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<td>Wed</td>
<td>17.00</td>
<td>Registration and welcome reception at University Centre 204</td>
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<td>Thu</td>
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<td>Thu</td>
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<td>Thu</td>
<td>9.20</td>
<td>F1 - Charly Pazdor</td>
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<td>Thu</td>
<td>10.10</td>
<td>Coffee in E2-229</td>
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| Thu | 10.30  | P2A: Finance I | E2-229 | P1B: ERM  
P1C: Risk theory I |
| Thu | 12.10  | Lunch at University Centre 210 | E2-229 |                                      |
| Thu | 14.00  | F2 - Rob Stapleford | E2-229 |                                      |
| Thu | 14.50  | F3 - Elias Shiu et al. | E2-229 |                                      |
| Thu | 15.40  | Coffee in E2-229 | E2-229 |                                      |
| Thu | 16.00  | P2A: Agricult. risk management | E2-229 | P2B: Stat. methods I  
P2C: Mortality |
| Thu | 17.30  | Centennial Dinner at University Centre 204 | E2-229 |                                      |
| Fri | 8.00   | Breakfast in E2-229 | E2-229 |                                      |
| Fri | 8.30   | F4 - Dave Snell | E2-229 |                                      |
| Fri | 9.20   | F5 - Gary Wang | E2-229 |                                      |
| Fri | 10.10  | Coffee in E2-229 | E2-229 |                                      |
| Fri | 10.30  | P3A: Finance II | E2-229 | P3B: Actuarial education  
P3C: Mortality |
| Fri | 12.10  | Lunch at University Centre 210 | E2-229 |                                      |
| Fri | 14.00  | F6 - Mary Hardy | E2-229 |                                      |
| Fri | 14.50  | F7 - Linda Golden | E2-229 |                                      |
| Fri | 15.40  | Coffee in E2-229 | E2-229 |                                      |
| Fri | 16.00  | P4A: Pensions | E2-229 | P4B: Stat. methods II  
P4C: Appl. of Act. Models |
| Fri | 18.00  | Conference Banquet at Manitoba Club | E2-229 |                                      |
| Sat | 8.00   | Breakfast in E2-229 | E2-229 |                                      |
| Sat | 8.30   | P5A: Finance III | E2-229 | P5B: Casualty  
P5C: Risk theory II |
| Sat | 10.10  | Coffee in E2-229 | E2-229 |                                      |
| Sat | 10.30  | P6A: Genetic algorithms | E2-229 | P6B: How to be a CAE?  
P6C: Mortality |
| Sat | 11.25  | Closing session | E2-229 |                                      |
| Sat | 11.50  | Box lunch in E2-229 | E2-229 |                                      |

1 F - Feature session; 2 P - Parallel session
17.00–20.00  Registration and welcome reception at University Centre 204

Join us for an opportunity to meet participants and enjoy fruit, cheese, hot hors d’oeuvre, and drinks at Marshall McLuhan Hall (UC204).
THURSDAY, August 2, 2012

8.00–8.30   Breakfast (E2-229)

8.30–9.20   Opening session (E3-270)
   • Jeffrey Pai to open the conference
   • Welcome by Michael Benarroch, Dean of Asper School of Business
   • Welcome by Sunny Oh, Vice President, Great-West Life Assurance Co.

9.20–10.10   Feature session 1 (E3-270)   Chair: Jeffrey Pai

Ethics and Professionalism in Actuarial Practice Charly Paudor

10.10–10.30  Coffee break (E2-229)

10.30–12.10  P1A: Finance I (E3-270)   Chair: Rui Zhou


2. Pricing of Debt and Loan Guarantees using Stochastic Delay Differential Equations Elisabeth Kemajou

3. Estimation and Pricing with a Diffusion Model with Jumps Claire Bilodeau and Andrew Luong

4. Model Selection in Regime-switching Models of Various Types Brian Hartman and Chris Groendyke

5. Pricing and Hedging GMWBs in a Binomial Model Menachem M. Wenger

10.30–12.10  P1B: Entreprise risk management (E2-399)   Chair: Ken Seung Tan

1. Economic capital approaches and solvency of UK annuity portfolios Mayukh Gayen

2. Estimating the required surplus, benchmark profit, and optimal reinsurance retention for an insurance enterprise using the compound Poisson distribution Joseph Boor

