

## **DAY 1: Tuesday 23 June 2015**

**17:00-19:30** Welcome Drink and Registration in the foyer of the Central Teaching Hub

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## **DAY 2: Wednesday 24 June 2015**

**08:30-09:00** Registration in the foyer of the Central Teaching Hub

**09:00-09:30** Welcome remarks

**09:30-10:30** Plenary talk: Soren Asmussen  
Chairman: Hansjoerg Albrecher

**10:30-11:00** Coffee break in the Central Teaching Hub

**11:00-12:40** Presentations 1

### **Risk Theory 1**

**HALL: CTL-A CHAIR: Gord Willmot**

11:00-11:25	Finite-time ruin probability for Markovian skip-free risk processes	Michael Chek Hin Choi, <a href="#">Pierre Patie</a>
11:25-11:50	On a Generalization of the Expected Discounted Penalty Function to Include Deficits at and Beyond Ruin	<a href="#">Zied Ben Salah</a>
11:50-12:15	The Robust Computation and the Sensitivity Analysis of Finite-Time Ruin Probabilities and the Estimation of Risk-Based Regulatory Capital	Mark S. Joshi, <a href="#">Dan Zhu</a>
12:15-12:50	On the analysis of time dependent claims in a class of birth process claim count models	David Landriault, Gordon E. Willmot, <a href="#">Di Xu</a>

### **Risk Measures 1**

**HALL: CTL-B CHAIR: Roger Laeven**

11:00-11:25	Maxentropic approach to decompound aggregate risk losses	<a href="#">Erika Gomes-Goncalves</a> , Henryk Gzyl, Silvia Mayoral
11:25-11:50	Risk Measures with the CxLS property	Freddy Delbaen, <a href="#">Fabio Bellini</a> , Valeria Bignozzi, Johanna Ziegel
11:50-12:15	Risk Measures in a Quantile Regression Credibility Framework with Fama/French Research Portfolios and Three Risk Factors	<a href="#">Georgios Pitselis</a>

12:15-12:50	Hedging Against Insolvency of Insurance Companies	<u>Yunzhou Chen</u> , Hirbod Assa
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## Bonus Malus

**HALL: CTL-C CHAIR: Greg Taylor**

11:00-11:25	Optimal Bonus-Malus Systems Using Generalized Additive Models for Location, Scale and Shape	<u>George Tzougas</u> , Spyridon Vrontos, Nicholas Frangos
11:25-11:50	Ruin Probabilities with Dependence on the Number of Claims within Fixed Window Time	<u>Weihong Ni</u> , Corina Constantinescu, Zbigniew Palmowski, Suhang Dai
11:50-12:15	Bonus malus systems and finite and continuous time ruin probabilities in motor insurance	LB Afonso, R Cardoso, <u>Alfredo Egdio dos Reis</u> , GR Guerreiro
12:15-12:50	Optimization of transition rules of bonus-malus system with respect to global elasticity	<u>Marcin Topolewski</u> , Michał Bernardelli

## EVT

**HALL: CTL-D CHAIR: Hailiang Yang**

11:00-11:25	On the Worst and Least Possible Asymptotic Dependence	<u>Alexandru Asimit</u> , Russell Gerrard
11:25-11:50	Paths and indices of maximal tail dependence	<u>Edward Furman</u> , Jianxi Su, Ricardas Zitikis
11:50-12:15	Approximation of Heavy-tailed distributions via infinite dimensional phase-type distributions	<u>Leonardo Rojas-Nandayapa</u>
12:15-12:50	Losses Given Default in the Presence of Extreme Risks	<u>Qihe Tang</u>

## Risk Models

**HALL: MATH – 027 CHAIR: Esther Frostig**

11:00-11:25	Model Risk Cultures	<u>Andreas Tsanakas</u> , M Bruce Beck, Michael Thompson
11:25-11:50	Discrete-time risk models, with exchangeable Archimedean copulas	Hélène Cossette, <u>Etienne Marceau</u> , Itre Mtalai, Déry Veilleux
11:50-12:15	A new Pareto distribution on integers with applications to modeling discrete insurance risk processes	<u>Tomasz Kozubowski</u> , Corina Constantinescu
12:15-12:50	Risk Measurement Based on Available Information	<u>Yiqing Chen</u>

## Pensions 1

**HALL: MATH – 029 CHAIR: Ermanno Pitacco**

11:00-11:25	Designing guarantee options in defined contribution pension plans	<u>Andrea Consiglio</u> , Michele Tumminello, Stavros Zeniosz
11:25-11:50	Optimal retirement financial planning for retirees with time-inconsistent preferences	<u>Anran Chen</u> , Steven Haberman
11:50-12:15	Optimal strategies for Pay-as-you-go pension finance: A sustainability framework	<u>Humberto Godinez-Olivares</u> , Maria del Carmen Boado-Penas, Steven Haberman

