北京应用统计学会 2025 年学术研讨会
暨第二届第五次理事会日程表

时间：2025 年 11 月 22 日　地点：北京紫玉饭店

时间	内容		主持人
8:00-9:00	注册、报到：紫光楼五层		
9:00-9:30	开幕式：紫光楼五层第六会议室 1. 主持人介绍与会嘉宾 2. 首都师范大学数学科学学院院长**张振雷**教授致辞 3. 兄弟学会代表致辞： (1) 中国现场统计研究会理事长、北京工商大学校长**郭建华**教授 (2) 全国工业统计学教学研究会会长、山西大学数学与统计学院学术院长**陈敏**教授 (3) 中国商业统计学会副会长、北京大学**邓明华**教授 4.北京应用统计学会会长、首都师范大学**崔恒建**教授发言并作理事会工作报告		**胡涛** 首都师范大学
合影			
大会报告 （紫光楼五层第六会议室）			
09:30-10:20	**周晓华** 北京大学	**Causal Inference in Complex Scenarios**	**崔恒建** 首都师范大学
10:20-10:40	茶歇		
10:40-11:20	**李启寨** 中国科学院数学与系统科学研究院	动态追踪疾病发生的概率	**张忠占** 北京工业大学
11:20-12:00	**周洁** 首都师范大学	**Deep Neural Network Regression with Binary Covariates and Its applications**	**许王莉** 中国人民大学
12:00-13:30	午餐（紫玉食府自助餐厅）		
13:30-15:35	分组报告与交流（详情见下页）		
15:35-15:50	茶歇		
15:50-16:20	颁奖仪式：　紫光楼五层第六会议室		

分组报告与交流

邀请报告第一组： 紫光楼五层 A 会议室			
13:30-13:55	冯毅 中国疾病预防控制中心性病艾滋病预防控制中心	HIV 分子流行病学进展	何黎黎 北京建筑大学
13:55-14:20	廖玲洁 中国疾病预防控制中心性病艾滋病预防控制中心	HIV 基因型耐药分析的进展	
14:20-14:45	阮玉华 中国疾病预防控制中心性病艾滋病预防控制中心 病毒及免疫学研究室	全员治疗背景下艾滋病防控若干问题	
14:45-15:10	汤后林 中国疾病预防控制中心	数字技术赋能艾滋病防控	
15:10-15:35	许鑫 中央民族大学	Latent Variable Selection for Multidimensional Testlet Effects Based on Bifactor Structure 基于双因子结构的多维题组效应推断方法	
邀请报告第二组：紫光楼五层 B 会议室			
13:30-13:55	郝钰欣 北京工业大学	基于变点检测与聚类的电力现货价格预测模型	张新瑜 首都师范大学
13:55-14:20	洪一平 北京理工大学	Fast and Scalable Gaussian Process Modeling with Fisher Scoring for Exact Matérn Likelihoods	
14:20-14:45	焦小奇 华东师范大学	Flexible and Interpretable Estimation of Heterogeneous Treatment Effects in Censored Data	
14:45-15:10	李文适 沈阳建筑大学	基于经济学习的高危数据统计分析方法研究	
15:10-15:35	马宁 中国人民大学	A CAT Bond Pricing Model Based on the Distortion of Aggregate Loss Distributions	

分组报告第一组：玉澜楼一层第一会议室			
13:30-13:50	范烨 首都经济贸易大学统计与数据科学学院	Collaborative Estimation of Quantile Treatment Effect for Distributed Data	李东 清华大学 亢芳圆 北京信息科技大学
13:50-14:10	黄荧 首都经济贸易大学	Distributed Censored Quantile Regression: Convolution Smoothing and Communication Efficiency	
14:10-14:30	孔凯笛 北京工业大学	Semiparametric Partial Functional Regression Model for Estimating Optimal Individualized Treatment Regime	
14:30-14:50	李秋华 北京航空航天大学	High-dimensional Adaptive Model Averaging Method Based on Neural Network	
14:50-15:10	石宇珂 中国科学院数学与系统科学研究院	Gaussian Multiplier Bootstrap Procedure for the kth Largest Coordinate of High-Dimensional Statistics	
15:10-15:30	张贺源 中国科学院数学与系统科学研究院	Conditional Inference for High-Dimensional Multi-Omics Survival Data	
分组报告第二组：玉澜楼一层第二会议室			
13:30-13:50	陈亚南 北京物资学院	长江三角洲地区数字经济发展水平的研究	胡永宏 中央财经大学 蒋媛媛 北京工业大学
13:50-14:10	董曼茹 北京物资学院	新发展格局下数字经济赋能国民经济循环的作用机制与空间效应研究	
14:10-14:30	葛薇 北京物资学院	中国式现代化可持续性测度及区域差异研究	
14:30-14:50	徐婷 对外经济贸易大学	Adaptive Weighted Regularized QRGRU Algorithm and Its Application in Stock Price Prediction	

