

Program - Concurrent Sessions

Monday, 9 November

13:45 - 15:30

- Session Title** **Global Issues Affecting Actuaries**
Venue Hall A
- Presentation 1** *Panel Discussion on Global Issues Affecting Actuaries*
Subject Life (IAALS), Non-Life (ASTIN), Enterprise Risk Management (AFIR-ERM), Health (IAAHS), Pensions and Social Security (PBSS), Actuarial Consulting (IACA), Data Science/AI, Investment and Finance, Professionalism/Actuarial Education
Speaker Michael Lombardi et al.
- Session Title** **Long-Term Care**
Venue Hall B5(1)
- Presentation 1** *Projections for the Rate of Certification of public Long-Term Care in Japan*
Subject Health (IAAHS), Data Science/AI
Speaker Masahiro Miyamura et al.
- Presentation 2** *Actuarial Applications of Long-Term Care Data: From Risk Prediction to Pricing and Portfolio Management*
Subject Health (IAAHS), Life (IAALS)
Speaker Fumihiko Endo
- Presentation 3** *Preparing for the Silver Tsunami: Longevity solution gaps and opportunities in the Asia-Pacific Region*
Subject Non-Life (ASTIN), Health (IAAHS)
Speaker Dennis Lu et al.
- Session Title** **Professionalism and Social Responsibility**
Venue Hall B5(2)
- Presentation 1** *Professional Skepticism for Actuaries: Understanding Common Biases for Better Assumptions*
Subject Life (IAALS), Professionalism/Actuarial Education
Speaker Otto Ho et al.
- Presentation 2** *Actuaries in Action: Advancing the Profession for Sustainable Development*
Subject Professionalism/Actuarial Education
Speaker Queenie Chow et al.
- Presentation 3** *Actuaries in Non-traditional Roles - Medicine Recycling*
Subject Professionalism/Actuarial Education
Speaker Aatman Dattani
- Session Title** **Large Language Models**
Venue Hall B7(1)
- Presentation 1** *Advanced Applications of Generative AI in Actuarial Science: Case Studies Beyond ChatGPT*
Subject Data Science/AI
Speaker Iris Nonneman et al.
- Presentation 2** *Harnessing Large Language Models in Actuarial Practice: Foundations, Spreadsheet Applications, and Enhanced Documentation Generation*
Subject Data Science/AI, Enterprise Risk Management (AFIR-ERM)
Speaker Pierre MIEHE et al.
- Presentation 3** *Engineering Quality Assurance for LLM Deployment in Insurance: A Framework for Precision and Stability*
Subject Data Science/AI, Life (IAALS)
Speaker YI-CHEN LAI et al.
- Session Title** **Recovery and Resolution / Governance**
Venue Hall B7(2)
- Presentation 1** *The European IRRD and its challenges for actuaries*
Subject Enterprise Risk Management (AFIR-ERM), Professionalism/Actuarial Education
Speaker Roland Weber
- Presentation 2** *Rethinking the Need for Insurance Guarantee Schemes*
Subject Enterprise Risk Management (AFIR-ERM)
Speaker Lauri Saraste
- Presentation 3** *Examining the G in ESG: An Actuarial Perspective*
Subject Enterprise Risk Management (AFIR-ERM)
Speaker Tetsuya Abe et al.

Session Title Climate Risk in Life Insurance**Venue** Hall C**Presentation 1** *Addressing Climate Risk in Life Insurance: Case Studies and Evolving Regulatory Expectations***Subject** Life (IAALS), Enterprise Risk Management (AFIR-ERM)**Speaker** Erica Chan et al.**Presentation 2** *A Second Step into Climate Risk: Applying DLNM (Distributed Lag Non-Linear Model) to Risk Analysis in Life and Health Insurance***Subject** Life (IAALS), Health (IAAHS)**Speaker** Shogo Katsui**Presentation 3** *Pricing of options and Guarantees: Impact of Climate Change***Subject** Life (IAALS), Enterprise Risk Management (AFIR-ERM)**Speaker** Alasdair Thompson**Session Title Private Equity Investment and AIR****Venue** Hall D5**Presentation 1** *Expected SBDA: A forward-looking performance measure of Private Equity funds***Subject** Investment and Finance, Pensions and Social Security (PBSS)**Speaker** Koichi Miyazaki**Presentation 2** *Asset-Intensive Reinsurance: A Strategic Lever for Capital Optimization and Product Competitiveness***Subject** Investment and Finance, Life (IAALS)**Speaker** Bingjie Li**Presentation 3** *TBD***Subject****Speaker****Session Title Evolving Actuarial Practice****Venue** Hall D7**Presentation 1** *Actuarial Analysis Based on Customer Behavior***Subject** Actuarial Consulting (IACA), Non-Life (ASTIN)**Speaker** John Kim**Presentation 2** *Challenges of Small to Medium size Actuarial Consulting Practice***Subject** Actuarial Consulting (IACA)**Speaker** Ibrahim Muhanna**Presentation 3** *Digital Ecosystems & Inclusive Financial Solutions for Underserved Communities***Subject** Actuarial Consulting (IACA)**Speaker** George Odera**Session Title Advanced Actuarial Risk Modeling****Venue** Hall E Seminar Room(1)**Presentation 1** *General Additive Modelling (GAM) with left truncation***Subject** Non-Life (ASTIN), Data Science/AI**Speaker** Hayden Lau**Presentation 2** *TBD***Subject****Speaker****Presentation 3** *TBD***Subject****Speaker****Session Title Modernizing Actuarial Models****Venue** Hall E Seminar Room(2)**Presentation 1** *Modernizing Life Insurance Systems with Markov: A Practical Alternative to Commutation Numbers***Subject** Life (IAALS)**Speaker** Alexandre Allegrezza**Presentation 2** *Comparison theorems and Thiele's equation***Subject** Life (IAALS), Health (IAAHS)**Speaker** Christian Furrer**Presentation 3** *Advancing Multiple Decrement Models in the Vietnamese Insurance Market: Bridging Data Gaps and Practical Applications***Subject** Life (IAALS), Health (IAAHS)**Speaker** Thi Hong Tham PHAM