12:15-12:50	Guarantee valuation in Notional Defined Contribution pension systems	<u>Jennifer Alonso Garcia</u> , Pierre Devolder
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## Optimal Consumption

**HALL: MATH – 106 CHAIR: Philip Yam**

11:00-11:25	Scenario-based Valuation in Participating Life Insurance and Unit-link Insurance	<u>Ninna Reitzel Jensen</u> , Kristian Juul Schomacker
11:25-11:50	Optimal Consumption-Life Insurance Rules in Incomplete Market	Chang-Chih Chen, <u>Chia-Chien Chang</u>
11:50-12:15	Optimal Disability Insurance with Moral Hazards: Absenteeism, Presenteeism, and Shirking	<u>Colin M. Ramsay</u> , Victor I. Oguledo
12:15-12:50	How Switching to Alternative Guarantees can help –	<u>Jochen Wieland</u>

**12:40-14:00 Lunch in the Guild of Students**

**14:00-15:40 Presentations 2**

## Risk Theory 2

**HALL: CTL-A CHAIR: Andreas Kyprianou**

14:00-14:25	On the joint analysis of the discounted total payments to policyholders and shareholders	<u>Eric C.K. Cheung</u> , Haibo Liu, Jae-Kyung Woo
14:25-14:50	An integral equation approach for the dual risk model with risky investment	<u>Sooie-Hoe Loke</u>
14:50-15:15	On the analysis of discounted aggregate claim costs until ruin in two-sided jump model	<u>Haibo Liu</u> , Eric C.K. Cheung
15:15-15:40	Number of jumps in two-sided first-exit problems for a compound Poisson process	Shuanming Li, <u>Yi Lu</u> , Can Jin

## Risk Measures 2

**HALL: CTL-B CHAIR: Pauline Barrieu**

14:00-14:25	Reduction of Value-at-Risk bounds via independence and variance information	<u>Giovanni Puccetti</u> , Ludger Rüschendorf, Daniel Smallz, Steven Vanduffel
14:25-14:50	Market sub-consistent valuation	<u>Hirbod Assa</u>
14:50-15:15	Coherent risk measures and infinite expectation risks	Alejandro Balbas, <u>Ivan Blanco</u> , Jose Garrido
15:15-15:40	A simple isochore model evidencing regulation risk	<u>Jacques Lévy Véhel</u>

## Financial Products 1

**HALL: CTL-C CHAIR: Tak Kuen Siu**

14:00-14:25	Pricing Asian options in a general tree model with varying skewness and kurtosis	Gianluca Fusai, <u>Ioannis Kyriakou</u>
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14:25-14:50	Best-Estimate Yield Curves in Incomplete Bond Markets	<u>Anne MacKay</u> , Mario V. Wüthrich
14:50-15:15	Derivative Pricing on a Threshold Mean-reverting Model with an Averaging Variable	Hoi Ying Wong, <u>Fangyuan Dong</u>
15:15-15:40	The pricing of catastrophe bonds using the CAPM	<u>Fei Su</u> , Jan Wenzelburger

## Optimal Strategy

**HALL: CTL-D CHAIR: Kostas Kardaras**

14:00-14:25	The Optimal Insurance under Disappointment Theories	K. C. Cheung, <u>W.F. Alfred Chong</u> , S. C. P. Yam
14:25-14:50	Deterministic Income under a Stochastic Interest Rate	<u>Julia Eisenberg</u>
14:50-15:15	Evaluating variable annuities with embedded GMWB riders in the presence of withdrawals driven by non-financial factors	<u>Massimo Costabile</u> , Ivar Massabo, Emilio Russo
15:15-15:40	Prospect Theory and the Demand for Cliquet-Style Guarantees	Jochen Ruß, <u>Stefan Schelling</u>

## Dividend 1

**HALL: MATH-027 CHAIR: Nora Muler**

14:00-14:25	A study of dividends and optimal barriers for a dual risk model	<u>Agnieszka Bergel</u> , Alfredo Egídio dos Reis, Eugenio Rodríguez Martínez
14:25-14:50	On the interface between optimal periodic and continuous dividend strategies in the presence of transaction costs	Benjamin Avanzi, Vincent Tu, <u>Bernard Wong</u>
14:50-15:15	Optimal Dividend payment under time of ruin constraint	<u>Camilo Hernandez</u> , Mauricio Junca
15:15-15:40	Optimal dividend problem under transaction cost for a two-dimensional insurance risk process	<u>Pablo Azcue</u> , Nora Muler, Zbigniew Palmowski

