

# Schedule

## 一、5月27日主会场：

时间	主题	演讲嘉宾
8:30-8:45	大会致辞	
8:45-9:30	Computational Issues Related to Big Data Analysis	李润泽
9:30-10:15	大数据与商业价值	苏萌
10:15-10:30	自由讨论、休息	
10:30-11:15	大数据分析中的统计学习方法	张志华
11:15-12:00	互联网征信数据处理和建模实践	葛伟平
午餐时间		
14:00-14:45	中国大气污染之统计学评价	陈松蹊
14:45-15:30	量化选股基础：三类因子模型的逻辑和实证	冯永昌
15:30-15:45	自由讨论、休息	
15:45-16:30	基于中国数据的商学研究现状	陈宇新
16:30-17:15	Network Vector Autoregression	王汉生

## 二、5月28日 国际统计论坛特邀报告（八百人大教室）

Time	Title		Speaker
07:30-08:15	Reception		
08:15-08:30	Opening Remarks and Host: Yanyun Zhao		
08:30-09:10	Inferences for Varying-Coefficient Panel Data Models with Cross-Sectional Dependence	Zongwu Cai, Oswald Professor Department of Economics, University of Kansas and WISE; Xiamen University	
09:10-09:50	Estimation of Extreme Quantiles for Functions of Dependent Random Variables	Qiwei Yao, Full Professor London School of Economics and Political Science	
09:50-10:10	Tea Break		
10:10	Host: HailiangYang		
10:10-10:50	The Econometrics of Innovation: Achievements and Challenges	Pierre Mohnen, Full Professor Maastricht University; UNU-MERIT	
10:50-11:30	Statistical Inferences and Fusion Learning in the Era of Data Science	Min-ge Xie, Full Professor Rutgers, The State University of New Jersey	
Lunch Time			
13:45-14:00	Opening Remarks---Host: Jun Yan		

<b>14:00-14:40</b>	Dependent Censoring and Competing Risks: Confusion and Controversy	Jason Fine, Full Professor Department of Biostatistics, Department of Statistics & Operations Research, UNC Chapel Hill
<b>14:40-15:20</b>	Statistics on Street Corners	Dianne Cook, Full Professor Department of Econometrics and Business Statistics, Monash University
<b>15:20-15:40</b>	Tea Break	
<b>15:40</b>	<b>Host: Min-ge Xie</b>	
<b>15:40-16:20</b>	Study on Internet Big Data Statistics	Yanyun Zhao, Director & Professor School of Statistics, Renmin University of China
<b>16:20-17:00</b>	Valuing Embedded Options in Insurance Products	Hailiang Yang, Full Professor Department of Statistics and Actuarial Science, The University of Hong Kong
<b>17:00-17:40</b>	Assessment of Uncertainty in High Frequency Data: The Observed Asymptotic Variance	Per Mykland, Robert M. Hutchins Distinguished Professor Department of Statistics, University of Chicago

### More Information:

#### 1、 08:30--09:10

Title: Inferences for Varying-Coefficient Panel Data Models with Cross-Sectional Dependence

Speaker: Zongwu Cai, Department of Economics, University of Kansas and WISE, Xiamen University

Abstract: We propose a varying-coefficient panel data model, allowing for cross-sectional dependence through a common factors structure. The local linear common correlated effect estimation technique is applied to estimating the varying-coefficient for the case where both cross-sectional dimension and

temporal dimension go to infinity and the consistency and asymptotic normality of the proposed estimator is established. A simple statistic for testing the constancy of the varying-coefficient is proposed and its asymptotic properties under both the null hypothesis and fixed alternatives are studied. Monte Carlo simulations demonstrate good finite sample performances for both the estimator and test statistic. This is the joint work with Professor Ying Fang (Xiamen University) and Qiuhua Xu (Xiamen University).

## **2、 09:10--09:50**

Title: Estimation of Extreme Quantiles for Functions of Dependent Random Variables

Speaker: Yao Qiwei, London School of Economics and Political Science

Abstract: Motivated by a concrete risk management problem in financial industry, we propose a new method for estimating the extreme quantiles for a function of several dependent random variables. In contrast to the conventional approach based on extreme value theory, we do not impose the condition that the tail of the underlying distribution admits an approximate parametric form, and, furthermore, our estimation makes use of the full observed data.

