

Third ICOSA-Canada Chapter Symposium

A Tentative Schedule

Plenary Speech, 8:00-9:00, 19 August, Saturday

Xuming He, University of Michigan, USA

A Statistical Tale of Subgroup Analysis for Managerial Decision Making

Parallel Sessions 1, 9:15 am - 10:35 am, 19 August, Saturday

Session 1: *Variable Selection and Model Checking*

Organizer: Lixing Zhu, Beijing Normal University and Hong Kong Baptist University, China

(1) Liqun Wang, University of Manitoba, Canada

Pending

(2) Weixin Song, Kansas State University, USA

Pending

(3) Lixing Zhu, Beijing Normal University, China

Pending

Session 2: *Improving Financial Modeling and Asset Pricing Theory with Advanced Statistical Analysis*

Organizer: Yonggan Zhao, Dalhousie University, Canada

(1) Leonard C. MacLean, Dalhousie University, Canada

Pending

(2) Chanaka Edirisinghe, Rensselaer Polytechnic Institute, USA

Pending

(3) Zhiping Chen, Xi'an Jiatong University, China

Pending

(4) Weixing Wu, University of International Business and Economics, China

Pending

(5) Peiming Wang, Auckland University of Technology, New Zealand

Session 3: *Advanced Methodologies in Survival Analysis*

Organizer: Jiajia Zhang, University of South Carolina, USA

- (1) Gary Chan, University of Washington, USA
Instrumental Variables in Survival Analysis
- (2) Jing Ning, The University of Texas M.D. Anderson Cancer Center, USA
Semiparametric Models and Estimation on the Dependence Structure of Bivariate Recurrent Events
- (3) Qi Zheng, University of Louisville, USA
High Dimensional Censored Quantile Regression
- (4) Yingwei Peng, Queen's University, Canada
Joint modeling longitudinal proportional data and survival times

Session 4: *Recent Advance on Computer Experiments*

Organizer: Chunfang Devon Lin, Queen's University, Canada

- (1) Will Welch, University of British Columbia, Canada
Analysis of computer experiments: what can be learned from physical experiments?
- (2) Shirin Golchi, University of British Columbia, Canada
Design of Computer Experiments with Input Constraints
- (3) Ryan Lekivetz, JMP Inc., USA
Space-Filling Designs with categorical factors for restricted regions
- (4) Xinwei Deng, Virginia Tech, USA
Additive Gaussian Process for Computer Experiments with Qualitative and Quantitative Input Factors

Session 5: *Recent Development of Statistical Methods for Complex Data*

Organizer: Weixin Yao, University of California (Riverside), USA

- (1) Suojin Wang, Texas A&M University, USA
Efficient estimation in partially linear single-index models for longitudinal data
- (2) Daniel Jeske, University of California (Riverside), USA
Maximizing the Utility of Statistical Classification with Applications to Medical Diagnostics

- (3) Michael Levine, Purdue University, USA
Aprial linear multivariate model - a difference approach
- (4) Xinping Cui, University of California(Riverside), USA
Pending

Session 6: *Recent developments in statistical inference for high dimensional data*

Organizer: Ping-Shou Zhong, Michigan State University, USA

- (1) Wenguang Sun, University of Southern California, USA
Simultaneous Multistage Adaptive Ranking and Thresholding for Sparse Signal Recovery
- (2) Srijan Sengupta, Virginal Tech, USA
A Subsampled Double Bootstrap for Massive Data
- (3) Jian Kang, University of Michigan, USA
Partition Based Ultrahigh Dimensional Variable Screening
- (4) Ping-Shou Zhong, Michigan State University, USA
Test for Temporal Homogeneity of High-Dimensional Means with Application to fMRI Studies

Parallel Sessions 2, 10:55 am - 12:15 am, 19 August, Saturday

Session 7: *Integrating big and complex data with new statistical methods and applications*

Organizer: Linglong Kong, University of Alberta, Canada, Canada

- (1) Xi Luo, Brown University, USA
Network of networks: A large scale graphical model for whole brain networks using fMRI
- (2) Guodong Li, University of Hong Kong, Hongkong
Hybrid conditional quantile inference for conditional heteroscedastic time series models
- (3) Sijian Wang, University of Wisconsin-Madison, USA
Robust Accelerated Failure Time Model for High-Dimensional Survival Data
- (4) Haiying Wang, University of Connecticut, USA
Big data regression