## Pension 2

**HALL: MATH-029 CHAIR: Steve Haberman**

14:00-14:25	How the crisis may affect retirement decisions in UK	<u>Jing Xu</u> , Carmen Boado-Penas, David Toscano Pardo, Juan Nave
14:25-14:50	Optimal assets allocation and benefit outgo policies of the dc pension plan to maintain the purchasing power	<u>Lin He</u> , Zongxia Liang
14:50-15:15	Pension risk management with funding and buyout options	Samuel H. Cox, Yijia Lin, <u>Tianxiang Shi</u>
15:15-15:40	On Integrated Chance Constraints in ALM for Pension Funds	Francois Dufresne, <u>Youssef Toukourou</u>

## Optimal Selection

**HALL: MATH-106 CHAIR: Thanasi Pantelous**

14:00-14:25	Non-Zero-Sum Stackelberg Game in Large Population	Alain Bensoussan, <u>Man Ho Chau</u> , Phillip Yam
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14:25-14:50	Ambiguity on the Insurer's Side: The Demand for Insurance	Massimiliano Amarante, <u>Mario Ghossoub</u> , Edmund Phelps
14:50-15:15	Dynamic Safety First Expected Utility Model	<u>Mei Choi Chiu</u> , Hoi Ying Wong, Jing Zhao
15:15-15:40	Adverse Selection, Loss Coverage and Equilibrium Premium in Insurance Markets	<u>Mingjie Hao</u> , Pradip Tapadar, Guy Thomas

**15:40-16:10 Coffee break in the Central Teaching Hub**

**16:10-17:50 Presentations 3**

## Risk Theory 3

**HALL: CTL-A CHAIR: Runhuan Feng**

16:10-16:35	Infinite-time Absolute Ruin in Dependent Renewal Risk Model with Constant Force of Interest	<u>Jiajun Liu</u> , Yang Yang
16:35-17:00	Occupation times of refracted Levy processes with jumps having rational Laplace transform	Lan Wu, <u>Jiang Zhou</u>
17:00-17:25	A multivariate discounted renewal sums with time-dependent claims in the presence of reporting/payment delays	<u>Jae-Kyung Woo</u>
17:25-17:50	Expansions of renewal functions and applications to ruin probabilities	Clement Dombry, <u>Landy Rabehasaina</u>

## Risk Measures 3

**HALL: CTL-B CHAIR: Fabio Bellini**

16:10-16:35	Risks aggregation in multivariate dependent Pareto distributions	<u>Jose Maria Sarabia</u> , Emilio Gomez-Deniz, Faustino Prieto, Vanesa Jorda
16:35-17:00	Integrating profit sharing in insurance supervision	<u>Karl-Theodor Eisele</u> , Ph. Artzner, E. Knobloch
17:00-17:25	VaR and CVaR with Uncertainty and Concave Distortion	<u>Fei Lung Yuen</u> , Ka Chun Chung
17:25-17:50	On the Esscher-Girsanov Transform	<u>Marc J. Goovaerts</u> , Roger J. A. Laeven

## Financial Products 2

**HALL: CTL-C CHAIR: Anne MacKay**

16:10-16:35	Credit risk in corporate spreads during the financial crisis of 2008: A regime-switching approach	<u>Jean-François Bégin</u> , Mathieu Boudreault, Geneviève Gauthier
16:35-17:00	Simplified Hedge for Path-dependent Derivatives	Carole Bernard, <u>Junsen Tang</u>
17:00-17:25	Volatility in options formulae for general stochastic dynamics	<u>Kais Hamza</u>

17:25-17:50	Tail mutual exclusivity and Tail-VaR lower bounds	<u>Ka Chun Cheung</u> , Michel Denuit, Jan Dhaene
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## Portfolio Optimization

**HALL: CTL-D CHAIR: Eric Cheung**

16:10-16:35	Combined Estimation-Optimization (CEO) Approach for High Dimensional Portfolio Selection	<u>Hoi Ying Wong</u> , Chi Seng Pun
16:35-17:00	Utility Risk Portfolio Selection	<u>Kwok Chuen Wong</u>
17:00-17:25	Portfolio insurance strategies for target annuitisation funds	<u>Mengyi Xu</u> , Michael Sherris, Adam Wenqiang Shao
17:25-17:50	General approach to the optimal portfolio selection	<u>Zinovy Landsman</u> , Udi Makov, Tomer Shushi

