independence and K-Sample Test in Multivariate Data
Li Wang, Tsinghua University
- 16:40 Copula-Based Nonparametric Estimation of Hellinger Correlation and Distance
Wenjing Liu, University of Macau
- 17:00 Bayesian Optimization via Exact Penalty
Jiangyan Zhao, East China Normal University
- 17:20 Optimal Model Average Prediction Based on Semi Parametric Mixed Effects Model
基于半参数混合效应模型的最优模型平均预测
Baoqun Chang, Kunming University of Science and Technology

Contributed Session CS048: Factor Model and Community Network

- Room: A316 (3rd Floor)
Chair: Xuemei Hu, Chongqing Technology and Business University
- 16:00 A Weighted Iterative Projection Estimation Procedure for Robust Tensor Factor Model with Tucker Decomposition
Xuemei Hu, Chongqing Technology and Business University
- 16:20 Nonasymptotic Performance Analysis of ESPRIT and Spatial-Smoothing ESPRIT
Zai Yang, Xi'an Jiaotong University
- 16:40 Statistics, Data Science, and Artificial Intelligence - A Comparative Analysis Based on Quantitative History
统计学、数据科学与人工智能——基于量化历史的比较分析
Leping Liu, Tianjin University of Finance and Economics

17:00 Community Detection in Directed Networks Based on Co-clustering and Node Similarity
Yang Jiao, Guizhou University of Finance and Economics

17:20 The Unique Solution of Factor Analysis and the Significance Test of Solutions
因子分析的唯一解与解的显著性检验
Haiming Lin, Guangzhou Huashang College

Contributed Session CS049: Bayesian and Machine Learning

Room: A317 (3rd Floor)

Chair: Ziqi Chen, East China Normal University

16:00 Bayesian Optimization with Pareto-Principled Training for Economical Hyperparameter Optimization
Yang Yang, Nankai University

16:20 A Unified EM Framework for Estimation and Inference of Normal Ogive Item Response Models
Xiangbin Meng, Northeast Normal University

16:40 A Spatial-Temporal Graph Neural Network Model for Multi-Tite Temperature Forecasting
Zhouping Li, Lanzhou University

17:00 Enhancing Missing Data Imputation through Combined Bipartite Graph and Complete Directed Graph
Ziqi Chen, East China Normal University

Contributed Session CS020: Optimal Subsampling

Room: A318 (3rd Floor)

Chair: Xiaozhou Wang, East China Normal University

16:00 Distributed Subsampling for Multiplicative Regression
Xiaoyan Li, Chongqing University

16:20 Jackknife Empirical Likelihood with Complex Surveys
Mengdong Shang, Shaanxi Normal University

16:40 Alpha Optimal Subsampling of Joint Mean and Variance Models under Heteroscedasticity Big Data
异方差大数据下联合均值与方差模型的alpha-最优子抽样
Zhengyu Xiong, Kunming University of Science and Technology

17:00 Optimal Linear Combination of Biomarkers by Weighted Youden Index Maximization
Sizhe Wang, East China Normal University

17:20 Multidimensional Distribution-to-Distribution Regression via Optimal Transport Maps
Jiayang Tong, Yunnan University

Contributed Session CS050: Mathematical Statistics and Industrial Statistics

Room: A322 (3rd Floor)

Chair: Mingxuan Cai, City University of Hong Kong

16:00 Leveraging Cross-Population Fine-Mapping to Strengthen cis-Mendelian Randomization
Mingxuan Cai, City University of Hong Kong

16:20 Planning for Efficient Accelerated Life Testing Experiments
Xiaojian Xu, Brock University

16:40 Addressing Dispersion in Mis-measured Multivariate Binomial Outcomes: A Novel Statistical Approach for Detecting Differentially Methylated Regions in Bisulfite Sequencing Data
Kaiqiong Zhao, York University

17:00 Graphical Principal Component Analysis of Multivariate Functional Time Series
Jianbin Tan, Duke university

