

# 2024 International Conference for Statistics and Data Science, ICSDS

**Date :** July 9-10, 2024

**Venue :** College of Commerce, National Chengchi University

July 9, 2024 (Tue)			
Time	Agenda		
08:30-09:00	Guest registration (The 1st floor of the College of Commerce) 來賓報到(商院一樓大廳)		
09:00-09:30	Opening Remarks (E.Sun Hall, the 1st floor of the College of Commerce) 開場致詞(商院一樓玉山國際廳) Group photo 大合照	<b>Tsai-Yen Li</b> , President (李蔡彥 校長) National Chengchi University (國立政治大學) <b>Jia-Chi Huang</b> , Dean (黃家齊 院長) College of Commerce, NCCU (國立政治大學商學院) <b>Su-Fen Yang</b> , Distinguished Professor and Chair (楊素芬 系主任) Department of Statistics, NCCU (國立政治大學統計系) <b>Yu-Han Tsou</b> , Dr. (鄒幼涵 博士) Taipei Economic and Cultural Representative Office in Japan Senior Advisor & General Director, Science and Technology Division (台北駐日經濟文化代表處顧問兼科技組組長) Title : Achieve Digital Transformation for a Sustainable Society via Data Science	
Time	Agenda	Speaker	Chair
9:30-10:30	Keynote Speech (E.Sun Hall, the 1st floor of the College of Commerce) Title : Autoregressive Networks and Some Stylized Features of Network Data	Qiwei Yao (姚琦偉) Department of Statistics London School of Economics and Political Sciences, U.K.	Cathy W. S. Chen (陳婉淑) Department of Statistics Feng Chia University
10:30-10:50	Break (Room 102, the 1st floor of the College of Commerce)		

session venue	Session Speech			
	E.Sun Hall	Room 210, the 2nd floor of the College of Commerce (260210)	Room 201, the 2nd floor of the College of Commerce (260201)	101 Conference Hall, Yi-Xian Building (050101)
10:50- 12:20	Parallel Session I			
	<p style="text-align: center;"><b>I-1</b></p> <p><b>Topic : Time Series Analysis</b></p> <p><b>Chair : Nan-Jung Hsu (徐南蓉)</b></p> <p style="text-align: center;"><b>Institute of Statistics, National Tsing Hua University</b></p> <p>1. Jong-Min Kim (金鍾旼)</p> <p style="padding-left: 20px;">Statistics Discipline, Division of Science and Mathematics, University of Minnesota- Morris, Morris, MN, U.S.A.</p> <p>2. Ning Ning (寧寧)</p> <p style="padding-left: 20px;">Department of Statistics, University of Texas A&amp;M, U.S.A.</p> <p>3. Shih-Feng Huang (黃士峰)</p> <p style="padding-left: 20px;">Graduate Institute of Statistics, National Central University</p>	<p style="text-align: center;"><b>I-2</b></p> <p><b>Topic : High-dimensional Data</b></p> <p><b>Chair : Wei-Ying Wu (吳韋瑩)</b></p> <p style="text-align: center;"><b>Department of Applied Mathematics, National Dong Hwa University</b></p> <p>1. Liqun Wang (王力群)</p> <p style="padding-left: 20px;">Department of Statistics, University of Manitoba, Canada</p> <p>2. Su-Yun Huang (陳素雲)</p> <p style="padding-left: 20px;">Institute of Statistical Sciences, Academia Sinica</p> <p>3. Yu-Bo Wang (王昱博)</p> <p style="padding-left: 20px;">Department of Mathematical and Statistical Sciences, Clemson University, U.S.A.</p>	<p style="text-align: center;"><b>I-3</b></p> <p><b>Topic : Statistics and Data Science</b></p> <p><b>Chair : Chao A. Hsiung (熊昭)</b></p> <p style="text-align: center;"><b>Institute of Population Health Sciences, National Health Research Institutes</b></p> <p>1. Jianxin Shi (時建新)</p> <p style="padding-left: 20px;">Biostatistics Branch, Division of Cancer Epidemiology and Genetics, National Cancer Institute (NCI), U.S.A.</p> <p>2. Dianliang Deng (鄧殿良)</p> <p style="padding-left: 20px;">Department of Mathematics &amp; Statistics University of Regina, Canada</p> <p>3. Li-Hsin Chien (簡立欣)</p> <p style="padding-left: 20px;">Department of Applied Mathematics, Chung Yuan Christian University</p>	<p style="text-align: center;"><b>I-4</b></p> <p><b>Topic : Machine Learning</b></p> <p><b>Chair : Cheng-Der Fuh(傅承德)</b></p> <p style="text-align: center;"><b>Graduate Institute of Statistics National Central University</b></p> <p>1. W.Y. Wendy Lou</p> <p style="padding-left: 20px;">Dalla Lana School of Public Health University of Toronto, Canada</p> <p>2. I-Ming Chiu (邱翊銘)</p> <p style="padding-left: 20px;">Department of Economics, Rutgers University-Camden, U.S.A.</p> <p>3. Chih-Hao Chang (張志浩)</p> <p style="padding-left: 20px;">Department of Statistics, National Chengchi University</p>
12:20- 13:30	Luncheon (Room 101, Room 102, Room 105, and Room 106 , the 1st floor of the College of Commerce)			

