



# SOCIETY OF ACTUARIES

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## ARCH Program - 2004.1

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### 38th Actuarial Research Conference

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**Thursday, 7 August 2003**

**{ 9:00 – 11:30 a.m. Committee on Knowledge Extension Research Meeting in 3096 East Hall. }**

1:15 – 1:30 p.m.

**WELCOME**

Abigail J. Stewart  
Associate Dean for Academic Affairs  
College of Literature, Science, & The Arts

1:30 – 1:45 p.m.

Elias Shiu University of Iowa

“On a Formula of Nesbitt”

1:45 – 2:05 p.m.

Alexandru Asimit University of Western Ontario (CA)

“An Empirical Study of Hattendorff’s Theorem”

2:05 – 2:25 p.m.

Shyamal Kumar ITAM (MX)

“Actuarial Computing via Recurrence Relationships in the Classroom”

2:25 – 2:45 p.m.

Andreas Milidonis Georgia State University

“An Application of Extreme Value Theory in Pricing Catastrophic Losses”

2:45 – 3:05 p.m.

Jacques Rioux Drake University

“On the Variance of Estimators of Tail-VaR and other Distortion Risk Measures”

3:05 – 3:25 p.m.

Kristina Pavlova University of Waterloo (CA)

“Actuarial Applications of some Lundberg type bounds”

REFRESHMENT  
BREAK

3:45 – 4:05 p.m.

Julia Wirch Heriot-Watt University (UK)

“Iterated CTE: A Dynamic Risk Measure”

4:05 – 4:25 p.m.

Mary Hardy University of Waterloo (CA)

“Application of the iterated CTE; a multi-period risk measure

4:25 – 4:45 p.m.

Vytaras Brazauskas University of Wisconsin-Milwaukee

"Favorable Estimators for Fitting Pareto Models: A Study Using Goodness-of-Fit Measures with Actual Data"

4:45 – 5:05 p.m. Rick Gorvett University of Illinois

"Modeling of Economic Series Coordinated with Interest Rate Scenarios"

5:05 – 5:25 p.m. Edward Leung University of Melbourne (AU)

"Projecting the Needs and Costs of Long-Term Care in Australia"

### **WELCOMING RECEPTION**

5:30 p.m. EAST HALL ATRIUM

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### **Friday, 8 August 2003**

**{ 6:30 - 8:30 a.m. Education & Research Section Council Breakfast Meeting in 3096 East Hall. }**

8:30 – 8:50 a.m. Hyuk-Sung Kwon University of Western Ontario (CA)

"Exploring Risk Factors for Retirement Mortality"

8:50 – 9:10 a.m. Yijia Lin Georgia State University

"Securitization of Mortality Risks in Life Annuities"

9:10 – 9:30 a.m. Esther Portnoy University of Illinois

"Survival Analysis with Disinformation"

9:30 – 9:50 a.m. Tom Edwalds Munich American Reassurance Co.

"The Distribution of Total Life Insurance Claims"

9:50 – 10:10 a.m. Arnold Shapiro Penn State University

"Market Forecasting and Trading Rules Based on Soft Computing Technologies"

### **REFRESHMENT BREAK**

10:30 – 10:50 a.m. Adam Kolkiewicz University of Waterloo (CA)

"Quasi-Monte Carlo Approach to Pricing American Options on Foreign Assets under a Stochastic Interest Rate Economy"

10:50 – 11:10 a.m. Yanyun Zhu University of Illinois

"Discrete-Time Models for an Individual's Life Insurance Purchase and Lapsing, Consumption and Stock Purchase Decisions"

11:10 – 11:30 a.m. Maritina Castillo University of New South Wales(AU)

"Stochastic Control Theory in Managing Insurance Risks"

11:30 – 11:50 a.m. Carisa Yu Hong Kong Polytechnic Univ. (HK)

"Pricing American Options without Maturity Date"

11:50 a.m. - 12:15 p.m. Dick London University of Connecticut

"Task Force on Academic Infrastructure"

**LUNCH**

**EAST HALL ATRIUM**

{ 12:15 – 1:15  
p.m.