The proposed method is semiparametric as no parametric forms are assumed on all the marginal distributions. But we select appropriate bivariate copulas to model the joint dependence structure by taking the advantage of the recent development in constructing large dimensional vine copulas. Consequently a sample quantile resulted from a large bootstrap sample drawn from the fitted joint distribution is taken as the estimates for the extreme quantile. This estimator is proved to be consistent as long as the quantile to be estimated is not too extreme. The reliable and robust performance of the proposed method is further illustrated by simulation.

## **3、 10:10—10:50**

Title: The econometrics of innovation: achievements and challenges

Speaker: Pierre Mohnen, Full Professor, Maastricht University; Professorial Fellow, UNU-MERIT

Abstract: Over the last half century much progress has been made in collecting in a harmonized and repeated way at least two types of statistics, the R&D and innovation surveys. Many other surveys have been conducted such as the inventor surveys or the surveys on the use of intellectual property rights. Patent statistics worldwide have been stored in an organized way and made available to researchers.

These data have been used in many empirical studies and advanced our understanding of the drivers of, and obstacles to, innovation. The work spans from determinants of innovation to the use of particular innovation strategies, collaborations, public-private partnerships, formal and informal ways of appropriating the benefits from innovation. Some studies have explored the transfer of technology, the sources of knowledge, and the existence of spillovers. The effectiveness of various innovation policies has been evaluated. Other studies have concentrated on the effects of innovation on employment, productivity, firm survival, competitiveness and international trade.

Although much progress has been made in collecting data and exploring an abundant range of issues, some challenges remain. Panel data have started to be exploited but many studies are still confined to cross-sectional data, not correcting for unobserved heterogeneity. Given the relative scarceness of long time series, dynamics have been underexplored. The most underdeveloped aspect of the literature has to do with uncertainty. Everybody would agree that innovation takes time and is highly stochastic. Not taking these aspects into account could lead to biased results and imperfect policy recommendations.

#### **4、 10:50—11:30**

Title: Statistical inferences and fusion learning in the era of data science

Speaker: Min-ge Xie, Rutgers, The State University of New Jersey

Brief Bio: Dr. Min-ge Xie is a full professor from Department of Statistics and Biostatistics, Rutgers University. He is a noted expert in statistical inference and fusion learning. His pioneer and ground-breaking research in confidence distributions was described as a “grounding process with energy and insight” by Efron (2013, ISR). His other expertise includes estimating equations, big data, robust statistics, hierarchical models, asymptotics, etc. Dr. Xie received his BS degree in mathematics from University of Science and Technology (USTC) with honor and PhD degree in statistics from University of Illinois at Urbana-Champaign (UIUC). He is a fellow of the American Statistical Association and an elected member of the International Statistical Institute. He has served on numerous review panels and editorial boards. His research is supported in part by grants from NSF (US), NIH (US), NSA (US), DHS (US) and FAA (US).

Abstract: The emergence of powerful data acquisition technologies has facilitated greatly the collection of massive data in all domains. This data explosion has magnified the need of efficient methodology for analyzing data and drawing inference. In this talk, I will introduce a new statistical inference tool called *confidence distribution* and demonstrate several powerful fusion learning approaches to deal with diverse and heterogeneous big data. The fusion learning approaches to be discussed including synthesis and combination of independent inferences, split-and-conquer methods, individualized fusion learning (iFusion) approaches, exact and robust meta-analysis methods, among others. Data sets from several clinical trials of drug developments and safety studies and data from airplane landing studies by FAA will be used to illustrate these methodologies.