## Dividends 2

**HALL: MATH-027 CHAIR: Pablo Azcue**

16:10-16:35	Optimal Dividends in the Dual Model under Fixed Transaction Costs	Erhan Bayraktar, Andreas E. Kyprianou, <u>Kazutoshi Yamazaki</u>
16:35-17:00	Optimal dividend problem for two companies with a collaboration agreement	Hansjoerg Albrecher, Pablo Azcue, <u>Nora Muler</u>
17:00-17:25	Dividend optimization in a regime-switching general diffusion model with capital injections	<u>Jinxia Zhu</u> , Hailiang Yang
17:25-17:50	Regularities of Viscosity Solution for Impulse Control Problems	Olivier Menoukeu Pamen, <u>Suhang Dai</u>

## Longevity

**HALL: MATH-029 CHAIR: Elena Vigna**

16:10-16:35	Re-thinking the Life Tables for Assured Lives in Kenya	<u>Carolyn Ndigwako Njenga</u>
16:35-17:00	Basis risk in static versus dynamic longevity-risk hedging	<u>Clemente De Rosa</u> , Elisa Luciano, Luca Regis
17:00-17:25	Nonzero Sum Stochastic Differential Games of the Longevity Security Market with Cointegration	<u>Kai Yin Kwok</u> , Mei Choi Chiu, Hoi Ying Wong
17:25-17:50	Longevity assets and pre-retirement consumption/portfolio decisions	Francesco Menoncin, <u>Luca Regis</u>

**18:30-21:30 Bus tour of Liverpool & Bowling**

## **DAY 3: Thursday 25 June 2015**

**09:30-10:30** Plenary talk: Montserrat Guillen  
Chairman: Marc Goovaerts

**10:30-11:00** Coffee break in the Central Teaching Hub

**11:00-12:40** Presentations 4

### **Risk Theory 4**

**HALL: CTL-A CHAIR: Jostein Paulsen**

11:00-11:25	Optimality in mortgage design under uncertain lifetime	<u>Mogens Steffensen</u> , Maj-Britt Nordfang
11:25-11:50	Predicting the Time of Ultimate Deficit of an Insurance Risk Process	<u>Manuel Morales</u> , Helene Guerin, Hassan Omid
11:50-12:15	On the time and number of claims until ruin in a two-barrier risk model perturbed by diffusion	<u>Michael V. Boutsikas</u>
12:15-12:50	Asymptotic results for a Markov-modulated risk process with Investment	<u>Lewis Ramsden</u> , Apostolos Papaioannou

### **Risk Measures 4**

**HALL: CTL-B CHAIR: Zbigniew Palmowski**

11:00-11:25	On a class of dynamic spectral risk-measures and distortion operators	Dilip B. Madan, <u>Martijn R. Pistorius</u> , Mitja Stadje
11:25-11:50	A comparative study of two-population mortality models for the assessment of basis risk in longevity hedges	Andrés M. Villegas, Steven Haberman, Vladimir Kaishev, <u>Pietro Millosovich</u>
11:50-12:15	Sequential Monte Carlo Samplers for capital allocation under copula-dependent risk models	<u>Rodrigo S. Targino</u> , Gareth W. Peters, Pavel V. Shevchenko
12:15-12:50	Comonotonic Approximations of Risk Measures for Variable Annuity Guaranteed Benefits with Dynamic Policyholder Behavior	<u>Runhuan Feng</u> , Xiaochen Jing, Jan Dhaene

## Financial Products 3

HALL: CTL-C CHAIR: Kais Hamza

11:00-11:25	A Self-Exciting Threshold Jump-Diffusion Model for Option Valuation	<u>Tak Kuen Siu</u>
11:25-11:50	Continuous-time perpetuities and time reversal of diffusions	<u>Kostas Kardaras</u>
11:50-12:15	Valuing commodity options and futures options with changing economic conditions	<u>Kun Fan</u> , Yang Shen, Tak Kuen Siu, Rongming Wang
12:15-12:50	Pricing and Hedging GLWB in the Heston and Black-Scholes with stochastic interest rates models	<u>Ludovic Goudenège</u> , Andrea Molent, Xiao Wei, Antonino Zanette

## Statistical Models 1

HALL: CTL-D CHAIR: Thomas Kozubowski

11:00-11:25	Prediction Intervals with ARIMA Processes	<u>Andrew D Smith</u> , Stuart Jarvis
11:25-11:50	Inside the Solvency 2 Black Box: Net Asset Values and Solvency Capital Requirements with a Least-Squares Monte-Carlo Approach	<u>Anthony Floryszczak</u> , Olivier Le Courtois, Mohamed Majri
11:50-12:15	Efficient Simulation for Choice and Market Share of Ranked Policy Providers	<u>Akshay Kumar Singh</u>
12:15-12:50	Robust LMI stability, stabilization and $H_\infty$ control for premium pricing models in a Markovian regime switching discrete-time framework	<u>Lin Yang</u> , Athanasios A. Pantelous, Hirbod Assa, Jukka Rantala