13:30-15:00	<b>Parallel Session II</b>			
<p style="text-align: center;"><b>II-1</b></p> <p><b>Topic : Biomedical Study</b>  <b>Chair : Hong-Dar Isaac Wu (吳宏達)</b>  <b>Department of Applied Mathematics, National Chung Hsing University</b></p> <p>1. Zhezhen Jin (金哲振)  Department of Biostatistics, Columbia University, U.S.A.</p> <p>2. Hua Zhou (周華)  Department of Biostatistics, University of California, Los Angeles, U.S.A.</p> <p>3. Jia-Han Shih (施嘉翰)  Department of Applied Mathematics National Sun Yat-sen University</p>	<p style="text-align: center;"><b>II-2</b></p> <p><b>Topic : Survival Analysis</b>  <b>Chair : Yi-Ting Hwang (黃怡婷)</b>  <b>Department of Statistics National Taipei University</b></p> <p>1. Mei-Ling Ting Lee (丁美齡)  Department of Epidemiology and Biostatistics, University of Maryland College Park, U.S.A.</p> <p>2. Jin Zhou (周瑾)  Department of Biostatistics, University of California, Los Angeles, U.S.A.</p> <p>3. Chung Chang (張中)  Department of Applied Mathematics National Sun Yat-sen University</p>	<p style="text-align: center;"><b>II-3</b></p> <p><b>Topic : Time Series Analysis</b>  <b>Chair : Ie-Bin Lian (連怡斌)</b>  <b>Department of Mathematics National Changhua University of Education</b></p> <p>1. William W.S. Wei (魏武雄)  Statistics, Operations, and Data Science Temple University, U.S.A.</p> <p>2. Li-Hsien Sun (孫立憲)  Department of Statistics, National Central University</p> <p>3. Hsin-Chieh Wong (翁新傑)  Department of Statistics, National Taipei University</p>	<p style="text-align: center;"><b>II-4</b></p> <p><b>Topic : Biostatistics</b>  <b>Chair : Chia-Hui Huang (黃佳慧)</b>  <b>Department of Statistics National Chengchi University</b></p> <p>1. Naisyin Wang (王乃昕)  Department of Statistics, University of Michigan, U.S.A.</p> <p>2. Li-Shan Huang (黃禮珊)  Institute of Statistics, National Tsing Hua University</p> <p>3. Dongdong Li (李東東)  Department of Population Medicine Harvard Medical School, U.S.A.</p>	
15:00-15:20	Break (Room 102, the 1st floor of the College of Commerce)			
15:20-16:50	<b>Parallel Session III</b>			
<p style="text-align: center;"><b>III-1</b></p> <p><b>Topic : Industrial Statistics</b>  <b>Chair : Sheng-Tsaing Tseng (曾勝滄)</b>  <b>Institute of Statistics, National Tsing Hua University</b></p> <p>1. Dennis KJ Lin (林共進)  Department of Statistics, Purdue University, U.S.A.</p> <p>2. Tsai-Hung Fan (樊采虹)  Graduate Institute of Statistics, National Central University</p> <p>3. I-Tang Yu (俞一唐)  Department of Statistics, TungHai University</p>	<p style="text-align: center;"><b>III-2</b></p> <p><b>Topic : Causal Inference and Lifetime Data Analysis</b>  <b>Chair : Tsung-Shan Tsou (鄒宗山)</b>  <b>Graduate Institute of Statistics National Central University</b></p> <p>1. Jialiang Li (梁家量)  Department of Statistics &amp; Data Science National University of Singapore</p> <p>2. Yong Chen (陳勇)  Department of Biostatistics, University of Pennsylvania, U.S.A.</p> <p>3. Hsin-wen Chang (張馨文)  Institute of Statistical Sciences, Academia Sinica</p>	<p style="text-align: center;"><b>III-3</b></p> <p><b>Topic : Experimental Designs</b>  <b>Chair : Mong-Na Lo Huang (羅夢娜)</b>  <b>Department of Applied Mathematics, National Sun Yat-sen University</b></p> <p>1. Ming-Hung Kao (高銘宏)  School of Mathematical and Statistical Sciences, Arizona State University, U.S.A.</p> <p>2. Hsiang-Ling Hsu (許湘伶)  Institute of Statistics, National University of Kaohsiung</p> <p>3. Cheng-Yu Sun (孫誠佑)  Institute of Statistics, National Tsing Hua University</p>	<p style="text-align: center;"><b>III-4</b></p> <p><b>Topic : Deep Learning and High Dimensional Data analysis</b>  <b>Chair : Yuan, Juan-Ming (袁淵明)</b>  <b>Department of Data Science and Big Data Analytics, Providence University</b></p> <p>1. Tai-Been Chen (陳泰賓)  Department of Radiological Technology Faculty of Medical Technology, Teikyo University, Tokyo, Japan</p> <p>2. Yen-Lung Tsai (蔡炎龍)  Department of Mathematical Sciences National Chengchi University</p>	