## **5、 14:00--14:40**

Title: Dependent Censoring and Competing Risks: Confusion and Controversy

Speaker: Jason Fine, Department of Biostatistics, Department of Statistics & Operations Research, UNC Chapel Hill

Abstract: Historically, censoring has played a dominant role in survival analysis, with the typical development in an introductory course placing heavy emphasis on right censoring and the assumption of independence necessary for the validity of standard analyses for the event time. Competing risks, in which there are multiple causes of failure, are widespread in contemporary applications in the biological and biomedical sciences. Such issues are generally treated superficially in the framework of right censoring, where the independence assumption may be violated when a competing event occurs. This has led to confusion regarding the appropriate analysis of competing risks data: the conventional wisdom is that if the competing risks are independent, then standard methods for right censored data should be employed. However, the interpretation of such analyses may be problematic, as the quantity being estimated corresponds to a setting where competing events do not exist, which may not be practically relevant. On the other hand, if dependence is a possibility, then the standard recommendation is that alternative approaches may be needed. Again, care is needed, as issues of interpretation are closely tied to the method of analyses. When the competing event is treated as a censoring event, issues of interpretation may arise, just as under independence. This talk will survey these issues, highlighting how the common strategy for teaching survival analysis has led to controversy regarding the handling of competing events. I will suggest an alternative approach which places censoring and competing risks on equal footing, providing a clear and explicit understanding of key interpretative issues and assumptions underlying the available analyses. Real data examples will be used to illustrate the main points.

## **6、 14:40-15:20**

Title: Statistics on Street Corners

Speaker: Dianne Cook, Department of Econometrics and Business Statistics, Monash University

Abstract: Perceptual research is often conducted on the street, with convenience sampling of pedestrians who happen to be passing by. It is through experiments conducted using passer-bys that we have learned about the effect of change-blindness (<https://www.youtube.com/watch?v=FWSxSQsspiQ>) is in play outside the laboratory.

In data science, plots of data become important tools for observing patterns, making decisions, and communicating findings. But plots of data can be viewed differently by different observers, and often provoke skepticism about whether what you see "is really there". With the availability of technology that harnesses statistical randomisation techniques and input from crowds we can provide objective evaluation of structure read from plots of data.

This talk describes an inferential framework for data visualisation, and the protocols that can be used to provide estimates of p-values, and power. I will discuss the experiments that we have conducted that (1) show that the crowd-sourcing does provide results similar to statistical hypothesis testing, (2) how this can be used to improve plot design, (3) p-values in situations where no classical tests exist. Joint work with Heike Hofmann, Andreas Buja, Deborah Swayne, Hadley Wickham, Eun-kyung Lee, Mahbubul Majumder, Niladri Roy Chowdhury, Lendie Follett, Susan Vanderplas, Adam Loy, Yifan Zhao, Nathaniel Tomasetti.

## **7、 15:40--16:20**

Title: Study on internet big data statistics

Speaker: Yanyun Zhao, Director & Professor, School of Statistics, Renmin University of China

Abstract: 1. The big data statistical thinking based on the Internet; 2. Internet Statistics from China Internet Network Information Center; 3. Government statistics of enterprise informatization and Electronic Commerce statistics; 4. the impact of Internet technology on Internet Statistics; 5. traditional statistics and Internet Statistics; 6. basic frame of Internet statistics system; 7. Internet Statistical Development Policy .

## **8、 16:20--17:00**

Title: Valuing Embedded Options in Insurance Products

Speaker: Hailiang Yang, Department of Statistics and Actuarial Science, University of Hong Kong, Hong Kong

Abstract: In this talk, I shall provide an overview on equity-linked insurance products and present a valuation method. The problem is motivated by the Guaranteed Minimum Death Benefits in various deferred annuities. The payment of the products depends on the price of a stock at that time and possibly also on the history of the stock price. Because each time-until-death distribution can be approximated by a combination of exponential distributions, the analysis is made for the case where the time until death is exponentially distributed. The time-until-death random variable is assumed to be independent of the stock price process. The logarithm of the index process can be a Brownian motion, a jump-diffusion process or a random walk. We are able to obtain closed-form formulas for the contingent call and put options, for lookback options, and for barrier options. (This talk is based on joint papers with Hans U. Gerber and Elias S.W. Shiu).

## **9、 17:00--17:40**

Title: Assessment of Uncertainty in High Frequency Data: The Observed Asymptotic Variance

Author: Per Mykland (presenter) and Lan Zhang

Speaker: Per Mykland, Robert M. Hutchins Distinguished Professor, Department of Statistics, University of Chicago



Abstract: High frequency inference has generated a wave of research among econometricians and practitioners. However, we witness a scarcity of methodology to assess the uncertainty -- standard error -- of estimators. The root of the problem is that standard errors rely on estimating the asymptotic variance (AVAR), and often AVAR involves substantially more complex quantities than the original parameter to be estimated.

