Conférence sur la recherche en actuariat 2006 - Programme

JEUDI 10 AOÛT

Session I - a) Éducation b) Assurance et réassurance - Président: L.G. Doray

8:30-8:45 Doray, L.G. - Welcoming address
8:45-9:15 Massé, J.-L. - On a Global Education and Examination System
9:15-9:30 Goulet, V. - actuar: an R package for Actuarial Science
9:30-9:45 Lysenko, N. - Stochastic Analysis of Life Insurance Surplus
9:45-10:00 Biffis, E. - Optimal Retention Levels in Dynamic Reinsurance Markets
10:00-10:15 Weng, C. - Optimal Reinsurance under VaR and CTE Risk Measures

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Session II - Modèles de risque - Président: J. Garrido

10:45-11:00 Blanchet, J. - Lundberg-type Approximations for Defective Renewal Equations: a Heavy-traffic Perspective
11:00-11:15 Constantinescu, C.D. - An Integro-differential equation for a Sparre Andersen Model with investments
11:15-11:30 Diasparra, M. - Bounds on the Ruin Probability in a Controlled Risk Model
11:30-11:45 Henry, J.B. - Extreme Value Analysis for Partitioned Insurance Losses
11:45-12:00 Ren, J. - The Discounted Probability of Ruin in the Sparre Andersen Model
12:00-12:15 Tang, Q. - Tail Behaviour of the Solution of a Random Difference Equation with Subexponential Innovation
12:15-12:30 Eisele, K-T - Mulivariate Phase Variables and Recursion Principles

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Session III - Assurance-santé - Président: C. Fuhrer

14:00-14:15 Andrews, D. - Assessing Alternative Financing Methods for the Canadian Health Care System in View of Population Aging
14:15-14:30 Espinosa, C. - Ascertainment Bias in Estimating Rates of Early Onset Alzheimers's Disease: a Critical Illness Insurance Application
14:30-14:45 Gamage, J. - An Alternative Approach to Calculation of IBNR Reserve in Health Insurance
14:45-15:00 Gao, J. - The Frequency and Amount of Inpatient and Outpatient Health Care Expenditures
15:00-15:15 Linfield, J.L. - Actuarial Judgment in the Calculation of Medical Liability
15:15-15:30 Munoz Perez, J. - Determinants of Group Health Insurance Demand

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Session IV - Finance 1 - Président: D. Dufresne

16:00-16:15 Qiu, K. - Application of Second-Order Cone Programming in Robust Portfolio Management
16:15-16:30 Boudreault, M. - Multivariate Modeling of Asset Returns for Investment Guarantees Valuation
16:30-16:45 Boyle, P.P. - Equity Indexed Annuities: the Quest for Optimality
16:45-17:00 Bridgeman, J.G. - Random Switching Times Among Randomly Parameterized Regimes of Random Interest Rate Scenarios
17:00-17:15 Craighead, S.G. - Strategic Valuation
17:15-17:30 de la Peña, V.H. - Quality Control of Risk Measures: Backtesting Var Models
17:30-17:45 Dufour, M. - The Theoretical Problem of Managing a fund by entering into independent bets
17:45-18:00 Fan, T. - Decomposing Loan Portfolio Value-at-Risk and Expected Shortfall

VENDREDI 11 AOÛT

Session V - Mortalité - Président: M. Morales

8:30-8:45 Edwalds, T. - Pandemic Influenza Claims Risk in the U.S.
8:45-9:00 Feng, R. - Application of Epidemiological Models in Actuarial Mathematics
9:00-9:15 Flores, E. - Robust Estimation of Generalized Additive Models in the Calculation of Mortality Tables
9:15-9:30 Hardy, M. - Mortality Improvement Scales for the Canadian Insured Lives
9:30-9:45 Shapiro, A.F. - Future Lifetime as a Fuzzy Random Variable
9:45-10:00 Zhu, Y. - Spatial and Longitudinal Analyses of Water Consumption and Obesity
10:00-10:15 Li, L.Y. - Broken-Heart Mortality