3. The Marginal Cost of Risk, Risk Measures, and Capital Allocation Daniel Bauer and George Zvaunji


5. Loss Given Default in the Presence of Multivariate Regular Variation. Part 2: Main Results Qihe Tang and Zhongyi Yuan

10.30–12.10  P1C: Risk theory I (E2-350)   Chair: Arnold Shapiro

1. Optimal Asset Allocation for Endowment Management Rina Ashkenazi, Sandra Paterlini and Francesco Pattarin

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2. VaR and ruin probabilities for the Geometric Brownian motion with jump model Yu Zhao and Jiandong Ren

3. Analysis of a bivariate risk model Jingyan Chen and Jiandong Ren

4. The application of the number of IBNR claims for Erlang (h) inter-arrival times David Landriault, Ya Fang Wang and Gordon E. Willmot

5. Ultimate Ruin Probability with Correlation Emmanuel Thompson and Rohana S. Ambagaspitiya

12.10–13.50 Lunch at University Centre 210

- During the conference lunch, Simon Curtis, President of CIA, will give a speech from 1:05-1:25. Simon Curtis then is to present a gift to Michael Benarroch, Dean of Asper School of Business.

- CKER lunch meeting at Souris Hall (UC224B). Please pick up lunch from UC210 first.

14.00–14.50 Feature session 2 (E3-270) Chair: Jeffrey Pai

The Canadian Institute of Actuaries' University Accreditation Program Rob Stapleford

14.50–15.40 Feature session 3 (E3-270) Chair: Elias Shiu

Open Forum for MLC Teachers Elias Shiu, Aaron Tenenbein and Heekyung Youn

15.40–16.00 Coffee break (E2-229)

16.00–17.20 P2A: Agricultural risk management (E3-270) Chair: Donald Belau

1. Factors Affecting the Use of Futures Hedging by Commodity Producing Firms: A Multifactor Risk Management Approach Charles Grant


3. Modeling Spatial Dependence and Optimal Retention for a Reinsurance Decision Model Under a Copula Framework Lysa Porth, Milton Boyd and Jeffrey Pai


16.00–17.20 P2B: Statistical methods I (E2-399) Chair: David Promislow

1. Log-Folded-t Models for Insurance Loss Data Vytautas Brazauskas and Andreas Kleefeld

2. Small Sample Stochastic Tail Modeling: Tackling Sampling Errors and Sampling Bias by Pivot-Distance Sampling and Parametric Curve Fitting Techniques Yvonne C. Chueh and Paul H. Johnson

3. Predictive Modeling in Healthcare Costs using Regression Techniques Michael V. Loginov, Emily Marlow and Victoria Potruch

4. An Introduction to Causal Analysis on Observational Data using Propensity Scores Margie Rosenberg, Brian Hartman and Shannon Lane

17.30–21.00 Centennial dinner at University Centre 204
8.00–8.30  Breakfast (E2-229)

8.30–9.20  Feature session 4 (E3-270)  
Chair: Xuemiao Hao

Complexity Science – what it is and why you want to know about it Dave Snell

9.20–10.10 Feature session 5 (E3-270)  
Chair: Xuemiao Hao

Usage Based Insurance and the Evolving Analytics Environment Gary Wang

10.10–10.30 Coffee break (E2-229)

10.30–12.10  P3A: Finance II (E3-270)  
Chair: Phelim Boyle


2. Capital asset pricing model with fuzzy returns and hypothesis testing Moussa Alfred Mbairadjim, J. Sadefo Kamdem, Arnold F. Shapiro and M. Terrazn


5. Risk analysis of annuity conversion options in a stochastic mortality environment Alexander Kling, Jochen Russ and Katja Schilling

10.30–12.10  P3B: Actuarial education (E2-399)  
Chair: Curtis Huntington

1. What do you want your students to know? What are you doing? Mark M. Maxwell

2. Society of Actuaries Education Update Stuart Klugman


5. The Society of Actuaries’ New Research Strategy Sara Teppena

10.30–12.10  P3C: Mortality (E2-350)  
Chair: Ian Duncan

1. Modeling and Forecasting Mortality Rates Patrick L. Brockett, Daniel Mitchell, Rafael Mendoza-Arriaga and Kumar Muthuraman

2. Longitudinal Analysis of Mortality Risk Factors Daniel H. Alai and Michael Sherris

3. Investigating Causal Mortality using the Multinomial Logistic Model Daniel H. Alai, Severine Gaillie and Michael Sherris

4. Assessing systematic bias in mortality prediction of the Lee-Carter model Defang Wu, Xiaoming Liu and Yu Hao

12.10–13.50 Lunch at University Centre 210

- During the conference lunch, David Cummins from Temple University will give a speech on “Next Year’s ARC”.
- E&R lunch meeting at Souris Hall (UC224B). Please pick up lunch from UC210 first.

