International Actuarial Association
Association Actuarielle Internationale

INSTITUT DES ACTUAIRES

SECTIONS VIRTUAL COLLOQUIUM 2020

Program

The Sections Virtual Colloquium will be available online on the actuarial streaming platform actuview:
www.iaasections2020.actuview.com

actuview

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Sections Virtual Colloquium | 11-15 May 2020

In mid-May, the Sections Virtual Colloquium 2020 will bring the actuarial world together for five days with more than 50 high-level scientific presentations, recorded article presentations, as well as live plenary sessions from IAA Sections with contributions from keynote speakers.

The whole event will be available online on the actuarial streaming platform actuview: www.iaasections2020.actuview.com

Find the full program on the following pages.

All live sessions:

11 May, 15.00–16.30 CEST | AFIR-ERM Session live

Panel: ERM Session on Artificial Intelligence

Bertrand Braunschweig (INRIA, France), Jeffrey Chan (BCG, Australia), Françoise Soulié-Fogelman (Hub France IA, France)

12 May, 13.00–14.30 CEST | ASTIN Session live

Detection of Data Anomalies
Alexandre Boumezoued (Milliman, France)

On Customer Behaviour in Insurance
Stéphane Loisel (University of Lyon, France)

12 May, 15.00–16.30 CEST | IAAHS Session live

Panel: Covid-19 Pandemic – International Health Care Perspectives, Lessons. What Next?

Joanne Buckle (Milliman, UK), Barry Childs (Insight Actuaries and Consultants, South Africa), Alex Leung (OneDegree, Taiwan), Nicola Oliver (Medical Intelligence, UK/France), Ed Pudlowski (MorningStar Actuarial Consulting, USA), Moderators: Adrian Baskir (UK) / Kevin Manning (Ireland)

13 May, 13.00–14.30 CEST | IAALS Session live

Mortality Trends in Developed Countries: An Analysis of the Recent Deceleration in Mortality Improvement
Steven Haberman (Cass Business School, UK)

Statistical Learning Methods for Mortality Data Correction in the Absence of Fertility Data
Alexandre Boumezoued (Milliman, France)

Measuring Longevity Risk Through a Neural Network Lee-Carter Model
Mario Marino (University of Rome, Italy)

13 May, 15.00–16.30 CEST | PBSS Session live

Role of the US National Academy of Social Insurance
William J. Arnone (National Academy of Social Insurance, USA)

Actuarial Ideas to Mitigate the Global Pension Crisis
Abraham Hernández (PBSS, Portugal)

14 May, 13.00–14.30 CEST | IACA Session live

The Power of Diversity of Thought – Next Chapter
Cathy Lyn (Jamaica), Tonya Manning (Buck, USA)

15 May, 13.00–14.30 CEST | Institut des Actuaires Session live

Key Issues and Challenges for Actuarial Science. Bringing Together Academics and Practitioners.

AFIR-ERM Session live on actuview | 15.00–16.30 CEST

ERM Session on Artificial Intelligence

Panelists:

* Bertrand Braunschweig (INRIA, France)
* Jeffrey Chan (BCG, Australia)
* Françoise Soulié-Fogelman (Hub France IA, France)

AFIR-ERM Recorded Sessions

Efficient and Reliable Solvency II Loss Estimates With Deep Neural Networks
Ning Lin (Deloitte), Zoran Nikolić (Deloitte)

Developing a Counter-Cyclical Risk Measure
Marie Kratz (ESSEC CREAR), Marcel Bräutigam (ESSEC CREAR / LPSM Sorbonne Université), Michel Dacorogna (Prime Re Solutions)

Threshold Portfolio Return for Swiss Pension Funds Based on Nested Stochastic Modelling
Ljudmila Bertschi (Member of Swiss Chamber of pension fund experts, SKPE), Urs Barmettler (Member of Swiss Chamber of pension fund experts, SKPE)/ Dr. math ETHZ), Mauro Triulzi (Dr. math ETHZ), Lionel Candaux (University of Lausanne / Swiss Chamber of pension fund experts, SKPE)

Consequences of IBOR Reform on Insurance Sector
Eleonore Haguet-Trouplin (BNP), Patrice Odo (CDC)

The European Safe Asset Debate
Malcolm Kemp (Barnett Waddingham)

Machine Learning : quelles opportunités de pilotage ALM pour un assureur vie?
Benjamin Tessiaut (Command Strategy Advisory), Nicolas Dusserre (Command Strategy Advisory)

Extreme cyber losses: An Alternative Approach to Estimating Probable Maximum Loss for Data Breach Risk
Kwangmin Jung (Drake University)