Session VI - a) Mortalité b) Rentes - Présidente: C. Bilodeau

10:45-11:00 Ranasinghe, S. - Method to Develop a Provision for Adverse Deviation (PAD) for the Longevity Risk for Impaired Lives
11:00-11:15 Li, J.S.H. - Threshold Life Tables and their Applications
11:15-11:30 Khalaf-Allah, M. - Entropy, Longevity and Annuities
11:30-11:45 Gómez, D. - The Effects on the Funding and Contribution Variance using the Modified Spreading Model
11:45-12:00 Liu, Y. - Policyholder Behavior Study in Variable Annuity with Guaranteed Minimum Withdrawal Benefit
12:00-12:15 Chen, K. - The Risk Management of a DB Underpin Pension Plan
12:15-12:30 Pichet, C. - Pension Plan Evaluation using Conditional Tail Expectation (CTE)

Session VII - Évaluation d'options - Président: S. Cox

14:00-14:15 Kim, O. - Implementation of Arbitrage-free Discretization of Interest Rate Dynamics and Calibration of Swaptions and Caps in Excel VBA
14:15-14:30 Reesor, R.M. - A Bias Reduction Technique for Monte Carlo Pricing of Early Exercise Options
14:30-14:45 Renaud, J-F - Explicit Martingale Representations for Brownian Functionals and Applications to Option Hedging
14:45-15:00 Thiagarajah, K.R. - Fuzzy Volatility Forecasts and Fuzzy Option Values
15:00-15:15 Turner, B. - Short Period NonCatastrophic Rainfall Options
15:15-15:30 Wang, F.X. - Efficient Procedure for Valuing American Lookback Options

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Session VIII - Finance 2 - Président: E. Shiu

16:00-16:15 Freeland, K. - Econometric Models for Interest Rates
16:15-16:30 Guo, W. - Optimal Mean-Variance Investment for an Insurer
16:30-16:45 Kim, J. - Quantifying and Correcting the Bias in Estimated Risk Measures
16:45-17:00 Li, Z. - Optimal Investment Strategy in a Discrete-Time Model with Regime-Switching and Uncertain Time-Horizon
17:00-17:15 Singh, G. - Using Aggregated Log Returns to Speed-up Simulations
17:15-17:30 Till, M. - Equity Return Model Selection
17:30-17:45 Milidonis, A. - Estimation of the Cost of Credit Rating Downgrades

SAMEDI 12 AOÛT

Session IX - Modèles statistiques et de risque - Président: S. Klugman

8:30-8:45 Bae, T. - Competing Risk Model for Corporate Default and Exit Analysis: Cox-Relative Hazard Model and Extension with Stochastic Frailties
8:45-9:00 Zhou, X. - Theory of Levy Processes Applied to Risk Models
9:00-9:15 Furman, E. - A Multivariate Tweedie Family with Applications to Risk Measurement
9:15-9:30 Lu, Y. - Some Optimal Dividend Problems in a Markov-modulated Risk Model
9:30-9:45 Lee, A. - On the Difference between Two Poisson Random Variables
9:45-10:00 Sun, J. - Heavy-Tailed Longitudinal Data Modeling Using Copulas
10:00-10:15 Valdez, E. - GB2 Regression with Insurance Claim Severities

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Session X - Modèles bayésiens et probabilistes - Président: C. Dugas

10:45-11:00 Dufresne, D. - Fitting Combinations of Exponentials to Probability Distributions
11:00-11:15 Tsai, C.C. - Impacts of Dynamic Credibility Premium Scheme, Deductible and Policy Limit on Ruin Probabilies
11:15-11:30 Zhou, J. - Credibility Theory for Generalized Linear Models
11:30-11:45 Asimit, A.V. - Extreme Behavior of Multivariate Phase-Type Distributions
11:45-12:00 Desgagné, A. - Bayesian Inference Resistant to Outliers, using Super Heavy-tailed Distributions, for the Calculation of Premiums
12:00-12:15 Angers, J-F - Modelling and Estimating Individual and Firm Effects with Panel Data
12:15-12:30 Jacques, M. - Using Expert Opinion in Actuarial Science

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Atelier de l'Institut Canadien des Actuaires

13:30-15:30 Marks, J. - Report on a Future Education Model for Canada