				3. An-Shun Tai (戴安順) Department of Statistics, National Cheng Kung University
16:50- 17:00	<p>shuttle bus@ <u>National Chengchi University Library</u></p> <p>(Gather at the “check-in” counter on the 1st floor of the College of Commerce, and proceed to the boarding area under the guidance of students.)</p> <p>晚宴接駁車停在政治大學中正圖書館前。</p> <p>欲搭乘接駁車者，請於商學院一樓大廳報到處集合，統一由學生帶至接駁車停車處上車。</p>			
17:40	Banquet (Spring of Shang-Hai Restaurant) (春申食府)			

July 10, 2024 (Wed)			
Time	Agenda		
08:20-09:00	Guest registration and pre-meeting communication (The 1st floor of the College of Commerce) 來賓報到及會前交流(商院一樓大廳)		
09:00-09:10	Opening Remarks (E.Sun Hall, the 1st floor of the College of Commerce) 開場致詞(商院一樓玉山國際廳)	<b>Jun Zhao, Executive Director</b> International Chinese Statistical Association, U.S.A. <b>Guan-Hua Huang, Professor and Director (黃冠華 所長)</b> Institute of Statistics, National Yang Ming Chiao Tung University (國立陽明交通大學統計研究所)	
Time	Agenda	Speaker	Chair
9:10-10:10	Keynote Speech (E.Sun Hall, the 1st floor of the College of Commerce) Title: Deep Learning for Censored Survival Data	Jane-Ling Wang (王建玲) Department of Statistics University of California, Davis, U.S.A.	Henry Horng-Shing Lu (盧鴻興) Institute of Statistics National Yang Ming Chiao Tung University
10:10-10:30	Break (Room 102, the 1st floor of the College of Commerce)		

session venue	<b>Session Speech</b>			
	E.Sun Hall	Room 210, the 2nd Floor of the College of Commerce (260210)	Room 201, the 2nd floor of the College of Commerce (260201)	101 Conference Hall, Yi-Xian Building (050101)
10:30- 12:00	<b>Parallel Session IV</b>			
	<b>IV-1</b>  <b>Topic : Functional Data Analysis &amp; Dimension Reduction</b>  <b>Chair : Mei-Hui Guo (郭美惠)</b>  <b>Department of Applied Mathematics, National Sun Yat- sen University</b>  1. Hans-Georg Müller Department of Statistics, University of California, Davis, U.S.A.  2. Ci-Ren Jiang (江其祚) Institute of Statistics and Data Science National Taiwan University  3. Lih-Yuan Deng (鄧利源) Department of Mathematical Sciences University of Memphis, U.S.A.	<b>IV-2</b>  <b>Topic : Recent Advances in Risk Analysis</b>  <b>Chair : Jun Zhao</b>  <b>International Chinese Statistical Association, U.S.A.</b>  1. Fabrizio Ruggeri Institute of Applied Mathematics and Information Technology, Italian National Research Council, Italia  2. Kyoji Furukawa Biostatistics Center, Kurume University Japan  3. Rachel Huang (黃瑞卿) Department of Finance, National Central University	<b>IV-3</b>  <b>Topic : Cutting-edge Statistical Modeling Approaches for Multifaceted Data</b>  <b>Chair : Tsung-I Lin (林宗儀)</b>  <b>Institute of Statistics, National Chung Hsing University</b>  1. Victor Hugo Lachos Department of Statistics, University of Connecticut, U.S.A.  2. Mohammad Arashi Department of Mathematical Sciences Ferdowsi University of Mashhad, Iran  3. Chang-Yun Lin (林長鑿) Institute of Statistics, National Chung Hsing University	<b>IV-4</b>  <b>Topic : Experimental Designs</b>  <b>Chair : Ray-Bing Chen (陳瑞彬)</b>  <b>Department of Statistics National Cheng Kung University</b>  1. Weng Kee Wong (王永琪) Department of Biostatistics, University of California, Los Angeles, U.S.A.  2. Qian Helen Li StatsVita, LLC, U.S.A.  3. Ming-Chung Chang (張明中) Institute of Statistical Science, Academia Sinica
12:00- 13:00	Luncheon (Room 101, Room 102, Room 105, and Room 106 , the 1st floor of the College of Commerce)			