Session 8: *Statistical Methods for Complex Data from Biomedical Studies*

Organizer: Ying Zhang, Indiana University, USA

- (1) Jingwei Wu, Temple University, USA
A multivariate single-index regression model
- (2) Bin Huang, Cincinnati Children's Hospital, USA
Addressing unmeasured confounders in comparative effectiveness research with patient registry data
- (3) Jingyang Zhang, Fred Hutchinson Cancer Center, USA
Adjusting for longitudinal adherence measure in HIV prevention trials
- (4) Giorgos Bakoyannis, Indiana University, USA
Analysis of competing risks data for cohort studies with double-sampling designs

Session 9: *Novel Clinical Trial Designs for Precision Medicine and Immunotherapy*

Organizer: Ying Yuan, The University of Texas MD Anderson Cancer Center, USA

- (1) Suyu Liu, The University of Texas MD Anderson Cancer Center, USA
A Novel Bayesian Phase I Clinical Trial Design for Delayed Toxicity
- (2) Rui Tang, Vertex Pharmaceuticals, USA
A Novel Bayesian Adaptive Platform Design for Efficiently Screening Oncology Combo Therapies in Drug Development Portfolio
- (3) Ying Yuan, University of Texas MD Anderson Cancer Center, USA
A Bayesian Phase I-II Trial Design for Immunotherapy
- (4) Julie Zhou, University of Victoria, Canada
Computing optimal regression designs via semidefinite programming

Session 10: *Advance in Statistical Methods for Large and Complex Data*

Organizer: Dehan Kong, University of Toronto, Canada

- (1) Yen-chi Chen, University of Washington, USA
Nonparametric Inference via Bootstrapping the Debiased Estimator

- (2) Ping Ma, University of Georgia, USA
Leveraging methods for big data regression
- (3) Linglong Kong, University of Alberta, Canada
Estimation for bivariate quantile varying coefficient model
- (4) Weining Shen, University of California (Irvine), USA
Independence testing: Bayesian and non-Bayesian approaches

Session 11: *Large-Scale Statistical Inference and Confidence Bands for Low Dose Risk*

Organizer: Jianan Peng, Acadia University, Canada

- (1) Kun Liang, University of Waterloo, Canada
Detecting Adverse Drug Reactions from Pharmacovigilance Databases
- (2) Joshua Habiger, Kansas University Medical Center, USA
Multiple Testing with Heterogeneous Data
- (3) Jun Li, University of Notre Dame, USA
Identifying and Removing the Cell-cycle Effect from Single-cell RNA-Sequencing Data
- (4) Lucy Kerns, Youngstown State University, USA
Low Dose Risk Estimation for Quantal Data via Simultaneous Confidence Bands

Session 12: *Model Selection in Big Data*

Organizer: Jingjing Wu, University of Calgary, Canada

- (1) Xiangrong Yin, University of Kentucky, USA
Estimating an inverse space via Fourier transformation
- (2) Hanxiang Peng, IUPUI, USA
A optimal subsampling in a linear regression model with big sample sizes and fast algorithms
- (3) Fei Tan, IUPUI, USA
Big data analysis in generalized linear models using A-optimal subsampling
- (4) Wenyan Zhong, University of Calgary, Canada
Bi-level variable selection in transformation models

Parallel Sessions 3, 2:00 pm - 3:20 pm, 19 August, Saturday

Session 13: *Recent Development of Statistical Methods for Large Genomic Data*

Organizer: Ximing Xu, Nankai University, China

(1) Wei Lin, Peking University, China

Low-rank Recovery for Large Metagenomic Data

(2) Ying Wu, Nankai University, China

Assessing the Accuracy of Predictive Models with Interval-Censored Data

(3) Ruibin Xi, Peking University, China

Copy number analysis of whole-genome data using BIC-seq2 and its application to detection of cancer susceptibility variants

(4) Ximing Xu, Nankai University, China

Issues in the statistical analysis of human gut metagenomic data

Session 14: *Analysis of Complex Longitudinal Data*

Organizer: Lang Wu, University of British Columbia, Canada

(1) Weiliang Qiu, Harvard University, USA

A mixture of Bayesian hierarchical models for detecting disease-associated genomic probes for data generated from paired/matched designs

(2) Jin Qiu, Zhejiang University of Finance and Economics, China

Functional data analysis for complex data

(3) Michelle Xia, Northern Illinois University, USA

A mixture growth model for covariate misclassification and missingness in longitudinal data