14:50-15:10	张梦园 北京物资学院	我国物流业双循环统计测度与网络韧性分析	
15:10-15:30	周梅艺 北京物资学院	Study on the Influencing Factors of Per Capita Energy Production in China	
分组报告第三组：紫光楼三层第五会议室			
13:30-13:50	邓思华 首都师范大学	Robust Online T-type Estimation and Detection for Linear Regression Models	李卫东 北京交通大学 王彦 北京工业大学
13:50-14:10	王中含 北京师范大学	Nonlinear Analysis of Nodal Covariates in Networks: Dimension Reduction and Clustering	
14:10-14:30	魏澜 中国人民大学	Conformal Prediction Method on Non-informative Interval-censored Data Using Random Sample	
14:30-14:50	岳明祖 中国科学院数学与系统科学研究院	The Cox-Aalen Rate Model for Recurrent Events with An Informative Terminal Event	
14:50-15:10	张欣然 南开大学统计与数据科学学院	Robust Designs for Order-of-Addition Experiments Based on Swap Distance	
15:10-15:30	周瑞 北京工业大学	Transfer Entropy-Based Change Point Detection and Structure Inference in Non-Stationary Dynamic Bayesian Network	
分组报告第四组：紫霞园第七会议室			
13:30-13:50	冯子恒 北京工业大学	PEACE: Pairwise Effectual Averaging Classification Estimation	谢田法 北京工业大学
13:50-14:10	刘淳 首都师范大学	MICPH: A Hypergraph-Based Model for Microscopic Information Cascade Prediction	
14:10-14:30	宋明辉 北京物资学院	Bootstrap Model Averaging	

14:30-14:50	王雪菲 北京师范大学	Moment-integrated Bias-adjusted Spectral Method for Community Detection in Multi-layer Networks	许王莉 中国人民大学
14:50-15:10	闫引桥 北京工业大学	BayesRare: A Bayesian Mixture Model for Population-Level Rare Cell Type Detection in Multi-Subject Single-cell RNA Sequencing Data	
15:10-15:30	袁浩宇 北京航空航天大学	An IV-Expectile Approach to Spatial Autoregressive Models	
分组报告第五组：紫光楼一层第三会议室			
13:30-13:50	毕楚然 北京物资学院	基于动态卷积与特征双分支提取的高光谱遥感影像分类	张楠 中国人民大学统计学院校、 赵晓军 北京交通大学
13:50-14:10	龚俊鹏 中国科学院数学与系统科学研究院	System Reliability Assessment via Transform-Resampled Double Bootstrap Percentile Method	
14:10-14:30	兰慧 北京工业大学	Hierarchical Hidden Markov Models for Heterogeneous Time Series under Data Scarcity	
14:30-14:50	宋雨薇 南开大学	Model-Free Attribution Analysis via Statistical Perspective: A Novel Framework for Marketing Applications	
14:50-15:10	王亚男 中国消防救援学院	基于 PSR-GPCA 模型的城市洪涝灾害风险评估研究	
15:10-15:30	王一轮 对外经济贸易大学	Robust Selection and Estimation for Sparse Multivariate Functional Nonparametric Additive Models Via Regularized Huber Regression	

大会报告介绍



大会报告一：Causal Inference in Complex Scenarios

摘要：In this talk, I introduce some new statistical methods for making causal inference in complex scenarios. Specifically, I will first discuss the causal inference methods for recommendation systems, then discuss the methods for making causal inference when the outcome has a network structure. Next, I discuss the methods for dealing with interference in causal inference, as well as how to make causal inference with intercurrent events. Finally, I briefly introduce some methods for causal Inference in large models.

报告人简介： **Xiao-Hua Zhou** is PKU Endowed Chair Professor and the Chair of the Department of Biostatistics at Peking University. He was selected into the National Thousand Talents Program of China. Previously he was Professor in the Department of Biostatistics at University of Washington and Director of Biostatistics Unit at Seattle VA Medical Center. He is a Fellow of the American Association for the Advancement of Science, Fellow of the American Statistical Association, and Fellow of the Institute of Mathematical Statistics.

For over three decades, Dr. Zhou has dedicated his effort to develop new biostatistical methods and their applications to medicine and public health, striving to extract statistical structures from complex medical data and develop mathematically interpretable statistical methods. His research has primarily centered on developing new statistical methods in three closely interrelated medicine and public health areas, diagnostic test evaluation, precision medicine, and medical cost analysis, which correspond to the three essential stages of medicine: diagnosis, treatment, and healthcare resource allocation.