13:00-14:30	<b>Parallel Session V</b>			
<p style="text-align: center;"><b>V-1</b></p> <p><b>Topic : Statistics and Data Science</b>  <b>Chair : Chien-Tai Lin (林千代)</b>  <b>Department of Mathematics</b>  <b>Tamkang University</b></p> <p>1. Samuel Kou (寇星昌)  Department of Statistics, University of Harvard, U.S.A.</p> <p>2. Jung-Ying Tzeng (曾仲瑩)  Department of Statistics and Bioinformatics Research Center, North Carolina State University, U.S.A.</p> <p>3. Hsiuying Wang (王秀瑛)  Institute of Statistics, National Yang Ming Chiao Tung University</p>	<p style="text-align: center;"><b>V-2</b></p> <p><b>Topic : Deep Learning and AI</b>  <b>Chair : Chun-Shu Chen (陳春樹)</b>  <b>Institute of Statistics, National Central University</b></p> <p>1. Fushing Hsieh (謝復興)  Department of Statistics, University of California, Davis, U.S.A.</p> <p>2. Ting-Li Chen (陳定立)  Institute of Statistical Sciences, Academia Sinica</p> <p>3. Guan-Hua Huang (黃冠華)  Institute of Statistics, National Yang Ming Chiao Tung University</p>	<p style="text-align: center;"><b>V-3</b></p> <p><b>Topic : Statistics and Data Science</b>  <b>Chair : Henghsiu Tsai (蔡恆修)</b>  <b>Institute of Statistical Sciences Academia Sinica</b></p> <p>1. Ying Hung (洪瑛)  Department of Statistics, Rutgers, the State University of New Jersey, U.S.A.</p> <p>2. Takeshi Emura (江村剛志)  Research Center for Medical and Health Data Science, the Institute of Statistical Mathematics, Tokyo, Japan</p> <p>3. Jeng-Huei Chen (陳政輝)  Department of Mathematical Sciences National Chengchi University</p>	<p style="text-align: center;"><b>V-4</b></p> <p><b>Topic : Biostatistics</b>  <b>Chair : Wen-Han Hwang (黃文翰)</b>  <b>Institute of Statistics, National Tsing Hua University</b></p> <p>1. George C. Tseng (曾建城)  Department of Biostatistics, University of Pittsburgh, U.S.A.</p> <p>2. Feng-Chang Lin (林逢章)  Department of Biostatistics, University of North Carolina at Chapel Hill, U.S.A.</p> <p>3. Ming-Yueh Huang (黃名鉞)  Institute of Statistical Sciences, Academia Sinica</p>	
14:30-14:50	Break (Room 102, the 1st floor of the College of Commerce)			
14:50-16:20	<b>Parallel Session VI</b>			
<p style="text-align: center;"><b>VI-1</b></p> <p><b>Topic : Biostatistics</b>  <b>Chair : Ly-Yu D Liu (劉力瑜)</b>  <b>Department of Agronomy</b>  <b>National Taiwan University</b></p> <p>1. Naitee Ting (丁迺迪)  Biostatistics and Data Sciences, Boehringer Ingelheim Pharmaceuticals, Inc. , U.S.A.</p> <p>2. Wan Yuo Guo (郭萬祐)  Taipei Veterans General Hospital and School of Medicine, National Yang Ming Chiao Tung University</p> <p>3. Hsuan-Yu Chang (張軒瑜)  The Center for Green Economy, Chung-Hua Institution for Economic Research</p>	<p style="text-align: center;"><b>VI-2</b></p> <p><b>Topic : Statistics and Data Science</b>  <b>Chair : Ben-Chang Shia (謝邦昌)</b>  <b>Fu Jen Catholic University</b></p> <p>1. Andrei Volodin  Department of Mathematics &amp; Statistics University of Regina, Canada</p> <p>2. Xiao Wang (王嘯)  Department of Statistics, College of Science Purdue University, U.S.A.</p> <p>3. Pei-Ting Chou (周珮婷)  Department of Statistics, National Chengchi University</p>	<p style="text-align: center;"><b>VI-3</b></p> <p><b>Topic : Statistical Process Monitoring</b>  <b>Chair : Chien-Yu Peng (彭健育)</b>  <b>Institute of Statistical Sciences Academia Sinica</b></p> <p>1. Arthur B. Yeh (葉百堯)  Department of Applied Statistics and Operations Research, Bowling Green State University, U.S.A.</p> <p>2. Wei-Hang Huang (黃偉恆)  Department of Statistics, Feng Chia University</p> <p>3. Ming-Che Lu (呂明哲)  Department of Accounting, Chaoyang University of Technology</p>	<p style="text-align: center;"><b>VI-4</b></p> <p><b>Topic : Modern statistics and Applications</b>  <b>Chair : Tsai, Pi-Wen (蔡碧紋)</b>  <b>Department of Mathematics</b>  <b>National Taiwan Normal University</b></p> <p>1. Chih-Li Sung (宋治立)  Department of Statistics and Probability Michigan State University, U.S.A.</p> <p>2. Frederick Kin Hing Phoa (潘建興)  Institute of Statistical Science, Academia Sinica</p> <p>3. Yu-Wei Chang (張育璋)  Department of Statistics, National Chengchi University</p>	

