AFIR-ERM / Sessions

• AI in longevity risk management: improved long-term projections by machine learning
  Peter Vekas, associate professor, Corvinus University of Budapest,
  Ronald Richman, Chief Actuary, Old Mutual Insure
  Laszlo Kovacs, PhD student, Corvinus University of Budapest

• Suicide Death Number Estimation for Insurers by Neural Networks: Grasping trend changes
  Miwaka Yamashita

• Risk management for climate change and catastrophes in Asia
  Wataru Hirose, Fukoku Mutual Life Insurance Company

• Sustainable Financial Risk Modelling Fitting the SDGs: Some Reflections
  Christian WALTER, Professor, Kedge Business School

• Efficient Monte Carlo simulation of portfolio value, value-at-risk and other portfolio metrics
  Malcolm Kemp, Actuary, Nematrian Limited

• Pension accounting forecasts based on nested stochastic modelling
  Ljudmila Bertschi, Senior Consultant, allea Ltd

• Analysis of financial contagion among economic sectors through Dynamic Bayesian Networks
  João Vinícius Carvalho, Assistant Professor, University of São Paulo,
  Nathalia Costa Fonseca, Pricing and Underwriting Actuary,

ASTIN / Sessions

• A new framework of prediction error decomposition for the machine learning era
  Kazuki Kuriyama, Actuary, The Institute of Actuaries of Japan
  Hirokazu Iwasawa, Guest Professor, Waseda University

• Estimating the effect on payment due to COVID-19 by machine learning method using causal inference
  Fumihiro Endo, JMDC.Inc, Yuji Hiramatsu,

• Stochastic Ensemble Loss Reserving
  Yanfeng Li, Benjamin Avanzi, Professor, University of Melbourne
  Bernard Wong, Professor, University of New South Wales
• Stochastic Loss Reserving with a Bi-directional Neural Network Algorithm
  Yuning Zhang

• Anti-discrimination Insurance Pricing: Regulations, Fairness Criteria, and Models
  Xi Xin, PhD Student, UNSW Sydney Fei Huang, Senior Lecturer, UNSW Sydney

• Capital market effects of full fair value insurance accounting
  Stefan Veith, Professor, University of Applied Sciences Bremen

• Deep Composite Regression
  Mario Wuthrich, Prof, RiskLab, ETH Zurich

• Multivariate matrix-exponential affine mixtures and their applications in risk theory
  Eric Cheung, Associate Professor, University of New South Wales

• Estimation of the mean square error of a product of random variables
  Alois Gisler, Professor emeritus, ETH Zurich

• Modelling Insurers Cyber Risk by Hybrid Methodology – Scenario Analysis and LDA
  Madhu Acharyya, , Glasgow Caledonian University (London Campus)

• The Skewness of Bornhuetter-Ferguson
  Eric Dal Moro, Head Quantitative Risk Management, Assura

• Thinning of loss counts and the Mixed Contagion model
  Michael Fackler, consulting actuary, self-employed

• GEMAct: a comprehensive actuarial package for non-life (re)insurance
  Gabriele Pittarello

• One-year and ultimate reserve risk in Mack Chain Ladder model
  Marcin Szatkowski, SGH Warsaw School of Economics / STU ERGO Hestia SA

• Social inclusion in the world of modern predictive analytics
  Esko Kivisaari, Deputy Managing Director, Finance Finland

• Stable Dividends are Optimal under Linear-Quadratic Optimization
  Debbie Kusch Falden, PhD, University of Copenhagen
AFIR-ERM / Sessions

• Analysis threshold portfolio return of Swiss pension funds engine based on nested simulation
  Mauro Triulzi, Head of IT Service, Software Developer, allea Ltd

• COVID-19 Mitigations in the U.S
  David Ingram, Semi-Retired and Daniel Ingram, Revenue Analyst, American Airlines

• Pandemic effects on investors behaviour: Tesla valuation with Holt-Winters and fundamental analysis
  JUAN CARLOS BRIBIESCA, PhD, Tec de Monterrey Luciana Ehrsam, Management, University of Essex
  Fernando Marine, Research, Universidad Anahuac

ASTIN / Sessions

• An aggregate trend renewal micro model for loss reserves, with inflation and discount
  Anas Abdallah, Assistant Professor, McMaster University

• Contingent Claim, Lender of Last Resort (LoLR), Helicopter Money in the Era of LIBOR Conversion
  Chitro Majumdar

• Risk model with dependent frequency and severity, premium and ruin probability calculation
  Renata Alcoforado

• Scenario Testing for Large Fleets during the yearly price adjustment process - a practical example
  Michael Klamser, Senior Actuary, Allianz Versicherungs AG