Analysis and Evaluation of the Mexican Market Behaviour, its Investors and its most relevant Companies through the Monetary, Economic and International Constructs, Using PLS-SEM Modeling
Fernando Jose Marine Osorio (Anáhuac University Mexico)

Intercultural Research and Motor Insurance Premiums: Prejudices, Multi-dimensional Criteria and Global Trends
Michael Fackler (Consulting Actuary)

Financial Engineering: A New Longevity Bond to Manage Individual Longevity Risk
Michael Sherris (School of Risk and Actuarial Studies, UNSW Business School), Yuxin Zhou (School of Risk and Actuarial Studies, UNSW Business School), Mengyi Xu (School of Risk and Actuarial Studies, UNSW Business School), Jonathan Ziveyi (School of Risk and Actuarial Studies, UNSW Business School)

AFIR-ERM Recorded Sessions

A Review of the Solvency II Risk Margin
Malcolm Kemp (Barnett Waddingham)

Actuarial (R)evolutions
Pierre Miehe (Milliman)

Aligning Retirement Goals and Outcomes
Catherine Donnelly (Risk Insight Lab, Heriot-Watt University)

Cyber Risk: The Responsibility of the Actuary in Setting up Individual, Collective and Coordinated Protection
Emmanuelle Huguet (Addactis), Thomas Bastard (Addactis)

In Measuring the Value Creation by Enterprise Risk Management for Insurance Companies: Does ESG (economic, social, governance) Performance Matter?
Madhu Acharyya (GCU London)

Prospective Modelling of Temporary Disability Risk: Proposal for a Two-dimensional Model and Machine Learning Algorithms Combined Approach
(joint session with PBSS & IAALS)
Fatoumata Ndoye (Fixage)

Interested in joining the AFIR-ERM Section? Click here for more information!

ASTIN Non-Life Insurance

12 May 2020

SECTIONS VIRTUAL COLLOQUIUM 2020

ASTIN Session live on actuview | 13.00–14.30 CEST

Detection of Data Anomalies
Alexandre Boumezoued (Milliman, France)

On Customer Behaviour in Insurance
Stéphane Loisel (University of Lyon, France)

Best Paper Award
Moderator: Dimitri Semenovich (Insurance Australia Group)

ASTIN Recorded Sessions

Discrimination-free Insurance Pricing
Mario Wüthrich (RiskLab, ETH Zurich)

The Effect of Disruption in Insurance Industry: Instant Policy Pricing and Cyber Risk Evaluation
Valeria D'Amato (University of Salerno), Paola Fersini (Luiss Guido Carli University), Salvatore Forte (Università Telematica Giustino Fortunato), Guiseppe Melisi (University of Sannio)

From Generalized Linear Models to Neural Networks, and Back
Mario Wüthrich (RiskLab, ETH Zurich)

Asymptotic Tail Probability of the Discounted Aggregate Claims under Homogeneous, Non Homogeneous and Mixed Poison Risk Model
Franck Adekambi (University of Johannesburg)

Goodness-of-t Tests for Compound Distributions with Applications in Insurance
Pierre-Olivier Goffard (Université Claude Bernard Lyon 1 – ISFA)

The Key Role of Actuaries in Steering IFRS 17 KPIs
Baptiste Brechot (Deloitte), Redouan Hmami (Deloitte)

Actuaries Climate Risk Index: Research Update
Steve Jackson (American Academy of Actuaries)

Moral Hazard in Supplementary Health Insurance: Modelling of the Insured's Behaviour and the Optimal Contract
Costin Oarda (CSS Insurance)

One-year Premium Risk and Emergence Pattern of Ultimate Loss Based on Conditional Distribution
Marcin Szatkowski (ERGO Hestia)

Joint Model Prediction and Application to Individual-level Loss Reserving
Peng Shi (Wisconsin School of Business)

How Can We Quantify Cyber Risk Based on Heterogenous and Volatile Data?
Sébastien Farkas (Sorbonne Université – LPSM), Olivier Lopez (UPMC), Maud Thomas (UPMC)

Believing the Bot – Model Risk in the Era of Deep Learning
Ronald Richman (QED)

Cash Flow and Unpaid Claim Runoff Estimates Using Mack and Merz-Wüthrich Models
Mark Shapland (MILLIMAN)

Regression Models for the Joint Development of Individual Payments and Claims Incurred
Łukasz Delong (SGH Warsaw School of Economics), Mario Wüthrich (RiskLab, ETH Zurich)

ASTIN Recorded Sessions

Multivariate Hawkes Process for Cyber Risk Insurance
Caroline Hillairet (ENSAE)

Agent Based Models: Dynamics, Stochastics and Rule Based Decisions – A Model Study.
Magda Schiegl (University of Applied Sciences Landshut)