Standard errors are important: they are used both to assess the precision of estimators in the form of confidence intervals, to create "feasible statistics" for testing, and also when building forecasting models based on, say, daily estimates.

This paper provides an alternative and general solution to this problem, which we call Observed Asymptotic Variance. It is a general nonparametric method for assessing asymptotic variance (AVAR), and it provides consistent estimators of AVAR for a broad class of parameters that are the integral of a spot parameter process. The spot process can be volatility, covariance, leverage effect, high frequency betas, and more generally any semimartingale, with continuous and jump components. The estimators work well in the presence of microstructure noise, and when the observation times are irregular or asynchronous. Edge effects are also analyzed and treated rigorously.

The paper also shows how to feasibly disentangle the effect from estimation error and the variation in the spot parameter process alone. For the latter, we obtain a consistent estimator of the quadratic variation (QV) of the parameter to be estimated, for example, the QV of the leverage effect.

三、5月29日分会场，每个分会场90分钟，每位报告人20-30分钟。

<b>Time</b> <b>Venue</b>	<b>08:30-10:00</b>	<b>10:00-10:20</b>	<b>10:20-11:50</b>	<b>Lunch Time</b>	<b>14:00-15:30</b>	<b>15:30-15:50</b>	<b>15:50-17:20</b>
<b>明商 0105</b>	Financial Econometrics 1 (Lan Zhang)	Tea Break	Financial Econometrics 2 (Yingying Li)		Mathematical Finance (Bingyi Jing)	Tea Break	Internet Finance and Its Risk Management (Xinghua Zheng)
<b>明商 0204</b>	Quantitative Approaches to Cultural Studies 1 (Cunjie Lin)	Tea Break	Quantitative Approaches to Cultural Studies 2 (Xiaoling Lv)		Statistical Inference for Big Data with Complex Dependence (Zhang Qi)		
<b>明商 0207</b>	Statistical Learning: Theory and Application (Xiaoling Lv)	Tea Break	Modeling and Application of Credit Investigation Data (Xiaoqun He)		Novel Variable Selection Method and Application (Danyang Huang)	Tea Break	Network Data: Models and Applications (Yifan Sun)
<b>明商 0208</b>	Psychometrics and Applied Statistics in Social Sciences (Ke-Hai Yuan)	Tea Break	New Statistical Methods for Big Data (Yang Li)		Innovations and Applications in Big Data Analysis (Yan Jun)	Tea Break	Advancement in Financial Time Series Analysis
<b>明法 0201</b>					Biostatistics in the Era of Big Data 1 (Yang Li)		Biostatistics in the Era of Big Data 2 (Yang Li)
<b>明商 0309</b>	Big Data and Its Application	Tea Break	Statistical Inference (Min Wang )		Biostatistics (Xiaokun Wu)	Tea Break	Social and Econometric Statistics

	(Xinqi Gong)						
明商 0407	Gender and Statistic1 (Yunzhu Jia)	Tea Break	Gender and Statistic2 (Yunzhu Jia)		Risk Management and Actuarial Science 1 (Zhengyan Xiao)	Tea Break	Risk Management and Actuarial Science 2 (Leping Liu)
明商 0409	Statistics Application on Social Science: Innovation and Development (Feng Zhen)		Statistical Methods for Cultural Data Analysis (Feng Zhen)				

#### More Information :

#### 08:30-10:00

Parallel Session 1.1 明商 0105

Topic: Financial Econometrics 1

Organizer: Bo Zhang, Renmin University of China

Chair: Lan Zhang, University of Illinois at Chicago

1. Xinghua Zheng, Hong Kong University of Science and Technology, Testing the Covariance Matrix When There is Heteroscedasticity
2. Xinbing Kong, Suchow University, Lack of Fit Test for Infinite Variation Jumps at High Frequencies
3. Zhi Liu, University of Macau, Efficient estimation of the Spot Volatility Under Infinite Variation Jumps
4. Bingyi Jing, Hong Kong University of Science & Technology; Cuixia Li, Lanzhou University; Is the Driving Force of a Continuous Process a Brownian Motion or Fractional Brownian Motion?