Dr. Zhou has published over 300 statistical methodology and medical papers and is either the corresponding author or senior author on most of them; many of them have been published in top statistical journals, such as Journal of the Royal Statistical Society Series B, Journal of the American Statistical Association, Biometrics, Biometrika, Annals of Statistics. Dr. Zhou is a main contributor for correcting the verification and imperfect gold standard bias in evaluation of the accuracy of diagnostic test. Dr. Zhou and his collaborator addressed the challenge of nonparametric identifiability in models for multiple diagnostic tests in the absence of a gold standard. They proved that as long as the number of diagnostic tests k $\geqslant$ 3 and the two-dimensional margins are no longer factorizable, the parameters of the mixture distribution are non-parametrically identifiable, and also proposed a nonparametric estimator for the ROC curve, which is root-n consistent and asymptotically normally distributed. Their work laid a solid foundation for subsequent diagnostic research without gold standard, has been cited over 318 times. Building on this work, Dr. Zhou further extended identifiability theories and methods to more complex diagnostic scenarios. Dr. Zhou as the leading author, published Statistical Methods in Diagnostic Medicine (Wiley & Sons), the first comprehensive statistical work in diagnostic medicine. Dr. Zhou has made important methodologic contributions in causal inference, particularly in statistical methods for handling broken randomized experiments and complex data scenarios.

From 2019 to 2025, he has been consecutively included in the Stanford/Elsevier top 2% Scientists list. He has led multiple U.S. national-level statistical methodology projects, as well as key initiatives such as the Key Program of National Natural Science Foundation of China, the National Key Research and Development Program, and the National Development and Reform Commission of China.

Dr. Zhou has received many honors. including Mitchell Prize from International Society for Bayesian Analysis, a prestigious Research Career Scientist Award from U.S. Federal Government Department of Veterans Affairs, Advisory Committee Service Award from U.S. FDA, Distinguished Overseas Young Scientist Award of Chinese

National Natural Science Foundation, and the China Ministry of Education Oversee Distinguished Teacher.



大会报告二：动态追踪疾病发生的概率

摘要：A subject's dynamic blood pressure levels can be tracked over time conditioning on the subject's race and covariates in the past. The problem of dynamic health outcome tracking in a longitudinal study is methodologically challenging because the outcomes and covariates can be time-varying and observed over unequally spaced time points. We propose a novel tracking index, the "tracking prediction probability" (TPP), to quantify the probability of a subject's disease risk factor status given the subject's observed risk factors and other covariates at a past time point, develop a class of dynamic copula models to estimate the TPPs, and apply the copula models and TPP estimators to the NGHS data to evaluate the dynamic relationships between future hypertension risk and the BP and covariate levels in the past. These results show that race and obesity have significant impacts on BP progression in young girls. Through a simulation study, we demonstrate that the copula models and estimation methods for the TPPs are computationally feasible for complex longitudinal studies and may have reduced biases even with misspecificed models.

报告人简介：李启寨，中国科学院数学与系统科学研究院研究员，系统科学研究所副所长；2001 年本科毕业于中国科学技术大学，2006 年博士毕业于中国科学院数学与系统科学研究院，2006-2009 年在美国国立卫生健康研究院(NIH)国家癌症研究所(NCI)从事博士后研究；2011 获中国科学院卢嘉锡青年人才奖，2015 年获中国工业与应用数学学会优秀青年学者奖，2016 年当选国际统计学会推选会员(ISI Elected Member), 2017 年获国家优秀青年科学基金，2020 年当选美国统计学会会士(ASA Fellow)，2023 年获国家杰出青年科学基金；研究方向：生物医学统计、遗传统计、复杂数据建模与推断等；在 Nature Genetics, Science Advances, Angewandte Chemie-International Edition, Cancer Research, AJHG, Bioinformatics, IEEE TPAMI, Psychometrika, JASA, JRSSB, Biometrics 等期刊发表 SCI 论文 120 余篇；现任中国数学会常务理事、中国现场统计研究会常务理事等。



大会报告三：Deep Neural Network Regression with Binary Covariates and Its applications

报告人简介：周洁，首师大数科院教授，中科院应用所博士，华盛顿大学博士后，曾前往香港中文大学交流访问。主要从事生存数据、复发事件数据以及纵向数据等复杂数据的统计建模与推断的理论和应用研究，近年来也开始涉足大数据分析、深度学习等领域的研究。主持国家自然科学基金 3 项，在国内外重要统计学杂志上发表 SCI 论文 20 余篇，其中统计学著名期刊《Journal of the American Statistical Association》(JASA) 1 篇，《Statistical Science》1 篇，《Biometrics》2 篇，《Statistica Sinica》1 篇。担任了"全国工业统计学教学研究会"等多个国家与地方统计学学术团体的理事，参与了《中国大百科全书》第三版统计学学科部分条目的撰审工作。 此外，还承担了《Statistica Sinica》、《Computational Statistics and Data Analysis》、《中国科学：数学》以及《数学学报》等国内外著名统计学期刊的匿名审稿工作。