## Reinsurance 1

HALL: MATH-027 CHAIR: Vladimir Kaishev

11:00-11:25	On the Optimal Reinsurance Problem	<u>Alejandro Balbás</u> , Beatriz Balbás, Raquel Balbás, Antonio Heras
11:25-11:50	Optimal reinsurance under multiple attribute decision making	<u>Basak Bulut Karageyik</u> , David C. M. Dickson
11:50-12:15	Optimal reinsurance minimizing the absolute value of the difference between the profit of the insurer and the profit of the reinsurer	Murat Büyükyazici, <u>Betül Zehra Karagül</u>
12:15-12:50	Optimal reinsurance under one insurer and multiple reinsurers	Tim Boonen, Ken Seng Tan, <u>Shengchao Zhuang</u>

## Mortality 1

HALL: MATH-029 CHAIR: Daniel Alai

11:00-11:25	Testing differences between projected mortality indicators	<u>Ana Debón</u> , Steven Haberman, Francisco Montes, Edoardo Otranto
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11:25-11:50	International Cause-Specific Mortality Rates: New Insights from a Cointegration Analysis	<u>S�verine Arnold (-Gaille)</u> , Michael Sherris
11:50-12:15	StMoMo: An R Package for Stochastic Mortality Modelling	<u>Andr�s Villegas</u> , Vladimir Kaishev, Pietro Millosovich
12:15-12:50	Optimal portfolio allocation with health contingent income products: The value of life care annuities	<u>Shang Wu</u> , Hazel Bateman, Ralph Stevens, Susan Thorp

## Catastrophe Risk

HALL: MATH-106 CHAIR: Etienne Marceau

11:00-11:25	Risk Diversification Effect in the Portfolio of Index Based Weather Insurances	<u>ChangSoo Lee</u> , HyangHwa Choi
11:25-11:50	Risk of flooding for ungauged basins: a general mathematical framework	<u>Jorge Ramirez</u> , Corina Constantinescu
11:50-12:15	Heterogeneous Demands for Flood Insurance against Climate Change Risk through Private Public Participation Mode: A Community-Based Survey in Tainan City	Ya-Pin Lyu, Ching-Cheng Chang, <u>Shu-Ling Chen</u> , Yu-Lieh Huang
12:15-12:50	Aggregation of catastrophe losses with multi-tiered financial terms	<u>Rafal Wojcik</u> , Huang Xiangyang, Lvelin Zvezdov

**12:40-14:00 Lunch in the Guild of Students**

**14:00-15:40 Presentations 5**

## Risk Theory 5

HALL: CTL-A CHAIR: Ronnie Loeffen

14:00-14:25	Some two-dimensional controlled ruin problems	<u>Peter Grandits</u>
14:25-14:50	Two-dimensional ruin probability for subexponential claim size	<u>Zbigniew Palmowski</u> , Serban Badila, Serguei Foss, Tomasz Rolski
14:50-15:15	Risk-Measure-Preserving Compression of Monte Carlo Simulation Results with Insurance Applications	Philipp Arbenz, <u>William</u> <u>Guevara</u>
15:15-15:40	On the relation between the order of claims arrival and the ruin probability in a nonhomogeneous risk process	<u>Raluca Vernic</u>

## Risk Measures 5

HALL: CTL-B CHAIR: Karl-Theodor Eisele

14:00-14:25	Transformations of Copulas and Measures of Concordance	<u>Sebastian Fuchs</u>
14:25-14:50	Quantification of Inflation Risk on the Annuities	<u>Ugur Karabey</u> , Sule Sahin
14:50-15:15	The exponential moment tail of inhomogeneous renewal process	<u>Emilija Bernackait�</u>

15:15-15:40	Micro-level insurance claim count modelling: a Cox process approach	Benjamin Avanzi, Bernard Wong, <u>Xinda Yang</u>
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## Financial Products 4

**HALL: CTL-C CHAIR: Oliver Le Courtois**

14:00-14:25	An extension of Itô's formula for finite variation Lévy processes and its applications in option pricing	<u>Ramin Okhrati</u> , Uwe Schmock
14:25-14:50	Dynamic hedging of longevity risk: the effect of trading frequency	<u>Hong Li</u>
14:50-15:15	Pricing Zero-coupon Bond and CDS under a Structural Credit Risk Model with Regime Switching	<u>Guangqing Wang</u> , Guojing Wang, Hailiang Yang, Jun Zhou
15:15-15:40	Quantitative Analysis of the Basis Risk of Index-linked CAT Risk Securities	<u>Zhongyi Yuan</u>