17:20 Decision Support System of Juvenile Hacking Classification
Siyang Guo, Wayne State University

Contributed Session CS051: Quantile Regression and Dimension Reduction

Room: B603 (3rd Floor)

Chair: Lilun Du, City University of Hong Kong

16:00 Tree-guided Compositional Variable Selection Analysis of Microbiome Data
Yicong Mao, Peking University

16:20 Heterogeneous Predictability on Mutual Fund Alphas: A Sparse Clustering GMM Approach
Jiangshan Yang, City University of Hong Kong

16:40 Sliced Inverse Regression with Large Structural Dimensions
Dongming Huang, National University of Singapore

17:00 Estimation of Average Treatment Effect for High-Dimensional Panel Data via Random Forests-Based Variable Selection
Xuehong Luo, Xiamen University

17:20 A Likelihood Function Perspective on Quantile Regression Model

Zhe Jiang, Kunming University Of Science And Technology

Contributed Session CS052: Statistical Models and Methods in Economics and Finance

Room: B606 (3rd Floor)

Chair: Haiqing Chen, Nanjing University of Finance and Economics

16:00 Earning Rate and Financial Risk Prediction Model Based on Transformer and WGAN
基于 Transformer 和 WGAN 的收益率与金融风险预测模型

Haiqing Chen, Nanjing University Of Finance and Economics

16:20 Ising Network Analysis with Missing Data
Siliang Zhang, East China Normal University

16:40 Least Squares Model Averaging for Distributed Data

Haili Zhang, Shenzhen Polytechnic University

17:00 Spatiotemporal Joint Analysis of PM2.5 and Ozone in California with INLA Approach

Chengxiu Ling, Xi'an Jiaotong-Liverpool University

July 14, 8:30-12:00

Poster

South Rest Area (1st Floor)

Poster 01 Hierarchical Semi-Implicit Variational Inference with Application to Diffusion Model Acceleration

Longlin Yu, Peking University

Poster 02 Rerandomization for Covariate Balance Mitigates P-hacking in Covariate Adjustment

Xin Lu, Tsinghua University

Poster 03 Construction and Measurement of Evaluation Index System for High-Quality Development Level of Port Economy-An Empirical Study Based on Yunnan

口岸经济高质量发展水平评价指标体系构建与测度——基于云南的实证研究

Aixia Fan, Yunnan Minzu University

Poster 04 Angle Covariance-Based Independence Tests for Multivariate Functional Data

Jiangyuan Bian, Beijing University of Technology

Poster 05 Evolutionary Game Study on Decision-Making Behavior of Four Parties under the Catastrophe Insurance System

巨灾保险制度下四方主体决策行为的演化博弈研究

Xinmei Yang, Yunnan University of Finance and Economics

Poster 06 Cognitive Ability, Information Acquisition and Demand for Commercial Insurance in Middle-Aged and Elderly Households

Dezhi Zhao, Yunnan University of Finance and Economics

Poster 07 Empirical Study on the Implementation of Environmental Pollution Liability Insurance to Improve Environmental Quality

Zhilan Zi, Yunnan University of Finance and Economics

Poster 08 Surveillance of COVID-19 Based on Meta-Transmission Dynamics Models

基于 Meta-传播动力学模型的新型冠状病毒感染传播监测

Wenhui Zhu, Sichuan University

Poster 09 Association between TB Delay and TB Treatment Outcomes in HIV-TB Co-infected Patients: A Study Based on the Multilevel Propensity Score Method

Lin Hu, Sichuan University

Poster 10 Reinforcement Learning Using Neural Networks in Estimating an Optimal Dynamic Treatment Regime in Patients with Sepsis: A Retrospective Cohort Study Based on the MIMIC-III Database

Weijie Liang, Peking University

Poster 11 Construction of Cell-Cell Interaction Network Based on Spatial Transcriptome Data

Dongyu Li, Tsinghua University

Poster 12 Stochastic Comparisons of Second-Order Statistics from Dependent and Heterogenous Modified Proportional Hazard Rate Observations