(4) Taraneh Abarin, Memorial University of Newfoundland, Canada

Measurement error in longitudinal models

Session 15: *Recent Developments in Event History and Survival Data Analysis*

Organizer: Xuewen Lu, University of Calgary, Canada

(1) Minggen Lu, University of Nevada, USA

Penalized estimation for proportional hazards models with current status data

- (2) Yi Xiong, Simon Fraser University, Canada
Event History Data Analysis in Wildland Fire Control
- (3) Chiung-Yu Huang, Johns Hopkins University, USA
Analysis of bivariate gap time with competing risks
- (4) Wenyu Jiang, Queen's University, Canada
Testing for clusterlevel random effects in joint modeling of survival time and marker responses in clinical trials

Session 16: *Recent advances in high-dimensional complex data modeling.*

Organizer: Weining Shen, University of California Irvine, USA

- (1) Hao Chen, University of California (Davis), USA
Gaussianity test for high-dimensional data
- (2) Fang Han, University of Washington, USA
Pairwise difference approach for partially linear models: some real gains
- (3) Dehan Kong, University of Toronto, Canada
Matrix linear discriminant analysis
- (4) Yuan Jiang, Oregon State University, USA
Variable Selection with Prior Information and Its Applications to Genetic Association Studies.

Session 17: *New methods for analyzing complex and high dimensional data*

Organizer: Bei Jiang, University of Alberta, Canada

- (1) Richard Cook, University of Waterloo, Canada
Modeling within-family dependence in disease onset times with biased samples by design
- (2) Ivan Mizera, University of Alberta, Canada
Shape-constrained density estimation
- (3) Adam Kashlak, University of Cambridge, UK
A concentration inequality based methodology for high dimensional sparse covariance matrix estimation
- (4) Annie Qu, University of Illinois at Urbana-Champaign, USA
Longitudinal Clustering for Binary Data

Session 18: *New Developments in Time Series and Regression models*

Organizer: Guodong Li, University of Hong Kong, Hong Kong

- (1) Xiaofeng Shao, University of Illinois at Urbana-Champaign, USA
A new approach to dimension reduction for multivariate time series
- (2) Ke Zhu, University of Hong Kong, Hong Kong
On a measure of lack of fit in nonlinear cointegrating regression
- (3) Alexander Aue, University of California, Davis, USA
Spectral analysis of high-dimensional time series with applications to the mean-variance frontier
- (4) Qiang Sun, Princeton University, USA
Robustify mean regression: phase transition and new insights

Parallel Sessions 4, 3:40 pm - 5:00 pm, 19 August, Saturday

Session 19: *Advanced Statistical Methods for Complex Data*

Organizer: Wei Liu, York University, Canada

- (1) Zhigang Li, Dartmouth College, USA
A zero-inflated logistic model for human microbiome data
- (2) Guohua Yan, University of New Brunswick, Canada
Analysis of large forest fire occurrences in Canada using multiple Poisson mixed models
- (3) Hongbin Zhang, City University of New York, USA
A mechanistic nonlinear model for censored and mis-measured covariates in longitudinal models, with application in AIDS studies
- (4) Ji Luo, Zhejiang University of Finance and Economics, China
causal inference on cancer recurrence

Session 20: *Recent Developments in Complex Data Analysis and Its Applications*

Organizer: Yichuan Zhao, Georgia State University, USA

- (1) Yi Li, University of Michigan, USA
Pending

(2) Xuewen Lu, University of Calgary, Canada

Pending

(3) Jiayang Sun, Case Western Reserve University, USA

Pending

(4) Min-ge Xie, Rutgers University, USA

Pending

Session 21: *Dimension reduction and network data analysis*

Organizer: Bing-Yi Jing, University of Science and Technology of Hong Kong, Hong Kong

(1) Qihua WANG, Chinese Academy of Sciences, China

Sufficient Dimension Reduction under Dimension-reduction-based Imputation with Predictors Missing at Random

(2) Xianshi YU, HKUST, Hongkong

Community detection for sparse network

(3) Ting LI, HKUST, Hongkong

Scaling variables in pre-processing data

(4) Ningchen Ying, HKUST, Hongkong

Link prediction for network data

Session 22: *Distributed Statistical Learning for Large-scale Data*

Organizer: Chen Xu, University of Ottawa, Canada

(1) Jialei Wang, University of Chicago, USA

Efficient Distributed Learning with Sparsity

(2) Ying Hung, Rutgers University, USA

A Sequential Split-Conquer-Combine Approach for Gaussian Process Modeling in Computer Experiments