## Statistical Models 2

**HALL: CTL-D CHAIR: Anna Panorska**

14:00-14:25	Existence and uniqueness of chain ladder solutions	<u>Greg Taylor</u>
14:25-14:50	Application of Metamodeling in Variable Annuity Portfolio Valuation	<u>Guojun Gan</u>
14:50-15:15	Time Series Data Mining Techniques for the Identification and Measurement of Insurance Cycles	<u>Iqbal Owadally</u> , Jessica Lin, Rasaan Otunba, Feng Zhou, Douglas Wright
15:15-15:40	On the impact of deductibles in non-life insurance estimation	<u>Jostein Paulsen</u>

## Reinsurance 2

**HALL: MATH-029 CHAIR: Alejandro Balbás**

14:00-14:25	Optimal Non-life Reinsurance under Solvency II Regime	Alexandru V. Asimit, Yichun Chi, <u>Junlei Hu</u>
14:25-14:50	Optimal proportional reinsurance for a risk model with thinning dependence	<u>Kam Chuen Yuen</u> , Zhibin Liang
14:50-15:15	Benchmark Rates for Excess of Loss Reinsurance Programs	<u>Robert Verlaak</u> , Jan Beirlant
15:15-15:40	Julia programming language in some classical risk models	<u>Haoyu Qian</u> , Corina Constantinescu

## Mortality 2

**HALL: MATH-027 CHAIR: Petar Jevtic**

14:00-14:25	Comparisons of hedge performances for insurance portfolios using matching strategies of size-free and size-independent mortality durations and convexities	<u>Cary Chi-Liang Tsai</u> , Xinying Liang
14:25-14:50	Modelling retirement outcomes	<u>Colin O'Hare</u> , Thomas Sneddon, Zili Zho
14:50-15:15	A unisex stochastic mortality model to comply with EU Gender Directive	An Chen, <u>Elena Vigna</u>

15:15-15:40	Bayesian portfolio specific mortality	<u>Frank van Berkum</u> , Katrien Antonio, Michel Vellekoop
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## Dependence

**HALL: MATH-106 CHAIR: Jose-Maria Sarabia**

14:00-14:25	Between first and second-order stochastic dominance	<u>Alfred Müller</u> , Marco Scarsini, Ilia Tsetlin, Robert Winkler
14:25-14:50	Dependence Model for Frequencies and Claims in the Compound Risk	Woojoo Lee, <u>Jae Youn Ahn</u>
14:50-15:15	On Hoeffding's Covariance Lemma: Its Functional Generalizations and Applications	<u>Ambrose Lo</u>
15:15-15:40	Stochastic Interpolation: An Application to Economic Models	<u>Sule Sahin</u> , A. David Wilkie

**15:40-16:10 Coffee break in the Central Teaching Hub**

**16:10-17:50 Presentations 6**

## Risk Theory 6

**HALL: CTL-A CHAIR: Manuel Morales**

16:10-16:35	Ruin probability in the dual model with two revenue streams	<u>Esther Frostig</u>
16:35-17:00	Analysis of a drawdown-based regime-switching Levy insurance model	David Landriault, Bin Li, <u>Shu Li</u>
17:00-17:25	Asymptotic Ruin Probabilities for a Bidimensional Renewal Risk Model with Constant Interest Rate and Dependent Claims	<u>Jinzhu Li</u>
17:25-17:50	Fractional Compound Poisson Risk Models	<u>Wei Zhu</u> , Corina Constantinescu

## Risk Measures 6

**HALL: CTL-B CHAIR: Catherine Donnelly**

16:10-16:35	Optimal time to enter a retirement village	<u>Jinhui Zhang</u> , Sachi Purcal, Jiaqin Wei
16:35-17:00	An Extreme-Value Theory Calibration Scheme in Reinsurance and Insurance-Linked Securities	<u>Roman Muraviev</u>
17:00-17:25	Polynomial approximations for multivariate aggregate claims amount probability distributions	<u>P.O. Goffard</u> , S. Loisel, D. Pommeret
17:25-17:50	The possibility of a Longevity Index in the European Union under Solvency II guidelines	<u>Amaia Jone Betzuen Álvarez</u> , Amancio Betzuen Zalbidegoitia