相依异质条件下修正的比例失效率模型中二阶统计量的随机比较

Jiale Niu, Northwest Normal University

Poster 13 Network Model Averaging Prediction for Latent Space Models by K-Fold Edge Cross-Validation

Yan Zhang, Xiamen University

Poster 14 Gold Closing Price Prediction Model Analysis

黄金收盘价预测模型分析
Zeying Wang, Inner Mongolia University of Finance and Economics

- Poster 15 Research on the Impact of Urban Sprawl on Car Bonemission Intensity—Empirical Analysis based on 260 Prefecture-level Cities
城市蔓延对碳排放强度影响研究—基于260个地级市的实证检验分析
Menghuan Gao, Anhui University of Finance and Economics
- Poster 16 Digital Economy and Regional Economic Integration in Beijing-Tianjin-Hebei and Inner Mongolia
数字经济驱动京津冀蒙经济高质量一体化发展的路径分析
Chunying Liu, Inner Mongolia University of Finance and Economics
- Poster 17 Research on Regional Innovation Capability Promoted by Digital Economy
数字经济推动区域创新能力研究
Zhiqing Zhang, Anhui University of Finance and Economics
- Poster 18 Conditional Independence Test Based on a Classifier
Xiaodong Wang, Shaanxi Normal University
- Poster 19 Digital Inclusive Finance's Effects on Income: China's Provincial Panel Data Analysis
双循环视角下数字普惠金融对居民收入水平影响的异质性研究——来自中国省级面板数据的经验证据
Chenyi Zhu, Anhui University of Finance and Economics
- Poster 20 Study on the Assessment of Carbon Emission Reduction Effectiveness of Cities in the Yellow River Basin - A Spatial-Temporal Dynamic Perspective of Pilot Policies for Low Carbon Cities
黄河流域城市碳减排成效评估研究——低碳城市试点政策的时空动态政策效应视角
Aorigele Wu, Inner Mongolia University of Finance and Economics
- Poster 21 Research on Stock Index Prediction Based on Social Media Sentiment
基于网络社交媒体情绪的股指预测研究
Jiayuan Li, Inner Mongolia University of Finance and Economics
- Poster 22 High-Frequency Trading Strategy Optimization with Reinforcement Learning
基于强化学习的高频交易策略优化及应用
Yuanying Zhuang, Jimei University
- Poster 23 Linking Economic Policy Uncertainty, Investor Sentiment, and Financial Risk: Evidence from China
经济政策不确定性、投资者情绪和系统性金融风险：来自中国的证据
Xuehua Zhou, Anhui University of Finance and Economics
- Poster 24 The Development Level and Evolution of Chinese-Style Modernization
中国式现代化发展水平及演变测度
Suting Zhang, Anhui University of Finance and Economics
- Poster 25 Efficient and Flexible LLMs - Generated Content Detection
Wan Tian, Beihang University
- Poster 26 Latent Space Model with Interactions between Nodal Features and Latent Variables
考虑节点特征和潜变量交互作用的潜空间模型
Ruixuan Qin, Xiamen University
- Poster 27 Identifying the Nonlinear Dynamics of Logistic Mapping Using the Modified 0–1 Test for Chaos
Xiaoxue Zhang, Kunming University of Science and Technology
- Poster 28 Investigation on Spatter Characteristics of Liquid Phase and Life Span of Submerged Lance in the Top-Blown Smelting Process Using Hydraulic Modelling
Kai Yang, Kunming University of Science and Technology
- Poster 29 Predicting Cobalt Ion Concentration in Process of Hydrometallurgy Zinc Using Data Decomposition and Machine Learning
Yinzhen Tan, Kunming University of Science and Technology
- Poster 30 Research on Fuzzy Pricing of Earthquake Catastrophe Insurance
地震巨灾保险的模糊性定价研究
Xinmei Yang, Yunnan University of Finance and Economics



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