July 9, 2024 (Tue)

Keynote Speech

09:30~10:30

E.Sun Hall, the 1st floor of the College of Commerce

Chair : Cathy W. S. Chen (陳婉淑)

【Department of Statistics, Feng Chia University】

Qiwei Yao (姚琦偉)

【Department of Statistics, London School of Economics and Political Sciences, U.K.】

***Autoregressive Networks and Some Stylized Features of Network Data***

## Session Agenda

Parallel Session I

10:50~12:20

E.Sun Hall, the 1st floor of the College of Commerce

I-1 Topic : Time Series Analysis

Chair : Nan-Jung Hsu (徐南蓉)

【Institute of Statistics, National Tsing Hua University】

1. Jong-Min Kim (金鍾旼)

【Statistics Discipline, Division of Science and Mathematics, University of Minnesota-Morris, Morris, MN, U.S.A.】

*Change point detection for the intraday volatility using functional ARCH and conditional Copula*

2. Ning Ning (寧寧)

【Department of Statistics, University of Texas A&M, U.S.A.】

*Advancements in Online Learning for High-Dimensional Spatiotemporal Models*

3. Shih-Feng Huang (黃士峰)

【Graduate Institute of Statistics, National Central University】

*Hysteretic Multivariate Bayesian Structural GARCH Model with Soft Information*

Room 210, the 2nd floor of the College of Commerce

I-2 Topic : High-dimensional Data

Chair : Wei-Ying Wu (吳韋瑩)

【Department of Applied Mathematics, National Dong Hwa University】

1. Liqun Wang (王力群)

【Department of Statistics, University of Manitoba, Canada】

*Estimation of variance and covariance matrix in high-dimensional models*

2. Su-Yun Huang (陳素雲)

【Institute of Statistical Sciences, Academia Sinica】

*A geometric algorithm for contrastive PCA in high dimension*



3. Yu-Bo Wang (王昱博)

**【Department of Mathematical and Statistical Sciences, Clemson University, U.S.A.】**

*SIGHR: Side information guided high-dimensional regression*

Room 201, the 2nd floor of the College of Commerce

### I-3 Topic : Statistics and Data Science

Chair : Chao A. Hsiung (熊昭)

**【Institute of Population Health Sciences, National Health Research Institutes】**

1. Jianxin Shi (時建新)

**【Biostatistics Branch, Division of Cancer Epidemiology and Genetics, National Cancer Institute (NCI), U.S.A.】**

*Estimating the overall fraction of phenotypic variance attributed to high-dimensional predictors measured with error*

2. Dianliang Deng (鄧殿良)

**【Department of Mathematics & Statistics, University of Regina, Canada】**

*Adaptive aggregation for longitudinal quantile regression based on censored history process*

3. Li-Hsin Chien (簡立欣)

**【Department of Applied Mathematics, Chung Yuan Christian University】**

*Developing and validating absolute risk prediction models for breast cancer in Taiwan with synthesized data from multiple sources*

101 Conference Hall, Yi-Xian Building

### I-4 Topic : Machine Learning

Chair : Cheng-Der Fuh (傅承德)

**【Graduate Institute of Statistics, National Central University】**

1. W.Y. Wendy Lou

**【Dalla Lana School of Public Health, University of Toronto, Canada】**

*Fusion Clustering for Multi-Source Longitudinal Data*

2. I-Ming Chiu (邱翊銘)

**【Department of Economics, Rutgers University-Camden, U.S.A.】**

*Predicting Adolescent Depression in the U.S. using a Two-Layered Ensemble Machine Learning Approach*

3. Chih-Hao Chang (張志浩)

**【Department of Statistics, National Chengchi University】**

*Application of Machine Learning Techniques in Threshold Regression Modeling*

**E.Sun Hall, the 1st floor of the College of Commerce****II-1 Topic : Biomedical study**

Chair : Hong-Dar Isaac Wu (吳宏達)

【Department of Applied Mathematics, National Chung Hsing University】

1. Zhezhen Jin (金哲振)

【Department of Biostatistics, Columbia University, U.S.A.】

*Semiparametric statistical methods for the analysis of biomedical data*

2. Hua Zhou (周華)

【Department of Biostatistics, University of California, Los Angeles, U.S.A.】

*Scalable and robust censored linear regression with applications to biobank studies*

3. Jia-Han Shih (施嘉翰)

【Department of Applied Mathematics, National Sun Yat-sen University】

*A class of regression association measure based on concordance***Room 210, the 2nd floor of the College of Commerce****II-2 Topic : Survival Analysis**

Chair : Yi-Ting Hwang (黃怡婷)

【Department of Statistics, National Taipei University】

1. Mei-Ling Ting Lee (丁美齡)

【Department of Epidemiology and Biostatistics, University of Maryland, College Park,  
U.S.A.】*Neural Network Extension of Threshold Regression for Event-time Data*