**Editorial Board Meeting – North American Actuarial Journal in  
3096 East Hall.}**

{ 12:15 – 1:15  
p.m.

**Ph.D. Grants Task Force Meeting in 3866 East Hall.}**

- 1:15 – 1:35 p.m. Min-Ming Wen University of Connecticut  
"Modeling Political Risk Insurance: Utility Maximization Perspective"
- 1:35 – 1:55 p.m. Phelim Boyle University of Waterloo  
"Own-Company Stock in Pension Plans"
- 1:55 – 2:15 p.m. Jed Frees University of Wisconsin-Madison  
"Pension Plan Turnover"
- 2:15 – 2:35 p.m. David Scollnik University of Calgary (CA)  
"Bayesian Implementations of Chain Ladder Reserving Models"
- 2:35 – 2:55 p.m. Marjorie Rosenberg University of Wisconsin-Madison  
"Bayesian Methods in Modeling Health Care Cost Data"

**REFRESHMENT  
BREAK**

- 3:15 – 3:35 p.m. Robert Brown University of Waterloo (CA)  
"Further Analysis of Future Canadian Health Care Costs"
- 3:35 – 3:55 p.m. Krupa Viswanathan Temple University  
"Adverse Selection in Term Insurance Purchasing due to the BRCA1/2  
Genetic Test and Elastic Demand"
- 3:55 – 4:15 p.m. Kristen Moore University of Michigan  
"Optimal Insurance in Continuous Time"
- 4:15 – 4:35 p.m. David Promislow York University (CA)  
"Optimal Insurance"
- 4:35 – 4:55 p.m. Etienne Marceau University Laval (CA)  
"Numerical Ruin Probabilities in General Discrete Time Risk Models"
- 4:55 – 5:15 p.m. Jun Cai University of Waterloo (CA)  
"Ruin Probabilities with a Markov Chain Interest Model"

**CONFERENCE DINNER**

6:00 p.m. EAST HALL ATRIUM

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**Saturday, 9 August 2003**

{ 6:30 - 8:30  
a.m.

**Education & Research Section Council Breakfast Meeting in  
3096 East Hall.}**

8:30 - 8:50 a.m. Heath Windcliff University of Waterloo (CA)

	"The 1/n pension investment puzzle"	
8:50 - 9:10 a.m.	Jenher Jeng	Berkeley
	"Modeling Stock Market with Financial Signal Processing"	
9:10 - 9:30 a.m.	George Argesanu	Ohio State University
	"Guaranteed Benefits in Incomplete Markets and Risk Analysis"	
9:30 - 9:50 a.m.	Chuck Fuhrer	The Segal Company
	"Non-Parametric Regression with a Functional Independent Variable"	
9:50 - 10:10 a.m.	Martina Wilhelm	ETH Zurich (CH)
	"The Continuous-Time Portfolio Problem"	

**REFRESHMENT BREAK**

Saturday, 9 August 2003	Bin Jiang	University of Waterloo (CA)
	"Regime Switching of Stocks and Interest Rates"	
10:50 - 11:10 a.m.	Adam Kolkiewicz	University of Waterloo (CA)
	"Volatility Risk for Regime Switching Models"	
11:10 - 11:30 a.m.	Rocio Gomez Reyes	University of Waterloo (CA)
	"A Trinomial Lattice Approach to Equity Index Annuity Valuation"	
11:30 - 11:50 a.m.	Paul Joss	University of Calgary (CA)
	"Pension Accounting and Earnings Implications"	
11:50 a.m. - 12:10 p.m.	Michael Bean	Manulife Financial (CA)
	"Practical Issues Associated with Implementing Stochastic Modeling in an Insurance Company"	
12:10 - 12:30 p.m.	Closing	

**LUNCH**

**EAST HALL ATRIUM**

**(In Celebration of the Life of Cecil J. Nesbitt)**