(3) Qiang Liu, Dartmouth College, USA

Distributed Estimation

(4) Ziwei Zhu, Princeton University, USA

The Distributed Learning of Eigenspace

Session 23: *Recent advances in analysis of correlated health data*

Organizer: Ying Zhang, Acadia University, Canada

- (1) Renjun Ma, University of New Brunswick, Canada
Poisson Nonlinear Mixed Models for Dose-Response Curve Data
- (2) Ronghui Xu, University of California, San Diego, USA
Prediction and Inference under Competing Risks in High Dimension - An EHR demonstration Project for Prostate Cancer
- (3) Depeng Jiang, University of Manitoba, Canada
Growth Trajectory Models for Longitudinal Outcomes and Survival Data
- (4) Ying Zhang, Acadia University, Canada
Tests of Concordance between Groups of Incomplete Rankings: with R Package

Session 24: *Recent Development in Integrative Analysis of Large-Scale Genetic Datasets*

Organizer: Yuan Jiang, Oregon State University, USA

- (1) Yong Chen, University of Pennsylvania, USA
Embracing heterogeneity: beware of YETI
- (2) Chi Song, Ohio State University, USA
Integrative analysis of GWAS data from different platforms by group-level regularization
- (3) Jin Liu, National University of Singapore, Singapore
SSE: A Summary-statistics-based approach to estimating heritability, co-heritability and effect sizes in GWAS data analysis
- (4) Dongjun Chung, Medical University of South Carolina, USA
Integrative analysis of multiple genetic studies guided by biomedical literature mining

Parallel Sessions 5, 8:30 am - 9:50 am, 20 August, Sunday

Session 25: *Recent Statistical Advances and Applications in Biomedical Research*

Organizer: Dongdong Li, Simon Fraser University, Canada

- (1) Lihui Zhao, Northwestern University, USA
Statistical methods to improve cardiovascular disease risk prediction.

- (2) Karen Kopciuk, Alberta Health Services, Canada
- (3) Coraline Danieli, McGill University, Canada
Flexible Competing Risks modeling of the effects of time-varying exposures with Applications in Drug Safety and Effectiveness research
- (4) Yi Niu, Dalian University of Technology, China
Variable selection via penalized GEE for a marginal survival model for clustered survival data

Session 26: *Sparsity Estimation in High-dimensional Data Analysis*

Organizer: Yi Yang, McGill University, Canada

- (1) Teng Zhang, University of Central Florida, USA
Sparse precision matrix estimation via lasso penalized D-trace loss
- (2) Junhui Wang, City Univ of Hong Kong, Hong Kong
Sparsity Oriented Importance Learning for High-dimensional Linear Regression
- (3) Chen Xu, University of Ottawa, Canada
Communication-efficient Distributed Kernel Regression via ADMM
- (4) Longhai Li, University of Saskatchewan, Canada
Fully Bayesian Classification with Heavy-tailed Priors for Selection in High-dimensional Features with Grouping Structure

Session 27: *Statistical methods for errors in variables*

Organizer: Juxin Liu, University of Saskatchewan, Canada

- (1) Yanyuan Ma, Pennsylvania State University, USA
A spline based semiparametric approach to non-parametric measurement error models.
- (2) Paul Gustafson, University of British Columbia, Canada
Bayesian adjustment for measurement error: How much prior knowledge is needed to make it worthwhile?
- (3) Wenqing He, Western University, Canada
Effect of covariate measurement error on classification

- (4) Xiaofeng Wang, Cleveland Clinic, USA
Semiparametric deconvolution methods in back-ground correction problems with medical applications

Session 28: *Statistical Methods and Applications with Big Data*

Organizer: Xikui Wang, University of Manitoba, Canada

- (1) Xinpeng Xiao, Wuhan University of Technology, China
MCMC Estimation of Spatial Autoregressive Panel Data Model with Time Varying Spatial Weights Matrices
- (2) Su Chen, University of Memphis, USA
Nonparametric K-sample Test using Kernel Functional Estimation and its Optimal Bandwidth Selection
- (3) You Liang, University of Manitoba, Canada
Portfolio Optimization for Agricultural Reinsurance
- (4) Matus Maciak, Charles University, Czech Republic
Post-selection inference in regression models with change points and shape constraints
- (5) Shuhua Mao, Wuhan University of Technology, China