2. Jin Zhou (周瑾)

【Department of Biostatistics, University of California, Los Angeles, U.S.A.】

*Scalable and robust joint models for longitudinal and survival outcomes*

3. Chung Chang (張中)

【Department of Applied Mathematics, National Sun Yat-sen University】

*Heavy-tailed distribution for combining dependent p-values with asymptotic robustness***Room 201, the 2nd floor of the College of Commerce****II-3 Topic : Time Series Analysis**

Chair : Ie-Bin Lian (連怡斌)

【Department of Mathematics, National Changhua University of Education】

1. William W.S. Wei (魏武雄)

【Statistics, Operations, and Data Science, Temple University, U.S.A.】

*Issues on Time Series Analysis and Applications*

2. Li-Hsien Sun (孫立憲)

【Department of Statistics, National Central University】

*Interval-Based Time Series Analysis: Detecting Structural Shifts and Change-Point Estimation*

3. Hsin-Chieh Wong (翁新傑)

【Department of Statistics, National Taipei University】

*Valid Post-Averaging Inference in AR-G/GARCH Models*

II-4 Topic : Biostatistics

Chair : Chia-Hui Huang (黃佳慧)

【Department of Statistics, National Chengchi University】

1. Naisyin Wang (王乃昕)

【Department of Statistics, University of Michigan, U.S.A.】

*Utilizing Synthetic Components to Balance Privacy Protection and Data Utility*

2. Li-Shan Huang (黃禮珊)

【Institute of Statistics, National Tsing Hua University】

*Promotion Time Cure Model with Local Polynomial Estimation*

3. Dongdong Li (李東東)

【Department of Population Medicine, Harvard Medical School, U.S.A.】

*Evaluating Association Between Two Event Times with Observations Subject to Informative Censoring.*

**E.Sun Hall, the 1st floor of the College of Commerce****III-1 Topic : Industrial Statistics**

Chair : Sheng-Tsaing Tseng (曾勝滄)

【Institute of Statistics, National Tsing Hua University】

1. Dennis KJ Lin (林共進)

【Department of Statistics, Purdue University, U.S.A.】

*AI, BI & SI—Artificial, Biological and Statistical Intelligent*

2. Tsai-Hung Fan (樊采虹)

【Graduate Institute of Statistics, National Central University】

*General Random-Effects Trend Renewal Processes with Applications*

3. I-Tang Yu (俞一唐)

【Department of Statistics, TungHai University】

*Increment Degradation Model: A Bayesian Perspective***Room 210, the 2nd floor of the College of Commerce****III-2 Topic : Causal Inference and Lifetime Data Analysis**

Chair : Tsung-Shan Tsou (鄒宗山)

【Graduate Institute of Statistics, National Central University】

1. Jialiang Li (栗家量)

【Department of Statistics &amp; Data Science, National University of Singapore】

*Efficient auxiliary information synthesis for cure rate model*

2. Yong Chen (陳勇)

【Department of Biostatistics, University of Pennsylvania, U.S.A.】

*Real-World Effectiveness of BNT162b2 Against Infection in Children: causal inference under misclassification in treatment status*

3. Hsin-wen Chang (張馨文)

【Institute of Statistical Sciences, Academia Sinica】

*Bivariate Analysis of Distribution Functions Under Biased Sampling***Room 201, the 2nd floor of the College of Commerce****III-3 Topic : Experimental Designs**

Chair : Mong-Na Lo Huang (羅夢娜)

【Department of Applied Mathematics, National Sun Yat-sen University】

1. Ming-Hung Kao (高銘宏)

【School of Mathematical and Statistical Sciences, Arizona State University, U.S.A.】

*Optimal Study Designs for Sparse Functional Data Analysis*

2. Hsiang-Ling Hsu (許湘伶)

【Institute of Statistics, National University of Kaohsiung】

*Optimal designs with multiple correlated responses for experiments with mixtures*

3. Cheng-Yu Sun (孫誠佑)

【Institute of Statistics, National Tsing Hua University】

*Space-Filling Regular Designs under a Minimum Aberration-Type Criterion*

III-4 Topic : Deep Learning and High Dimensional Data analysis

Chair : Yuan, Juan-Ming (袁淵明)

【Department of Data Science and Big Data Analytics, Providence University】

1. Tai-Been Chen (陳泰賓)

【Department of Radiological Technology, Faculty of Medical Technology, Teikyo University, Tokyo, Japan】

*Deep Learning Applications in Chest X-Ray Classification, CT Liver Tumors Segmentation, and Detection of Stenosis on X-ray Coronary Angiography*

2. Yen-Lung Tsai (蔡炎龍)

【Department of Mathematical Sciences, National Chengchi University】

*Contrastive Learning for Time Series Data: Predicting Stock Price Movements*

3. An-Shun Tai (戴安順)

【Department of Statistics, National Cheng Kung University】

*Robust and Flexible High-Dimensional Causal Mediation Model for DNA Methylation Studies*