14.00–14.50 Feature session 6 (E3-270) Chair: Sam Cox

Divided by a common language: communicating applied research in actuarial science Mary Hardy

14.50–15.40 Feature session 7 (E3-270) Chair: Sam Cox

The shape of the insurance marketplace in 2020 Linda Golden

15.40–16.00 Coffee break (E2-229)

16.00–17.00 P4A: Pensions (E3-270) Chair: Ron Gebhardtshauer

1. Mortality Improvement for Canadian Pensioners: Proposed Projection Scales Louis Adam
2. On the Impact of Raising the Full Retirement Age in the Social Security Program Kidane Testfu
3. The Impact of Investment Strategy of DC Pension Plan on Retirement Age Distribution Minxian Ly, Xiaoming Liu and Yu Hao

16.00–17.00 P4B: Statistical methods II (E2-399) Chair: Jed Frees

1. A Multivariate Analysis of Intercompany Loss Triangles Peng Shi
2. Implementing Fuzzy Random Variables Arnold F. Shapiro
3. Approximate Copula Regression Paul G. Ferrara and Rahul A. Parsa

16.00–17.00 P4C: Applications of Actuarial Models (E2-350) Chair: Margie Rosenberg

1. Forward transition rates in a multi-state model Marcus C. Christiansen and Andreas J. Niemeyer
3. Incurred but Unreported Deaths in Life Settlements Donald F. Behan

18.00–22.00 Conference banquet at Manitoba Club
SATURDAY, August 4, 2012

8.00–8.30  Breakfast (E2-229)

8.30–10.10  **PSA: Finance III** (E3-270)  
Chair: Yajang Wang

1. Combinatorics for Moments of a Randomly Stopped Quadratic Variation Process  
   James G. Bridgeman

2. Positive Weights on the Efficient Frontier  
   Phelim Boyle

3. Market dependent fees for GMMB and GMDB riders  
   Anne MacKay, Carole Bernard and Mary Hardy

4. Modeling Trades in the Life Market as Nash Bargaining Problems  
   Rui Zhou, Johnny S.H. Li and Ken Seng Tan

5. A Comonotonicity-based Valuation Method for Annuity-linked Contracts  
   Xiaoming Liu, Rogemar Mamon and Huan Gao

8.30–10.10  **PSB: Casualty** (E2-399)  
Chair: Sam Cox

1. Insurance Ratemaking and a Gini Index  
   E. W. (Jed) Frees, Glenn Meyers and A. David Cummings

2. A renewal model for medical malpractice  
   Ghislain Leveille and Emmanuel Hamel

   Xiaoli Jin

4. An Experience Rating Approach to Insurer Projected Loss Ratios  
   Marc-Andre Desrosiers

5. Experience Rating in Motor Insurance  
   Pervin Baylan-Irven and Jeffrey Pai

8.30–10.10  **PSC: Risk theory II** (E2-350)  
Chair: Lysa Porth

1. First- and Second-order Asymptotics for the Tail Distortion Risk Measure of Extreme Risks  
   Fan Yang

2. Default risk of a jump-diffusion model subject to Chapter 7 and Chapter 11 bankruptcy codes  
   Bin Li, Qihe Tang and Xiaowen Zhou

3. Credibility Theory in a Fuzzy Environment  
   Arnold F. Shapiro and Marie-Claire Koissi

4. Analysis of Disability Insurance Portfolios with Stochastic Interest Rates  
   Yu Xia

10.10–10.30  Coffee break (E2-229)

10.30–11.20  **P6A: Genetic algorithms** (E3-270)  
Chair: Xuemiao Hao

Genetic Algorithms - what they are and how to apply them to actuarial problems  
   Dave Swanell

10.30–11.20  **P6B: How to be a CAE?** (E2-399)  
Chair: Warren Luckner

Being or becoming a Society of Actuaries Center of Actuarial Excellence: Challenges and Opportunities  
   Sam Broverman, Ron Gebhartsbauer, Warren Luckner and Kris Presler

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11.25–11.50  **Closing session (E3-270)**  

* Closing remarks by Mark Whitmore, Dean of the Faculty of Science  
* Closing remarks by David Stangeland, Associate Dean of Asper School of Business  
* Jeffrey Pai to end the 47th Actuarial Research Conference

11.50  **Box lunch (E2-229)**