Parallel Session 1.2 明商 0204

Topic: Quantitative Approaches to Cultural Studies 1

Organizer: Yang Li, Renmin University of China

Chair: Cunjie Lin, Renmin University of China

1. Shimpei Hashio, Doshisha University, What Is the Optimal Approach to Overcome the Language Interference of Japanese Language Among Japanese EFL Learners in Sentence Production?
2. Candy, Doshisha University, Occurring Order of the Semantic Formula in Refusal Expression
3. Jongchan Lee and Mingzhe Jin, Doshisha University, Authorship Attribution in Korean Using an Integrated Classification Algorithm
4. Hao Sun and Mingzhe Jin, Doshisha University, Authorship Attribution in Yasunari Kawabata's Novel Hana Nikki

#### Parallel Session 1.3 明商 0207

Topic: Statistical Learning: Theory and Application

Organizer: Xiaoling Lv, Renmin University

Chair: Xiaoling Lv, Renmin University

1. Yufeng Liu, University of North Carolina, Sparse Regression for Block Missing Data without Imputation
2. Xiangyu Chang, Xi'an Jiaotong University, Divide and Conquer Local Average Regression
3. Junlong Zhao, Beijing Normal University, Robust Shrinkage Estimation and Selection for Functional Multiple Linear Model Through LAD Loss
4. Hanzhong Liu, Department of Statistics at UC Berkeley, Bootstrap Lasso+mLS for Construction Confidence Intervals for Parameters in High-dimensional Linear Regression Model

#### Parallel Session 1.4 明商 0208

Topic: Psychometrics and Applied Statistics in Social Sciences

Organizer: Lijuan Wang, University of Notre Dame

Chair: Ke-Hai Yuan, University of Notre Dame

1. Ying Cui, University of Alberta, Explore the Usefulness of Person-Fit Analysis on Large Scale Assessment
2. Zijun Ke, Sun Yat-Sen University, Bayesian Priors for Variance Parameters in Random Coefficient Meta-Analytic Structural Equation Modeling
3. Lijuan Wang, University of Notre Dame, Integrative Mediation Analysis
4. Lan Yu, University of Pittsburgh, PROMISE of PROMIS®: Applying Item Response Theory to Develop and Improve Patient Reported Outcome

Parallel Session 1.5 明商 0309

Topic: Big Data and Its Application

Organizer: Organization Committee

Chair: Xinqi Gong, Renmin University Of China

1. Menggang Yu and Chensheng Kuang, University of Wisconsin – Madison, Subgroup Identification Based on Multiple Outcomes
2. Zhaohu Fan, Pennsylvania State University, High-Dimensional Adaptive
3. Junming Zhu, University of Cincinnati U.S.A, Amplifying Creativity in the Big Data Era — Study of Creative Performance and Big Data Analysis
4. Xinqi Gong, Renmin University Of China, Different Scale Leads to Different Solution: Deeper Learning on Bigger Data

Parallel Session 1.6 明商 0407

Topic: Gender and Statistics

Organizer: Yunzhu Jia, Women's Studies Institute of China,

Chair: Yunzhu Jia, Women's Studies Institute of China,

1. Xiao Li, National Bureau of Statistics of China, The Development of China's Gender Statistics and the Present Situation
2. Guoping Jia, United Nations Population Fund in China, Gender Statistics and The United Nations Organizations
3. Yunzhu Jia, Women's Studies Institute of China, The Opportunity of Gender Statistics under the Big Data Time
4. Yongping Jiang, Women's Studies Institute of China, Gender Statistics as a Tool in the Development of Women and Gender Equality

Parallel Session 1.7 明商 0409

Topic: Statistics Application on Social Science: Innovation and Development

Organizer: Yanyun Zhao, Renmin University of China

Chair: Feng Zhen, Renmin University of China

1. Siming Liu, University of International Business and Economics, Does Stronger Protection of Intellectual Property Right Promote the Innovation Capacity of China's Industry?