July 10, 2024 (Wed)

Keynote Speech

09:10~10:10

E.Sun Hall, the 1st floor of the College of Commerce

Chair : Henry Horng-Shing Lu (盧鴻興)

【Institute of Statistics, National Yang Ming Chiao Tung University】

Jane-Ling Wang (王建玲)

【Department of Statistics, University of California, Davis, U.S.A.】

***Deep Learning for Censored Survival Data***

## Session Agenda

Parallel Session IV

10:30~12:00

E.Sun Hall, the 1st floor of the College of Commerce

IV-1 Topic : Functional Data Analysis & Dimension Reduction

Chair : Mei-Hui Guo (郭美惠)

【Department of Applied Mathematics, National Sun Yat-sen University】

1. Hans-Georg Müller

【Department of Statistics, University of California, Davis, U.S.A.】

*Distance Profiles for Random Objects*

2. Ci-Ren Jiang (江其祚)

【Institute of Statistics and Data Science, National Taiwan University】

*Eigen-adjusted FPCA*

3. Lih-Yuan Deng (鄧利源)

【Department of Mathematical Sciences, University of Memphis, U.S.A.】

*Big Data Model Building using Dimension Reduction and Sample Selection*

Room 210, the 2nd floor of the College of Commerce

IV-2 Topic : Recent Advances in Risk Analysis

Chair : Jun Zhao

【International Chinese Statistical Association, U.S.A.】

1. Fabrizio Ruggeri

【Institute of Applied Mathematics and Information Technology, Italian National Research Council, Italia】

*Recent advances in Adversarial Risk Analysis*

2. Kyoji Furukawa

【Biostatistics Center, Kurume University, Japan】

*Statistical Challenges in Radiation Risk Assessment*

3. Rachel Huang (黃瑞卿)

【Department of Finance, National Central University】

*Hedge Funds Performance: Are Crypto Hedge Funds the Rising Star?*

Room 201, the 2nd floor of the College of Commerce

#### IV-3 Topic : Cutting-edge Statistical Modeling Approaches for Multifaceted Data

Chair : Tsung-I Lin (林宗儀)

【Institute of Statistics, National Chung Hsing University】

1. Victor Hugo Lachos

【Department of Statistics, University of Connecticut, U.S.A.】

*Heckman selection contaminated normal model: Parameter estimation via the EM-algorithm*

2. Mohammad Arashi

【Department of Mathematical Sciences, Ferdowsi University of Mashhad, Iran】

*High-Dimensional Regression Analysis with Machine Learning*

3. Chang-Yun Lin (林長鏗)

【Institute of Statistics, National Chung Hsing University】

*Design Construction and Model Selection for Small Mixture-Process Variable Experiments with High-Dimensional Model Terms*

101 Conference Hall, Yi-Xian Building

#### IV-4 Topic : Experimental Designs

Chair : Ray-Bing Chen(陳瑞彬)

【Department of Statistics, National Cheng Kung University】

1. Weng Kee Wong (王永琪)

【Department of Biostatistics, University of California, Los Angeles, U.S.A.】

*Optimal Exact Designs for Small Studies in Toxicology with Applications to Hormesis via Metaheuristics*

2. Qian Helen Li

【StatsVita, LLC, USA】

*Extending the Use of Adaptive Design Beyond Sample Size Re-estimation*

3. Ming-Chung Chang (張明中)

【Institute of Statistical Science, Academia Sinica】

*Orthogonalized Moment Aberration for Multi-Stratum Factorial Designs*

**E.Sun Hall, the 1st floor of the College of Commerce****V-1 Topic : Statistics and Data Science**

Chair : Chien-Tai Lin (林千代)

【Department of Mathematics, Tamkang University】

1. Samuel Kou (寇星昌)

【Department of Statistics, University of Harvard, U.S.A.】

*Statistical inference of dynamic systems via manifold-constrained Gaussian processes*

2. Jung-Ying Tzeng (曾仲瑩)

【Department of Statistics and Bioinformatics Research Center, North Carolina State University, U.S.A.】

*Transfer Learning with false negative control improves polygenic risk prediction*

3. Hsiuying Wang (王秀瑛)

【Institute of Statistics, National Yang Ming Chiao Tung University】

*Tolerance interval for COVID-19 data prediction***Room 210, the 2nd floor of the College of Commerce****V-2 Topic : Deep Learning+AI**

Chair : Chun-Shu Chen (陳春樹)

【Institute of Statistics, National Central University】

1. Fushing Hsieh (謝復興)

【Department of Statistics, University of California, Davis, U.S.A.】

*Data intelligence and A.I.*

2. Ting-Li Chen (陳定立)

【Institute of Statistical Sciences, Academia Sinica】

*Multiscale major factor selections for complex system data with structural dependency and heterogeneity*