• An Asset-Liability Model for Stable Value Fund Wraps (Guaranteed Retirement Plans)
  Behzad Alimoradian

• Cyber risk: An analysis of self-protection and the prediction of claims
  Alana Azevedo
• Efficient computation of expected allocations
Christopher Blier-Wong, PhD Student, Laval University

• Enhancing Claims Triage with Dynamic Data
Peng Shi, Associate Professor, University of Wisconsin – Madison

• Rebalancing the off-Balance Factor Using the Complement of Credibility
Joe Boor

• A Correlated Approach to Monte Carlo Simulation
Katherine Dalis, Senior Staff Actuarial Solutions Strategist, One Concern

• Capturing the dependence among large losses using extreme-value copulas
João Vinícius Carvalho, Assistant Professor, University of São Paulo
Thiago Araujo, University of São Paulo

• Modeling the Reserving Cycle with the Discrete Fourier Transform
James Ely, President, Convolved, Inc

• The predictive power of the multinomial distribution - 2 practical examples
Michael Klamser, Senior Actuary, Allianz Versicherungs AG

• Peer-to-Peer Multi-Risk Insurance and Mutual Aid
Runhuan Feng, Professor and Director of Actuarial Science Program, University of Illinois

• Required Sample Size in Capital Modeling
Kevin Zhang, Assistant Vice President, Cincinnati Insurance Companies

• Simulation-based Earthquake Insurance Risk Calculation
Roba Bairakdar, Concordia University

• Update on Actuarial Density and Actuarial Penetration
Michael Smith, Cristina Mano, XCEEDANCE Partner Director, Cantanhede Mano Consultoria em Atuaria

Actuarial Colloquia 2022 is brought to you by
AFIR-ERM / Sessions

• Selling life insurance in Africa and Modeling Loss Reserving for surrounding in Micro saving Product

• Taxation treatment of retirement income products in Australia focusing on variable annuity contracts
  Jonathan Ziveyi, Associate Professor, University of New South Wales

• Computation of bonus in multi-state life insurance
  Jamaal Ahmad

• Impact of management actions such as policyholder dividends on solvency ratio
  Miwaka Yamashita

• Cyber Risk Management
  Marco Pirra

• Regulation risk: the case of Solvency II
  Christian WALTER, Professor, Kedge Business School

• Covering pandemic risk: insurance or smart saving?
  Michael Fackler, consulting actuary, self-employed

• Insurability and Pandemic (or More Generally, Shared Resilience) Risk
  Esko Kivisaari, Deputy Managing Director, Finance Finland

ASTIN / Sessions

• Fraud detection in insurance using generative adversarial networks for data imbalance
  Rohan Yashraj Gupta, Actuarial Research, Sri Sathya Sai Institute of Higher Learning

• Integrating hidden markov model with machine learning for fraud detection in health insurance
  Phani Kandala

• Optimal prevention strategies in the classical risk model
  Stephane Loisel, Professor, Université Claude Bernard Lyon 1
• Optimal reinsurance under terminal value constraints
  Benjamin Avanzi, Professor, University of Melbourne

• Generating unfavorable VaR scenarios with patchwork copulas
  Dietmar Pfeifer, university professor (retires), University of Oldenburg, Germany

• Internal Modeling without copulas: the beauty of multivariate Thorin classes
  Oskar Laverny, Ph.d, SCOR SE

• Predicting Region-Specific Seismic Losses and Tail Risk – DFA with Learning Algorithms
  Chitro Majumdar, Rita Sousa

• Seismic Risk Assessment in UAE by the Large-Magnitude Offshore Shallow Crustal Earthquake
  Tadahiro Kishida, Dr., Khalifa University

• A copula estimation through recursive partitioning of the unit hypercube
  Oskar Laverny, Ph.d, SCOR SE

• Gamma Mixture Density Networks and their application to modelling insurance claim amounts
  Łukasz Delong, Professor, SGH Warsaw School of Economics

• Longevity and mortality risk management post-Covid
  Andrew Cairns, Heriot-Watt University

• Mental health and insurance cover
  Esko Kivisaari, Deputy Managing Director, Finance Finland

• Actuarial and IT (R)evolutions
  Pierre Miehe

• Bootstrap Consistency for the Mack Bootstrap
  Julia Steinmetz, PhD student, TU Dortmund University

• Capital requirements modeling for market and non-life premium risk in a dynamic insurance portfolio
  Stefano Cotticelli, Fully Qualified Actuary, Sapienza Università di Roma

• Continuous partition-of-unity copulas and their application to risk management and other fields
  Dietmar Pfeifer, university professor (retires), University of Oldenburg, Germany