# 40th Actuarial Research Conference

### Conference Program

### Thursday, August 11

07:30 - 08:30 -	08:30 Registration and Continental Breakfast (Sponsored by CONAC) 09:15 Welcome by Arturo Fernández, Rector of ITAM, and Opening Session by Act. Luis Huerta, Former President IAA				
09:15 -	09:55 Session - Actuarial Education				
09:15 - 09:35 - 09:55	09:35 Warren Luckner 09:55 John Shepherd 10:15 Mary Hardy	University of Nebraska Macquarie University University of Waterloo	The Work of the SOA Accreditation Implementation Taskforce Mistakes? We've seen a few A joined-up syllabus for technical actuarial education		
10:15 - 10:40 -	10:40 Coffee Break 12:20 Session - Mathematical Finance				
10:40 - 11:00 - 11:20 - 11:40 12:00 -	11:00 Donald Mango 11:20 Palahela Dayandanda 11:40 Adam Kolkiewicz 12:00 Mark Saxonov 12:20 Jennie La and Christiane Lemieux	GE Insurance Solutions St Thomas University University of Waterloo New York Life University of Calgary	Insurance Capital as a Shared Asset A Dynamic Programming Approach to Valuing Reload Executive Stock Options Pricing American options on exponential Levy processes. Pricing of Guaranteed Products for Defined Benefit Pension Funds. Study of Variance Reduction Techniques for American Option Pricing		
12:20 - 14:00 -	14:00 Lunch (Sponsored by Hewitt Associates Mexico) 15:40 Simultaneous Session - Risk Theory				
14:00 - 14:20 - 14:40 - 15:00 - 15:20 -	14:20 John Henry 14:40 Sarah Christiansen and <b>Tom Edwalds</b> 15:00 Thomas Herzog 15:20 X. Sheldon Lin and Kristina Pavlova 15:40 <b>Hélène Cossette</b> , Mathieu Boudreault, David Landriault, Etienne Marceau	Oregon State University Munich American Reassurance Company FHA/HUD University of Toronto Université Laval	Tail Index Estimation for Partitioned Insurance Losses A Comparison of Methods for Modeling an Aggregate Life Insurance Claims Distribution Applications of Capture-Recapture Methods The Compound Poisson Risk Model with a Threshold Dividend Strategy Ruin Measures in Risk Models with Time Dependent Claim Amounts		
14:00 -	15:40 Simultaneous Session - Analysis of Mortality and Related Risks				
14:00 - 14:20 - 14:40 - 15:00 - 15:20 -	14:20 Johnny Li 14:40 X. Sheldon Lin and <b>Xiaoming Liu</b> 15:00 N. D. Shyamalkumar 15:20 Jorge Rendon 15:40 Syed Hossain	University of Waterloo University of Toronto University of Iowa ITAM University of Nebraska	The Canadian Insured Lives Investigation Phase-type law of mortality A Poisson Regression Model for Mortality Data Mortality Under Standard Individually Life Insurance Between 1999 and 2002 Anniversaries An Interpolation Method to Produce Continuous Force of Mortality		
15:40 - 16:05 -	16:05 Coffee Break 17:45 Session - Risk Modeling				
16:05 - 16:25 - 16:45 - 17:05 - 17:25	16:25 <b>Luis Gutierrez</b> , A. F. Ochoa and A. Correa 16:45 Victor Guerrero 17:05 Mathieu Boudreault 17:25 Emiliano Valdez and <b>Jed Frees</b> 17:45 Nadia Pérez and Ángeles Yáñez	University of Nebraska ITAM Université Laval University of Wisconsin HSBC	A Comparative Study of IBNR Methodologies for the Colombian Pension System Estimating Trends with Percentage of Smoothness Chosen by the User Modeling natural catastrophe risk: an application to earthquakes and hurricanes Longitudinal Modeling of Singapore Automobile Insurance Factors Affecting Labour Risks Severity		

18:00 - 19:00 Reception (Held at ITAM and sponsored by Mercer Human Resource Consulting Mexico)