Session 29: *Strategies for Complex Data Analysis*

Organizer: Wenqing He, Western University, Canada

- (1) Xin Yuan Song, Chinese University of Hong Kong, Hong Kong
Bayesian Scalar on Image Regression with Nonignorable Non-response
- (2) Mark Wolters, Fudan University, China
Better Autologistic Regression
- (3) Paul Marriott, University of Waterloo, Canada
Information Geometry and Restrictive Boltzmann Machines
- (4) Ying MacNab, University of British Columbia, Canada
Some recent work on linear models of coregionalization

Parallel Sessions 6, 10:10 am - 11:30 am, 20 August, Sunday

Session 30: *Functional Data Analysis*

Organizer: Jiguo Cao, Simon Fraser University, Canada

- (1) Chongzhi Di, Fred Hutchinson Cancer Research Center, USA
A new testing procedure for functional linear models
- (2) Matias Salibian Barrera, University of British Columbia, Canada
S-estimators for functional principal component analysis
- (3) Camila P. E. de Souza, BC Cancer Research Centre, Canada
Probabilistic and distance based approaches for clustering whole genome bisulfite sequencing data from single cells
- (4) Yunlong Nie, Simon Fraser University, Canada
Supervised functional principal component analysis

Session 31: *Advances in Statistical Analysis for Complex Data*

Organizer: Amy Yuehua Wu, York University, Canada

- (1) Zhou Zhou, University of Toronto, Canada
Pending
- (2) Ming Yuan, University of Wisconsin, USA
Pending
- (3) Xiaoping Shi, Thompson Rivers University, Canada
Pending
- (4) Xuekui Zhang, University of Victoria, Canada
Temporal curve alignment for normalizing different batches of time course genomic experiments

Session 32: *Recent developments in experimental designs*

Organizer: Po Yang, University of Manitoba, Canada

- (1) Chang-Yun Li, National Chung Hsing University, Taiwan
Contamination and Beta-aberration Criteria for Screening Quantitative Factors.
- (2) Rongxian Yue, Shanghai Normal University, China
Robust Population Designs for Longitudinal Regression Models with Random Intercepts.

- (3) Boxin Tang, Simon Fraser University, Canada
Designs from Good Hadamard Matrices
- (4) Sauman Mendal, University of Manitoba, Canada

Session 33: *Recent Advances in Statistical Methods for Modeling Large-Scale Health data*
Organizer: Cindy Xin Feng, University of Saskatchewan, Canada

- (1) Charmaine Dean, Western University, Canada
Nonparametric statistical tools for genome-wide detection of clustering and spatial association among mutations under a microarray probe sampling system
- (2) Amy Yuehua Wu, York University, Canada
Association rule mining for genome-wide association study and market basket analysis
- (3) Liangliang Wang, Simon Fraser University, Canada
Pattern Discovery of Health Curves with an Ordered Probit Model,
- (4) Peijun Sang, Simon Fraser University, Canada
Parametric Functional Principal Component Analysis

Session 34: *Recent Developments in Empirical Likelihood Methods*
Organizer: Song Cai, Carleton University, Canada

- (1) Jiahua Chen, University of British Columbia, Canada
Monitoring test by empirical likelihood and resampling method
- (2) Min Tsao, University of Victoria, Canada
Transforming the empirical likelihood towards better accuracy
- (3) Pengfei Li, University of Waterloo, Canada
A unified semiparametric inference framework for multiple non-negative distributions with excess zero observations
- (4) Changbao Wu, University of Waterloo, Canada
Empirical Likelihood Inferences for Public-Use Survey Data

Parallel Sessions 7, 1:30 pm - 2:50 pm, 20 August, Sunday

Session 35: *Statistical Methods for Environmental Data*

Organizer: Jianan Peng, Acadia University, Canada

- (1) Sylvia R. Esterby, University of British Columbia Okanagan, Canada
Comparison of Water Quality Indicators
- (2) Jiguo Cao, Simon Fraser University, Canada
Parametric Functional Principal Component Analysis
- (3) Connie Stewart, University of New Brunswick, Canada
Measures of Distance and Seal Diets
- (4) Jianan Peng, Acadia University, Canada
Empirical likelihood ratio test for the means of zero-inated populations

Session 36: *Statistical Issues and Methods for Analysing Administrative Health Data*