Will P2P Insurance Replace Traditional Insurance?
Charles Davenne (University Paris Ouest Nanterre, EconomiX / Yakman)

Resource Exploitation in a Stochastic Horizon Under Two Parametrics Interpretations
Jose Daniel Lopez Barrientos (Universidad Anahuac Mexico)

Application of Machine Learning Methods for Cost Prediction of Natural Hazard in France
Antoine Heranval (Sorbonne Université / Mission Risques Naturels), Olivier Lopez (Sorbonne Université), Maud Thomas (ISUP/Sorbonne Université)

How to Improve the Performance of a Neural Network with Unbalanced Data for Text Classification in Insurance Application
Isaac Cohen Sabban (Sorbonne/Pacifica), Olivier Lopez (Sorbonne Université), Yann Mercuzot (Pacifica)

CORT: the Copula Recursive Tree
Oskar Laverny (Scor, Université Claude Bernard Lyon 1), Véronique Maume-Deschamps (Université Claude Bernard Lyon 1), Didier Rullière (Université Claude Bernard Lyon 1), Esterina Masiello (Université Claude Bernard Lyon 1)

Accumulation Scenarios for Cyber Insurance Based on Epidemiological Models.
Olivier Lopez (UPMC), Caroline Hillairet (Ensae Paris, Crest)

AGLM: A Hybrid Modeling Method of GLM and Data Science Techniques
Suguru Fujita (FIAJ, CERA), Toyoto Tanaka (FIAJ), Kenji Kondo (FIAJ), Hirokazu Iwasawa (FIAJ)

Generalized Pareto Regression Trees for Extreme Claims Prediction
Maud Thomas (UPMC), Olivier Lopez (UPMC)

Premium Rating Without Losses – How to Estimate the Loss Frequency of Loss-free Risks
Michael Fackler (Consulting Actuary)

Non-Affirmative Cyber Assessment Framework
Visesh Gosrani (CyDelta)

Best Estimate(s): Who Will Get the Best One? Cognitive Biases and Expert Judgement Applied to P&C Reserving“
Simon Robert (Deloitte)

Can Machine Learning Algorithms Outperform Traditionally Used Methods in Insurance Pricing?
Harej Bor (PRS)

Measuring the Value of Risk Cost Models
Dimitri Semenovich (Insurance Australia Group)

Social Inclusion in the World of Modern Predictive Analytics
(joint session with IACA)
Esko Kivisaari (Finance Finland)

Interested in joining the ASTIN Section? Click here for more information!

IAALS Session live on actuview | 13.00–14.30 CEST

Mortality Trends in Developed Countries: An Analysis of the Recent Deceleration in Mortality Improvement
Steven Haberman (Cass Business School, UK)

Statistical Learning Methods for Mortality Data Correction in the Absence of Fertility Data
Alexandre Boumezoued (Milliman, France)

Measuring Longevity Risk Through a Neural Network Lee-Carter Model
Mario Marino (University of Rome, Italy)

IAALS Recorded Sessions

Disability Income Claimant Rehabilitation and other Claim Interventions: Who Are the Selected Few; and Are these Claimants More Likely to Return to Work.
Landi Du Toit (University of Cape Town)

A Synthetic Model for Asset-Liability Management in Life Insurance, and Analysis of the SCR with the Standard Formula
Arturo Infante (AXA), Aurélien Alfonsi (UPMC), Adel Chenchali (Ponts Paritech)

The IAIS Global Frameworks for Supervision of IAIGs Including ComFrame, ICS 2.0 and the Holistic Framework in Japan, the Unites States, and the Rest of the World
Marc Slutzky (Milliman), Ito Kenjiro (Milliman)

Viability Analysis of Brazilian Market for Universal Life in Brazil
João Vinícius de França Carvalho (University of Sao Paulo), Mariana Ikeda (University of Sao Paulo)

Duration of Long-Term Care: Socio-Economic Drivers, Evolution and Type of Care Interactions
Michel Fuino (UNIL), Joël Wagner (UNIL)

Modeling Multi-Country Mortality Dependence by a Vine Copula
Masafumi Suzuki (PGF Life)

Mortality Forecasting with Wavelets
Donatien Hainaut (UC LOUVAIN)

Prospective Modelling of Temporary Disability Risk: Proposal for a Two-dimensional Model and Machine Learning Algorithms Combined Approach
(joint session with PBSS & AFIR-ERM)
Fatoumata Ndoye (Fixage)

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PBSS Session live on actuview | 15.00–16.30 CEST

Role of the US National Academy of Social Insurance
William J. Arnone (National Academy of Social Insurance, USA)