#### Friday, August 12

07:30 -	08:30 Continental Breakfast (sponsored by CONA	AC)	
08:30 -	10:10 Session - Pensions		
08:30 -	08:50 Alejandro Renteria and Tapen Sinha		ITAM
08:50 -	09:10 Kyle Hays		University of Iowa
00:30 -	09:30 Héctor Sandoval		Banco de México
09:10 -	09:50 Yan Liu		University of Waterloo
09:50 -	10:10 Enrique Marín		Mercer
00.00	10.10 Emilique Marini		Wereer
10:10 -	10:35 Coffee Break		
10:35 -	12:15 Session - Risk Theory		
10:35 -	10:55 David Landriault		University of Waterloo
10:55 -			ITAM
11:15 -	11:35 <b>Manuel Morales</b> and José Garrido		York University
11:35 -			University of Waterloo
11:55 -	12:15 Yao Wang		Roosevelt University
			. to book on one one,
12:15 -	13:55 Lunch (Sponsored by L M & S)		
13:55 -	15:55 Session - Risk Management		
40.55	44.45 Amald Chamins		Dana Otata University
13:55 -			Penn State University
14:15 - 14:35 -	· · · · · · · · · · · · · · · · · · ·		University of Waterloo
14.35 -	14:55 Judy Zhu 15:15 Ken Seng Tan		University of Illinois University of Waterloo
15:15 -	15:35 Edoh Afambo		Georgia State University
15:15 -	15:55 Yu Zhou		University of Waterloo
13.33	13.33 Tu Zilou		Offiversity of Waterloo
15:55 -	16:20 Coffee Break		
16:20 -	17:20 Special Session on Risk Management Educ	ation	
		Chair: Robert L. Brown	University of Waterloo
		Discussants: Manuel Mendoza	ITAM
		Sam Cox	Georgia State University

19:00 - 22:00 Conference Dinner at Grupo Nacional Provincial, Insurance Co.

The Cost of Pension Guarantee
Topics in Lump Sum Payments from Defined Benefit Pension Plans
Analysis of the Pension Reform in Mexico
Long Term Deferred Annuity Products
Retirement Planning

Analysis of the discounted penalty function in a discrete-time risk model with dependence Claims Reserving When There Are Negative Values in the Runoff Triangle On the Expected Discounted Penalty Function for Generalized Risk Levy Processes. The adjustment coefficient with QS and XL reinsurance Useful properties of the three-parameter Burr XII distribution

Fuzzy Regresion Models and the Term Structure of Interest Rates
Bootstrap estimation of the conditional tail expectation
Generate a Confidence Interval for VaR
CTE and Capital Allocation under the Skew Elliptical Distributions
Operational Risk Capital Provisions for Banks and Insurance Companies
Risk Management at a Leading Canadian Bank: An Actuarial Science Graduate's View

## Saturday, August 13

08:30 - 09:50 Session - Pensions

07:30 - 08:30 Continental Breakfast (sponsored by CONAC)

Lunch boxes available

Buses depart to hotels and the "Bazar del Sábado"

08:30 - 08:50 - 09:10 - 09:30 -	08:50 Kevin Shand 09:10 Kai Chen 09:30 Guillermo Ruiz Palacios 09:50 David Kausch	University of Manitoba University of Waterloo Banco de México University of Michigan	Provisions for Adverse Deviations: The Margin Based Approach for Setting Assumptions for Pension The Valuation of hybrid pension plan Some Salary Scale Estimation Methods for Pension Valuations A Better Defined Benefit Contribution Policy: Contribute No Less than the Normal Cost
09:50 - 10:15 -	10:15 Coffee Break 12:15 Final Session		
10:15 - 10:35 - 10:55 - 11:15 - 11:35 - 11:55 -	10:35 Edgard Baqueiro and Tapen Sinha 10:55 <b>Sebastian Jaimungal</b> and Suhas Nayak 11:15 Sebastian Jaimungal and <b>Tao Wang</b> 11:35 Tapen Sinha 11:55 Jie Gao 12:15 Charles-Patrick Dugas	ITAM University of Toronto University of Toronto ITAM University of Wisconsin University of Montreal	Rainfall insurance On Indifference Pricing for Double-Trigger Reinsurance Products Catastrophe Options with stochastic interest rates Bancassurance: who ties the knot and why Four-Part Models with Correlation between Inpatient and Outpatient Health Care Expenditures 41st ARC, 2006 in Montreal

In the Technical Sessions there will be simultaneous translation English-Spanish-English sponsored by Asociación Mexicana de Actuarios (AMA) Participants need to be at the lobby of their respective hotels to take the shuttle bus to the conference site.

Departure times are as follows:

CIESS - 7:00 am

Royal Pedregal - 7:15 am

12:15

13:00

Pedregal Palace - 7:15 am