Organizer: Cindy Xin Feng, University of Saskatchewan, Canada

- (1) Lisa Lix, University of Manitoba, Canada
Multiple imputation models for misclassification bias in administrative health data
- (2) Leilei Zeng, University of Waterloo, Canada
Tracing Studies in Cohorts with Loss to follow-up
- (3) Liqun Diao, University of Waterloo, Canada
Classification Trees for Misclassified Responses
- (4) Cindy Xin Feng, University of Saskatchewan, Canada
Impact of Misspecified Covariance Structure on the Parameter Estimates in a Shared Spatial Frailty Model

Session 37: *Methodological Advances on Analyzing Complex Survey Data*

(Session Sponsored by CANSSI CRT Statistical Inference for Complex Surveys with Missing Observations)

Organizer: Changbao Wu, University of Waterloo, Canada

- (1) David Haziza, University of Montreal, Canada
Multiply Robust Imputation Procedures for Populations Containing a Large Number of Zeros

- (2) Wilson Lu, Acadia University, Canada
The impact of Calibration Distances and Constraints on Weighting and Estimation for Complex Surveys
- (3) Puying Zhao, University of Waterloo, Canada
Empirical Likelihood and Semiparametric Inference with Survey Data
- (4) Zilin Wang, Wilfrid Laurier University, Canada
Resampling Techniques for Estimation and Inferences for Variances

Session 38: *Recent advances in statistical genetics*

Organizer: Kun Liang, University of Waterloo, Canada

- (1) Jinko Graham, Simon Fraser University, Canada
Combining phenotypes, genotypes and genealogies to uncover genomic variants that influence complex traits
- (2) Wei Xu, University of Toronto, Canada
Statistical methods to assess host genetic association with human gut microbiome
- (3) Wendy Lou, University of Toronto, Canada
Integrated analysis of genetic and environmental data from multiple sources
- (4) Shijia Wang, Simon Fraser University, Canada
Particle MCMC methods for Bayesian phylogenetics

Session 39: *Recent Advances in High-Dimensional Data Analysis and Small Area Estimation*

Organizer: Ying Yan, University of Calgary, Canada

- (1) Lai Jiang, McGill University, Canada
Constrained Instruments and its Application to Mendelian Randomization with Pleiotropy
- (2) Yi Yang, McGill University, Canada
Sparsity Oriented Importance Learning for High-dimensional Linear Regression

- (3) Tianyu Guan, Simon Fraser University, Canada
One Dimensional Historical Functional Linear Regression via Group Bridge Approach
- (4) Golshid Chatrchi, Carleton University, Canada
Semi-parametric small area estimation under informative sampling

Parallel Sessions 8, 3:10 pm - 4:30 pm pm, 20 August, Sunday

Session 40: *Statistical Approaches are in Great Demand*

Organizer: Joan Hu, Simon Fraser University, Canada

- (1) Teresa Cheung, Simon Fraser University, Canada
Pending
- (2) Jing Li, Simon Fraser University, Canada
Pending
- (3) Yue Wang, Simon Fraser University, Canada
Pending
- (4) Trevor Thomson, Simon Fraser University, Canada
Discussion

Session 41: *Recent developments in design and analysis of biostatistical experiments*

Organizer: Hua Shen, University of Calgary, Canada

- (1) Xikui Wang, University of Manitoba, Canada
- (2) Ying Yan, University of Calgary, Canada
Optimally Weighted Estimation in Case-Cohort Studies
- (3) Po Yang, University of Manitoba, Canada
- (4) Hua Shen, University of Calgary, Canada
Analysis of heterogeneous lifetime data with missing covariates

Session 42: *Statistical analysis and modeling of complex data*

Organizer: Guohua Yan, University of New Brunswick, Canada

- (1) Bingshu Chen, Queens University, Canada
Biomarker threshold models in cancer clinical trials
- (2) Zhaozhi Fan, Memorial University, Canada
Localized quantile regression of realized volatility
- (3) Wei Liu, York University, Canada
Two-step and likelihood methods for HIV viral dynamic models with covariate measurement errors and missing data
- (4) Yang Zhao, University of Regina, Canada
Nonmonotone missingness patterns in semiparametric maximum likelihood inference for regression analysis

Session 43: *Statistical Methods in Actuarial Science*

Organizer: Yi Lu, Simon Fraser University, Canada

- (1) Jun Cai, University of Waterloo, Canada
Risk measures based on the behavioural economics theory and their estimation
- (2) Chengguo Weng, University of Waterloo, Canada
Regression Tree Credibility Model
- (3) Suxin Wang, Simon Frase University, Canada
- (4) Yi Lu, Simon Fraser University, Canada
Pending