3. Guan-Hua Huang (黃冠華)

【Institute of Statistics, National Yang Ming Chiao Tung University】

*Automated convolutional neural network and transformer for multi-class classification of three-dimensional brain images***Room 201, the 2nd floor of the College of Commerce****V-3 Topic : Statistics and Data Science**

Chair : Henghsiu Tsai (蔡恆修)

【Institute of Statistical Sciences, Academia Sinica】

1. Ying Hung (洪瑛)

【Department of Statistics, Rutgers, the State University of New Jersey, U.S.A.】

*Identifying Nonlinear Dynamics with High Confidence from Sparse Data*

2. Takeshi Emura (江村剛志)

【Research Center for Medical and Health Data Science, the Institute of Statistical Mathematics, Tokyo, Japan】

*Survival Prognostic Analysis with Copula-Graphic Estimator for Dependent Censoring*

3. Jeng-Huei Chen (陳政輝)

【Department of Mathematical Sciences, National Chengchi University】

*A big-data based model of chronic kidney disease and its applications.*



V-4 Topic : Biostatistics

Chair : Wen-Han Hwang (黃文瀚)

【Institute of Statistics, National Tsing Hua University】

1. George C. Tseng (曾建城)

【Department of Biostatistics, University of Pittsburgh, U.S.A.】

*Outcome-guided Disease Subtyping by Generative Model and Weighted Joint Likelihood in Omics Applications*

2. Feng-Chang Lin (林逢章)

【Department of Biostatistics, University of North Carolina at Chapel Hill, U.S.A.】

*Maximum Likelihood Estimation of the Silent Hypnozoite Carriage in a Malaria Randomized Clinical Trial*

3. Ming-Yueh Huang (黃名鉞)

【Institute of Statistical Sciences, Academia Sinica】

*Improved estimation under proportional rates model for recurrent events data*

**E.Sun Hall, the 1st floor of the College of Commerce****VI-1 Topic : Biostatistics**

Chair : Ly-Yu D Liu (劉力瑜)

【Department of Agronomy, National Taiwan University】

1. Naitee Ting (丁迺迪)

【Biostatistics and Data Sciences, Boehringer Ingelheim Pharmaceuticals, Inc. , U.S.A.】

*Drug Development and Dose Finding*

2. Wan Yuo Guo (郭萬祐)

【Taipei Veterans General Hospital and School of Medicine, National Yang Ming Chiao Tung University】

*The Journey of Imaging AI: From Data Governance to Clinical implementation*

3. Hsuan-Yu Chang (張軒瑜)

【The Center for Green Economy, Chung-Hua Institution for Economic Research】

*Trending time-varying coefficient spatial panel data models***Room 210, the 2nd floor of the College of Commerce****VI-2 Topic : Statistics and Data Science**

Chair : Ben-Chang Shia (謝邦昌)

【Fu Jen Catholic University】

1. Andrei Volodin

【Department of Mathematics &amp; Statistics, University of Regina, Canada】

*Statistical inference for the ratio of medians of two lognormal distributions*

2. Xiao Wang (王嘯)

【Department of Statistics, College of Science, Purdue University, U.S.A.】

*Efficient multimodal sampling via tempered distribution flow*

3. Pei-Ting Chou (周珮婷)

【Department of Statistics, National Chengchi University】

*Unveiling the Power of Dimension Reduction in Neural Networks***Room 201, the 2nd floor of the College of Commerce****VI-3 Topic : Statistical Process Monitoring**

Chair : Chien-Yu Peng (彭健育)

【Institute of Statistical Sciences, Academia Sinica】

1. Arthur B. Yeh (葉百堯)

【Department of Applied Statistics and Operations Research, Bowling Green State University, U.S.A.】

*On Monitoring and Post-Detection Diagnostics of Correlated Quality Variables of Different Types*

2. Wei-Hang Huang (黃偉恆)

【Department of Statistics, Feng Chia University】

*The Performance of S Control Charts for the Lognormal Distribution with Estimated Parameters*

3. Ming-Che Lu (呂明哲)

【Department of Accounting, Chaoyang University of Technology】

*Pollution Concentration Monitoring Using a New Birnbaum-Saunders Control Chart*

VI-4 Topic : Modern Statistics and Applications

Chair : Tsai, Pi-Wen (蔡碧紋)

【Department of Mathematics, National Taiwan Normal University】

1. Chih-Li Sung (宋治立)

【Department of Statistics and Probability, Michigan State University, U.S.A.】

*Stacking designs: designing multi-fidelity computer experiments with target predictive accuracy*

2. Frederick Kin Hing Phoa (潘建興)

【Institute of Statistical Science, Academia Sinica】

*An Efficient Approach for Identifying Important Biomarkers for Biomedical Diagnosis*

3. Yu-Wei Chang (張育璋)

【Department of Statistics, National Chengchi University】

*Bayesian inference with spike-and-slab priors for differential item functioning detection in a multiple-group IRT tree model*