2. Jingping Li, Renmin University, The Determinants of Dividends: Evidence From China's Listed Companies Using Two-Stage Model
3. Zhipeng Lv, Renmin University, The Statistical Study of Enterprise Competitiveness Microstructure
4. Mengxia Zeng, Renmin University, The Relationship of Innovation Pattern and Competitiveness: Evidence from Chinese Industrial Enterprises

## 10:20-11:50

### Parallel Session 2.1 明商 0105

Topic: Financial Econometrics 2

Organizer: Bo Zhang, Renmin University of China

Chair: Yingying Li, Hong Kong University of Science & Technology

1. Lan Zhang, University of Illinois at Chicago, Between Data Cleaning and Inference: Pre-averaging and Robust Estimators of the Efficient Price
2. Yingying Li, Hong Kong University of Science & Technology, Volatility of Volatility: Estimation and Tests Based on Noisy High Frequency Data
3. Ben Wu, Renmin University of China, Goodness-of-fit Tests for Copulas: along the Boundaries
4. Chao Yu, University of International Business and Economics, Intraday Jump Dynamics, Jump Tail Risk in Chinese Stock Market

### Parallel Session 2.2 明商 0204

Topic: Quantitative Approaches to Cultural Studies 2

Organizer: Yang Li, Renmin University of China

Chair: Xiaoling Lv, Renmin University of China

1. Xueqin Liu and Mingzhe Jin, Doshisha University, Quantitative Analysis of Uno Kouji's Work before and after the Disease
2. Sayaka Irie, Doshisha University, Changes in the Language of the Magazine “Chuo-Koron” in the last 101 years
3. Akihiro Kawase, Doshisha University, Characteristics of Musical Culture: A Quantitative Comparisons of Japanese and Chinese Folk Songs
4. Ayaka Uesaka, Doshisha University, What is the Difference between Saikaku and Dansui's writing style?

Parallel Session 2.3 明商 0207

Topic: Modeling and Application of Credit Investigation Data

Organizer: Xiaoqun He, Renmin University of China

Chair: Xiaoqun He, Renmin University of China

1. Yanfei Kang, Baidu Inc. Credit Rating for Enterprises Based on Big Data
2. Junchao Hu, Renmin University of China, Research on the Construction of Social Credit Systems in China
3. Qiuping Wei, A View of Credit's Significance on the Basis of reject inference
4. Liyu Xia, Renmin University of China, Reject Inference in Credit Scoring based on Semi-parametric Method

Parallel Session 2.4 明商 0208

Topic: New Statistical Methods for Big Data

Organizer: Dungang Liu, University of Cincinnati

Chair: Yang Li, Renmin University of China

1. Hao Hellen Zhang, University of Arizona, Probability-enhanced Sufficient Dimension Reduction for Binary Classification
2. Xiaoming Huo, Georgia Institute of Technology, A Distributed Estimator based on a One-Step Approach
3. Xiaoyue Zou Cheng, University of Nebraska at Omaha, Cranstime: Interactively Explore Time Series and Longitudinal Data
4. Jinzhu Jia, Peking University, Sampling for Generalized Linear Models

Parallel Session 2.5 明商 0309

Topic: Statistical Inference

Organizer: Organization Committee

Chair: Min Wang, Michigan Technological University

1. Zhifa Yuan, North West Agriculture and Forestry University, Generalized Complex Correlation Coefficient and Its Application
2. Min Wang, Michigan Technological University, Bayesian Analysis of Testing General Hypotheses in Linear Models with Spherically Symmetric Errors
3. Xu Guo, Nanjing University of Aeronautics and Astronautics, Confidence Band for Expectation Dependence with Applications

4. Yinguo Li, Jiangsu Normal University, Three-way Data Clustering Method Based on Tucker3 Decomposition

Parallel Session 2.6 明商 0407

Topic: Gender and Statistic 2

Organizer: Yunzhu Jia, Women's Studies Institute of China,

Chair: Yunzhu Jia, Women's Studies Institute of China,

1. Chuxin Nan, China Women's News, Exploring Gender Issues from the Big Data of Medium
2. Lvjun Zhou, China Women's University, Anti-Domestic Violence Network Around the World
3. Yueqing Guo, Women's Studies Institute of China, Review on International Organizations' Gender Statistics