# RARE

## HALL: CTL-C CHAIR: Qihe Tang

16:10-16:35	A stochastic model for the sum and the maximum of $N$ dependent, heavy-tail Pareto components	<a href="#">Marek Arendarczyk</a> , <a href="#">Tomasz J. Kozubowski</a> , <a href="#">Anna K. Panorska</a>
16:35-17:00	General random walk in a random environment defined on Galton-Watson trees	<a href="#">Andrea Collevocchio</a>
17:00-17:25	Nonstandard regular variation of in-degree and out-degree in the preferential attachment model	<a href="#">Gennady Samorodnitsky</a>
17:25-17:50	On Ultimate and Finite Horizon Ruin in Cramer – Lundberg model with Pareto Severity	<a href="#">Shubhabrata Das</a>

# Statistical Models 3

## HALL: CTL-D CHAIR: Raluca Vernic

16:10-16:35	On estimation of insurance risk parameters by combining local regression and distribution fitting ideas	<a href="#">Meelis Käärik</a> , <a href="#">Raul Kangro</a> , <a href="#">Liina Muru</a>
16:35-17:00	Regime Switch Models on Inflation Modelling	<a href="#">Meng Wang</a> , <a href="#">Hirbod Assa</a>
17:00-17:25	q-Credibility	<a href="#">Olivier Le Courtois</a>
17:25-17:50	The Power Log-Lindley distribution, with applications to lifetime data modeling	<a href="#">Silvia Dedu</a> , <a href="#">Vasile Preda</a>

# Risk Management 1

## HALL: MATH-027 CHAIR: Pierre Patie

16:10-16:35	Ruin Probabilities of a Discrete-time Multi-risk Model	<a href="#">Agneska Korvel</a>
16:35-17:00	Market valuation of financial, actuarial and combined risks	<a href="#">Ben Stassen</a> , <a href="#">Jan Dhaene</a> , <a href="#">Michel Vellekoop</a>
17:00-17:25	Towards Resilience to Nuclear Accidents: Financing Nuclear Liabilities via Catastrophe Risk Bonds	<a href="#">Bilal Ayyub</a> , <a href="#">Athanasios Pantelous</a> , <a href="#">Jia Shao</a>
17:25-17:50	Modelling Lifetime Dependence for Older Ages using a Multivariate Pareto Distribution	<a href="#">Daniel Alai</a> , <a href="#">Zinoviy Landsman</a> , <a href="#">Michael Sherris</a>

# Mortality 3

## HALL: MATH-029 CHAIR: Severine Arnold

16:10-16:35	Mortality Forecast: Global Or Local?	<a href="#">Han Li</a> , <a href="#">Colin O'Hare</a>
16:35-17:00	Cause-of-Death Mortality: What Can Be Learned From Population Dynamics?	<a href="#">Séverine Arnold (-Gaille)</a> , <a href="#">Alexandre Boumezoued</a> , <a href="#">Nicole El Karoui</a> , <a href="#">Héloïse Labit Hardy</a>
17:00-17:25	Projecting mortality rates by a Markov chain	<a href="#">Jaap Spreeuw</a> , <a href="#">Iqbal Owadally</a>
17:25-17:50	Modelling Mortality: the Effect of Small Population Size on Parameter Estimation	<a href="#">Liang Chen</a>

# Gerber-Shiu Functions

**HALL: MATH-106 CHAIR: Elias Shiu**

16:10-16:35	Gerber-Shiu dynamic risk measures for solvency evaluation	<u>Yasutaka Shimizu</u> , Shuji Tanaka
16:35-17:00	Fourier-cosine method for Gerber-Shiu functions	K.W. Chau, <u>Philip Yam</u> , H. Yang
17:00-17:25	A Truncated Type of Gerber-Shiu Function in the Classical Risk Model with Surplus-Dependent Premium	<u>Ran Xu</u> , Jae-Kyung Woo, Eric C.K. Cheung
17:25-17:50	Analysis of the Generalized Gerber-Shiu Function in Discrete-time Dependent Sparre Andersen Risk Model	<u>Xiaozhen Qi</u> , Jae-Kyung Woo

**18:30-22:30 Gala dinner at the Anglican Cathedral**

**23:00-02:00 The Cavern**

## DAY 4: Friday 26 June 2015

**09:30-11:10 Presentations 7**

### Risk Theory 7

**HALL: CTL-A CHAIR: Julia Eisenberg**

09:30-09:55	On a capital management problem for a central branch with subsidiaries	<u>Florin Avram</u> , Martijn Pistorius
09:55-10:20	Some distributional properties of the deficit at the time of ruin	<u>Georgios Psarrakos</u>
10:20-10:45	On the density of the time to ruin in dependent Sparre Andersen models with Coxian claims	<u>Wing Yan Lee</u>
10:45-11:10	Multivariate Stop loss Mixed Erlang Reinsurance risk: Aggregation, Capital allocation and Default risk	<u>Gildas Ratovomirija</u>