Actuarial Ideas to Mitigate the Global Pension Crisis
Abraham Hernández (PBSS, Portugal)

PBSS Recorded Sessions

Actuarial Practice Experience in Social Security Reform and Crisis Management
Eduardo Melinsky (Universidad de Buenos Aires)

Measuring Adequacy and Facing Longevity Risk in Social Security
Raffaello Marcelloni (INAIL), Daniela Martini (INAIL)

Pension Accounting: Forecasts for the Company‘s Own Balance Sheet as well as Profit and Loss Accounting Based on Nested Stochastic Modelling
Ljudmila Bertschi (Member of Swiss Chamber of pension fund experts), Urs Barmettler (ETHZ), Mario Triulzi (ETHZ), Lionel Candaux (University Lausanne)

Global Developments in Pension Fund ESG Disclosures → What Pension Actuaries Need to Know
Paul Meins (Acturial Consultant), Tim Furlan (Russell Investments), Philip Shier (Society of Actuaries in Ireland)

In the South African Context, does increasing Member Choice and Flexibility Add Real Value to Employees
Michelle Acton (Old Mutual), Andrew Davison (Old Mutual)

A New Pension System in Brazil? An Evaluation of the Fiscal and Distributive Impacts of the 2019 Pension Reform Proposal
Luís Eduardo Afonso (University of Sao Paulo), João Vinícius de Franca Carvalho (University of Sao Paulo)

Towards an IAA-ILO-ISSA Joint Project on Workers’ Compensation Systems
Raffaello Marcelloni (INAIL)

Digitalization of Pension System in Mexico: Benefits and Implications
Juan Carmona (Universidad de Mexico), Jocelyn Griseld Alba Aellano (Scotiabank Mexico)

The Impact of Migration on Finnish Pension System Sustainability: Scenario Calculations
Tuija Nopola (Finnish Centre for Pensions)

Current Situation and Future Issues of Corporate Pension in Japan
Kenji Kusakabe (The Institute of Actuaries of Japan)

Towards a Phased Retirement System Whose Functionalities Foster an Increased Degree of Self-determination for the Individual without Jeopardizing the Sustainability of the Social Protection
Catherine Plessis (BEI)

Pension Reform and Innovation in Canada
Robert L. Brown (Retired)

PBSS Recorded Sessions

Deferred Public Pension and Longevity Risk for a Household in Retirement
Norio Hibiki (Keio University), Masahiro Shibahara (Keio University)

The Great Pension Debate: Finding Common Ground
Robert L. Brown (Retired)

IAS19 Discount Rates in the Time of Covid-19
Peter Devlin (Deloitte)

Prospective Modelling of Temporary Disability Risk: Proposal for a Two-dimensional Model and Machine Learning Algorithms Combined Approach
(joint session with AFIR-ERM & IAALS)
Fatoumata Ndoye (Fixage)

IACA Session live on actuview | 13.00–14.30 CEST

The Power of Diversity of Thought – Next Chapter
Cathy Lyn (Jamaica), Tonya Manning (Buck, USA)

IACA Recorded Sessions

Adoption of IFRS 17 in Emerging and Frontier Insurance Markets. An Actuarial Perspective
Carlos Arocha (Arocha & Associates GmbH)

Ethical Perspectives of the Actuaries of the Future
Colm Fitzgerald (University of Dublin)

Generative Adversarial Networks for Actuarial Use
Kwanda Ngwenduna (ABSA)

Risk Analysis of Active Membership in Relation to Death and Disability Risk Coverage
Ljudmila Bertschi (Member of Swiss Chamber of pension fund experts), Urs Barmettler (ETHZ), Mario Triulzi (ETHZ), Lionel Candaux (University of Lausanne / Swiss Chamber of pension fund experts, SKPE)

La psychiatrie: un risque important en assurance santé?
Romain Gauchon (Addactis), Jean-Pascal Hermet (Addactis)

Insurance and Consulting in Emerging Market-CIS Countries
Dilara Asadova (Actuarial Association of Azerbaijan), Bakhodir Shamsuddinov (National University of Uzbekistan), Rustam Azimov (Uzabekinvest)

Instruction on Character Formation in the Ethical Education of Actuaries
Colm Fitzgerald (University of Dublin)

Pension Schemes Do not Deliver the Amounts Needed When They Are Needed. Can Actuaries Solve this Problem?
Nigel Sloam (Nigel Sloam), Aaron Segal (Nigel Sloam)

The Scourge of the Indies: Tropical Depressions, Storms, & Hurricanes.
Marc Bagarry (Groupama), Arnaud Dalleau (Groupama)

Social Inclusion in the World of Modern Predictive Analytics
(joint session with ASTIN)
Esko Kivisaari (Finance Finland)

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