PROGRAM

45TH ACTUARIAL RESEARCH CONFERENCE

TALKS WILL BE HELD IN:

SESSION A: SAYWELL HALL 10081
SESSION B: BLUSSON HALL 10011

Sunday, July 25th

17:30 – 20:30 **Registration/Cocktail Reception (Halpern Centre #126)**
Participants can register, pick up conference materials and network.

Monday, July 26th

8:00 – 8:45 **Registration/Continental Breakfast** (outside Room 10081)

8:45 – 9:00 Opening Remarks (Room 10081)

9:00 – 10:15 **Actuarial Accounting--A Cautionary Report** (Room 10081)
Invited Talk: Dan R. Young
Moderator: Gary Parker

10:15 – 10:45 **Break**

10:45 - 12:15 **Session 1A – Mortality Risk** (Room 10081)
Moderator: Margie Rosenberg
José Garrido: **Mortality Improvement: An Actuarial Perspective**
Albina Orlando: **Solvency appraisal for life annuities: demographic risk measures**
Cary Tsai: **Actuarial Applications of the Linear Hazard Transform in Mortality Fitting and Prediction**

Session 1B – Reinsurance (Room 10011)
Moderator: Ron Gebhardtsbauer
Beatriz Balbás-Aparicio: **Optimal Reinsurance Problems Involving Risk Measures**
Jianfa Cong: **Optimal Multi-period Proportional Reinsurance Strategy**
Wei Wei: **Optimal Reinsurance Strategy in Two Dimensional Risk Model**

12:15 – 13:45 **Lunch** (E&R Meeting: Room ASB 10940 – IRMACS)

13:45 – 14:45 **Society of Actuaries Education Update** (Room 10081)
Invited Talk: Stuart Klugman
Moderator: Samuel Cox

14:45 – 15:45 **Session 2A – Actuarial Education** (Room 10081)
Moderator: Arnold Shapiro
Margie Rosenberg: **Technology Enhanced Learning for Actuarial Science Education**
Barry McKeown: **Diversity In The Actuarial Profession - Why College Summer Programs For High School Students Can Make A Difference**

Session 2B – Mortality Projections (Room 10011)
Moderator: Bruce Jones
Louis Adam: **The Canadian Pensioners Mortality Table: some results on mortality level and trends**
Ping An: **Forecasting Mortality in the Presence of Missing Data: An Application to Chinese Population**

15:45 – 16:15 **Break**

16:15 – 17:45 **Session 3A – Risk Theory I** (Room 10081)
Moderator: Étienne Marceau
David Landriault: **Ruin Theory with Parisian Delays**
Tianxiang Shi: **Finite-time ruin problems in Sparre Andersen models with arbitrary interclaim times**
Yi Lu: **The expected discounted penalty at ruin for a risk model with two-sided jumps**

Session 3B – Pension Valuation (Room 10011)
Moderator: Curtis Huntington
Arnold Shapiro: **Fuzzy Post-Retirement Financial Strategies**
Patrick Mignault: **How Phased Retirement Affects Defined Benefits**
Barbara Sanders: **Analysis of Variable Benefit Plans**

Tuesday, July 27th

8:00 – 9:00 **Registration/Continental Breakfast** (outside Room 10081)

9:00 – 10:00 **Spatio-Temporal Models for Rates and Survival Analysis** (Room 10081)
Invited Talk: Charmaine Dean
Moderator: José Garrido

10:00 – 10:30 **Break**

10:30 – 12:00 **Session 4A – Loss Reserving and Forecasting** (Room 10081)
Moderator: Sarah Christiansen
Glenn Meyers: **The Technical Provisions in Solvency II. What EU Insurers Could Do if They Had Schedule P**
Andrew Loach: **Claim Forecasting Using Econometric Stepwise Regression**
Wu-Chyuan Gau: **Loss reserving with random selection**

Session 4B – Finance and Risk I (Room 10011)
Moderator: Mary Hardy
Daniel Dufresne: **Changes of Measure for the Square-root Stochastic Volatility Process**
Ken Seng Tan: **Pricing and hedging with discontinuous functions: quasi-Monte Carlo methods and dimension reduction**
Joseph Kim: **Measuring and managing systemic risk**

12:00 – 13:30 **Lunch** (CKER Meeting: Room ASB 10901 – IRMACS)

12:30 – 1:30 **Poster Session** (outside Room 10081)

13:30 – 15:00 **Session 5A – Model Fitting** (Room 10081)
Moderator: Glenn Meyers
Louis Doray: **Inference for the Discrete Stable Distribution with the Probability Generating Function**
Eric Vaagen: **Measuring Supplier Performance Using Generalized Linear Modeling**
Brian Hartman: **Bayesian Methods for Fitting Regime-switching Models**

Session 5B – Risk Theory II (Room 10011)
Moderator: David Landriault
Hélène Cossette: **Ruin Related Quantities in a Risk Model Based on Time Series for Count Data**
Ya Fang Wang: **Distribution of discounted compound sums when the mean of inter-arrival time is small**
Ghislain Léveillé: **Discounted Compound Renewal Sums with a Stochastic Force of Interest**

15:00 – 15:30 **Break**

15:30 – 17:00 **Session 6A – Statistical Methods** (Room 10081)
Moderator: David Scollnik
Jay Vadiveloo: **Replicated Stratified Sampling – A Practical Approach to Financial Modeling**
Brant Wipperman: **Premium Forecasting Using Principal Components Analysis**
Maciej Augustyniak: **Inference for a Family of Statistical Distributions with Heavy Tails**

Session 6B – Risk Measures and Optimal Insurance (Room 10011)
Moderator: Alejandro Balbás
Etienne Marceau: **TVaR-based Capital Allocation with Dependence**
Jacques Rioux: **Evaluation of Parameter Risk via First Order Approximation of Distortion Risk Measures**
Mostafa Mashayekhi: **A Note On Optimal Insurance Under Ambiguity**

18:00 – 21:00 **Conference Dinner** (Diamond Alumni Centre, SFU)

Wednesday, July 28th

8:00 – 9:00 **Continental Breakfast** (outside Room 10081)

9:00 – 10:30 **Session 7A – Life Insurance** (Room 10081)
Moderator: Yvonne Chueh
Jaap Spreeuw: **Estimation and Nonparametric Testing of Heterogeneous Life Data Models**
Min Ji: **A Multiple State Model for the Joint-life Reverse Mortgage Termination Speed**
Ruowei Zhou: **Actuarial and Financial Valuations of Guaranteed Annuity Options**

Session 7B – Finance and Risk II (Room 10011)
Moderator: Daniel Dufresne
Emmanuel Thompson: **Valuation of Segregated Funds in India**
Richard Joss: **Investment Forecasting Using Conditional Probabilities**
Raquel Balbás: **Compatibility Between Prices and Risks**

10:30 – 11:00 **Break**

11:00 – 12:00 **Forum** (Room 10081)
Moderator: Gary Parker

12:00 – 12:15 **Closing Remarks** (Room 10081)

12:15 **Lunch Box**