### Pricing

**HALL: CTL-B CHAIR: Ed Furman**

09:30-09:55	Assessing Health Risk with Soft Computing	<u>Marie-Claire Koissi</u> , Arnold F. Shapiro
09:55-10:20	Ruin and deficit at ruin under an extended order statistics risk process	<u>Vladimir K. Kaishev</u>
10:20-10:45	Nash Equilibrium Pricing of General Insurance in a Competitive Non-Cooperative Market	<u>Renchao Wu</u> , Athanasios A. Pantelous
10:45-11:10	Competitive equilibria in markets with expected utility and dual utility	<u>Tim Boonen</u>

## Survival Models

HALL: CTL-C CHAIR: Gennady Samorodnitsky

09:30-09:55	Have Life Insurers Done Right in The Process of Dynamic Optimized ALM? The Participating Life Policy Case	<u>Yujia He</u> , <u>Ze Chen</u> , Bingzheng Chen
09:55-10:20	In-sample forecasting with local linear survival densities - A continuous chain ladder approach	<u>M. Hiabu</u> , E. Mammen, M. D. Martínez Miranda, J. P. Nielsen
10:20-10:45	Fuzzy Logic versus Uncertainty Theory – What are the issues?	<u>Arnold F. Shapiro</u>
10:45-11:10	Large Duration Asymptotics in Bivariate Survival Models with Unobserved Heterogeneity	<u>Yang Lu</u>

## Life Insurance

HALL: CTL-D CHAIR: Pierto Millosovich

09:30-09:55	Valuation of Guaranteed Minimum Maturity Benefits in variable annuities with surrender options	<u>Jonathan Ziveyi</u> , Michael Sherris, Yang Shen
09:55-10:20	Optimal Asset-Liability Management of Issuers of Variable Annuities with Guarantees	Olivier Le Courtois, Krzysztof Ostaszewski, <u>Li Shen</u>
10:20-10:45	Managing sustainability of a defined contribution pension system perturbed by a demographic wave	Massimo Angrisani, <u>Cinzia Di Palo</u>
10:45-11:10	Pricing and Hedging Inflation-linked Annuities Considering Inflation, Interest rate Risk and Longevity Risk	<u>Sharon S. Yang</u> , Fen-Ying Chen, Hong-Chih Huang

## Risk Management 2

HALL: MATH-027 CHAIR: Andreas Tsanakas

09:30-09:55	Return Risk Measurement: Orlicz-Type Measures of Risk	Fabio Bellini, <u>Roger J. A. Laeven</u> , Emanuela Rosazza Gianin
09:55-10:20	How to Invest and Draw-Down Accumulated Wealth in Retirement? A Utility-Based Analysis	<u>Servaas van Bilsen</u>
10:20-10:45	Time Varying Copula Model for claims reserving in Nonlife insurance	<u>Sawssen Araichi</u> , Christian de Perettia, Lotfi Belkacem

## Mortality 4

HALL: MATH-029 CHAIR: Luca Regis

09:30-09:55	Risk Sharing via Mortality Indexed Annuities with Biometric Guarantees	<u>Jakob Klein</u>
09:55-10:20	A continuous-time model for the mortality surface of multiple populations	<u>Petar Jevtic</u> , Luca Regis
10:20-10:45	Bayesian Poisson log-bilinear models for mortality projections with multiple populations	Katrien Antonio, <u>Anastasios Bardoutsos</u> , Wilbert Ouburg
10:45-11:10	The Application of Affine Processes in Multi-Cohort Mortality Model	<u>Yajing Xu</u> , Michael Sherris, Jonathan Ziveyi

# Reserving

**HALL: MATH-106 CHAIR: Hirbod Assa**

09:30-09:55	On some extensions to classical chain ladder method	<u>Liivika Tee</u> , Meelis Käärik
09:55-10:20	Calendar Effect and Continuous Chain Ladder	<u>Maria Dolores Martinez-Miranda</u> , Jens Perch Nielsen, Michael Vogt
10:20-10:45	Micro-level stochastic loss reserving models for time-discrete data	<u>Robin Van Oirbeek</u> , Katrien Antonio, Els Godecharle
10:45-11:10	Egalitarian Equivalent Capital Allocation	Shinichi Kamiya, <u>George Zanjani</u>

**11:10-11:40 Coffee break in the Central Teaching Hub**

**11:40-12:40 Plenary talk: Stéphane Loisel  
Chairman: Rob Kaas**

**12:40-13:00 Concluding remarks and invitation to  
IME2016**

**13:00-14:00 Lunch in the Guild of Students**