Parallel Session 2.7 明商 0409

Topic: Statistical Methods for Cultural Data Analysis

Organizer: Yang Li, Renmin University of China

Chair: Feng Zhen, Renmin University of China

1. Jun Tsuchida and Hiroshi Yadohisa, Doshisha University, L1 Penalized Three-mode Three-way Canonical Covariance Analysis Based on Tucker2 Model
2. Mariko Takagishi and Hiroshi Yadohisa, Doshisha University, Iteratively Reweighted Alignment Method Based on Shape Invariant Model
3. Hiroyasu Abe and Hiroshi Yadohisa, Doshisha University, Two Soft Clustering Approaches for Weighted Spherical K-means

**14:00-15:30**

Parallel Session 3.1 明商 0105

Topic: Mathematical Finance

Organizer: Bo Zhang, Renmin University of China

Chair: Jing Bingyi, Hong Kong University of Science & Technology



1. Shangzhen Luo, University of Northern Iowa, Stochastic Differential Games for Diffusion Processes
2. Jun Deng, University of International Business and Economics, The Price of Asymmetric Information
3. Mingming Wang, University of International Business and Economics, Minimize the Expected Time to Reach a Goal

#### Parallel Session 3.2 明商 0204

Topic: Statistical Inference for Big Data with Complex Dependence

Organizer: Yumou Qiu, University of Nebraska Lincoln

Chair: Zhang Qi, University of Nebraska Lincoln

1. Yuzhen Zhou, University of Nebraska-Lincoln, Process-based Hierarchical Models for Coupling High-dimensional LiDAR and Forest Variables over Large Geographic Domains
2. Wanjie Wang, University of Pennsylvania, Important Features PCA (IF-PCA) for Large-Scale Inference, with Applications in Gene Microarrays
3. Honglang Wang, Indiana University-Purdue University Indianapolis, Unified Empirical Likelihood Ratio Tests for Functional Linear Models and the Phase Transition from Sparse to Dense Functional Data
4. Zhang Qi, University of Nebraska Lincoln, Graphlet Screening for High Dimensional Variable Selection

#### Parallel Session 3.3 明商 0207

Topic: Novel Variable Selection Method and Application

Organizer: Yang Li, Renmin University of China

Chair: Huang Danyang, Renmin University of China

1. Kuangnan Fang, Xiamen University, Network-adaptive Robust Penalization for Time-varying Coefficient Longitudinal Model
2. Lei Qin, University of International Business and Economics, Parameter Estimation and Variable Selection via ArctanL ASSO
3. Hu Yang, Central University of Finance and Economics
4. Jiesheng Si, Hangzhou Dianzi University, The Study on Variable Selection of Logit Model Based on Heterogeneous Data

#### Parallel Session 3.4 明商 0208

Topic: Innovations and Applications in Big Data Analysis

Organizer: Yuping Zhang, University of Connecticut

Chair: Jun Yan, University of Connecticut

1. Kun Chen, University of Connecticut, Sequential Estimation of Sparse Factor Regression
2. Ke Deng, Tsinghua University, Statistical Text Mining and Related Applications in Big Data Era
3. Yuan Yao, Peking University, Path to the Oracle Estimator — A Dynamic Approach to Sparse Recovery
4. Cheng Li, Peking University, Co-expression and Network Motif Models of Cancer Expression Profiles

Parallel Session 3.5 明法 0201

Topic: Biostatistics in the Era of Big Data 1

Organizer: Yang Li, Renmin University

Chair: Yang Li, Renmin University

1. Zuorong Yan, Institute of Statistical Science, Academia Sinica, Solving Fused Group Lasso Problems via Block Splitting Algorithms
2. Zilin Li, Tsinghua University, Statistical Methods for Analysis of High Dimensional Genomic Data

Parallel Session 3.6 明商 0309

Topic: Biostatistics

Organizer: Organization Committee

Chair: Xiaokun Wu, North China Electric Power University

1. Zhen Yan, Renmin University Of China, Variable Selection in Joint Modeling of Longitudinal Multiple Outcomes
2. Yanan Hu, Renmin University Of China, Joint Modeling of Spatial Panel Data and Survival Time
3. Xiaokun Wu, North China Electric Power University, The Parameter Estimation of Lee-Carter Model with Missing Data

Parallel Session 3.7 明商 0407

Topic: Risk Management and Actuarial Science 1

Organizer: Shengwang Meng, Renmin University of China

Chair: Zhengyan Xiao, Renmin University of China

1. Leping Liu, TianJin University of Finance and Economics, solvency II: From Loss Reserving to Reserving Loss
2. ZhiYi Lu, Tianjin university of Commerce, Optimal Insurance Design under Background Risk with Dependence
3. Xiao Wei, China Central University of Finance and Economics, A Fourier-Cosine Expansion Method for Fitting Sample Data Distributions and its Applications
4. Liang Yang, Renmin University of China, Predicting of Individual Risk Premium Base on Zero-adjustment Inverse Gaussian

#### **15:50-17:20**

Parallel Session 4.1 明商 0105

Topic: Internet Finance and Its Risk Management

Organizer: Bo Zhang, Renmin University

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

1. Guobing Fang, Zhang Bo, Renmin University of China, Structured Data Dymnamic Factor Models in P2P Market
2. Rongxin Wang, Zhang Bo, Renmin University of China, Information Transmission Measurement, Market Cycle and Liquidity: Evidence from China' s Stock Market High-frequency
3. Xia Zhao, Shandong Uinversity of Finance and Economics, Optimal Insurance Portfolio Selection under Different Risk Measures

Parallel Session 4.2 明商 0207

Topic: Network Data: Models and Applications

Organizer: Yifan Sun, Renmin University of China

Chair: Yifan Sun, Renmin University of China

1. Jin-Shan Wu, Beijing Normal University, General input-output analysis and its application in identifying influential elements in interacting systems
2. Yongduo Xu, Renmin University of China, Sparse Princeple Components Regression based on ISIS Method.

3. Dan-Yang Huang, Renmin University of China, A Popularity Scaled Latent Space Model for Network Structure Formulation
4. Yi-Fan Sun, Renmin University of China, Recommendation Algorithm based on Ising Model

#### Parallel Session 4.3 明商 0208

Topic: Advancement in Financial Time Series Analysis

Organizer: Organization Committee

1. Wenjiang Jiang, Hainan Normal University; Yongsheng Yang, Yunnan Normal University; A new Multivariate Time Series Model for Modelling the Changing Dependence in Financial Markets
2. Qiang Xia, South China Agricultural University, & Yongsheng Yang, Pan-Asia Business School, Yunnan Normal University, Determining the Number of Factors for High-dimensional Time Series
3. Hui Gong, University College London, Delta One ETF Nitro™ Hedging Algorithms

#### Parallel Session 4.4 明法 0201

Topic: Biostatistics in the Era of Big Data 2

Organizer: Yang Li, Renmin University of China

1. Guangfu Zheng, Taipei Medical University
2. Xiuhua Guo, Capital Medical University

#### Parallel Session 4.5 明商 0309

Topic: Social and Econometric Statistics

Organizer: Organization Committee

1. Meili Zhu, Tsinghua University, Application of Big Data at the Local Government in the Medium-term Fiscal Planning and Management
2. Yajing Fan, Guangxi University Of Finance and Economics, Micro Determinants of Apartment Rents: Evidence Based on the Online Apartment Advertising in Beijing

3. Minggao Wang, Shandong Institute of Business and Technology, Inverse-Weibull- Pareto Models for Leptokurtic Insurance Loss Data

Parallel Session 4.6 明商 0407

Topic: Risk Management and Actuarial Science 2

Organizer: Shengwang Meng, Renmin University of China

Chair: Leping Liu, TianJin University of Finance and Economics

1. Zhengtang Zhao, Xiameng University, The Study On the Catastrophe Reinsurance Demand of Property Insurance Companies
2. Mian Yu, University of International Business and Economics, Pricing Equity-linked Term-life Insurance Product in a Regime-switching Market
3. Zhengxiao Zhao, Renmin University of China, Modeling Dependent Severity and Frequency for Insurance Claim: a Comparative Analysis of Various Methods for Predicting Total Loss
4. Wei Zhu, University of International Business and Economics, Beijing, Health State Transitions and Longevity Effects on Retirees' Optimal Annuitization