- Session Title** Pension Fund Valuation and Solvency
Venue G402
- Presentation 1** *If the discount rate is the answer, what is the question?*
Subject Pensions and Social Security (PBSS), Non-Life (ASTIN)
Speaker Charles Cowling
- Presentation 2** *Resilient Pension Systems in a Small Open Economy: Solvency, Longevity, and Innovative Benefit Design in Iceland*
Subject Pensions and Social Security (PBSS), Health (IAAHS)
Speaker Sigurdur Freyr Jonatansson
- Presentation 3** *Deep Learning supports Solvency Requirements for Swiss Pension Funds and ensures the Guarantee of Benefit Payments at any time*
Subject Pensions and Social Security (PBSS), Data Science/AI
Speaker Mauro Triulzi
- Session Title** Predictive Modeling
Venue G409
- Presentation 1** *Spatio-Temporal Actuarial Modeling with SPDE*
Subject Non-Life (ASTIN)
Speaker Seiichiro Sano
- Presentation 2** *Optimal Pricing of CMTPL Insurance Using Machine Learning Models*
Subject Non-Life (ASTIN), Data Science/AI
Speaker Artak Bakhshyan
- Presentation 3** *Interpretable Ensembles: Enhancing Claim Frequency Modeling with External Socioeconomic Factors*
Subject Non-Life (ASTIN), Data Science/AI
Speaker Tobias Baur
- Session Title** Quantum Methods
Venue G502
- Presentation 1** *A Hybrid Quantum-Stochastic Framework for the Valuation and Forecasting of Complex Financial Instruments*
Subject Investment and Finance, Enterprise Risk Management (AFIR-ERM)
Speaker MARCO ANTONIO RUIZ OLVERA
- Presentation 2** *From Research to Reality: Quantum Computing Opportunities for Actuaries*
Subject Actuarial Consulting (IACA)
Speaker Svenja Ernst et al.
- Presentation 3** *Quantum Machine Learning: An Upgrade to Actuarial Data Quality and Capital Modelling?*
Subject Data Science/AI, Enterprise Risk Management (AFIR-ERM)
Speaker David Garvin et al.
- Session Title** Evaluation of Pension Reforms
Venue G510
- Presentation 1** *Improving pension outcomes : experience following the introduction of the two-pot system*
Subject Pensions and Social Security (PBSS)
Speaker John Anderson
- Presentation 2** *Intragenerational heterogeneity in Brazilian General Social Security System (RGPS): an actuarial analysis of the 2019 reform within a multi-risk framework*
Subject Pensions and Social Security (PBSS)
Speaker Ana Cristina de Souza Queiroz et al.
- Presentation 3** *Pension Reform, Investor Storm: How Did Investors React to Brazil's Pension Reform?*
Subject Pensions and Social Security (PBSS), Investment and Finance
Speaker Laryssa Cristhina Freitas et al.
- Session Title** Actuarial Practices in M&A
Venue G602
- Presentation 1** *Will IFRS 17 replace EV? — analysis on recent disclosures -*
Subject Life (IAALS), Actuarial Consulting (IACA)
Speaker Clement Bonnet et al.
- Presentation 2** *Life Insurance M&A in North America: Current Trends, Driving Forces & Future Outlook*
Subject Actuarial Consulting (IACA), Life (IAALS)
Speaker Rahul Mohan et al.
- Presentation 3** *Life Insurance M&A in Europe: Current Trends, Driving Forces & Future Outlook*
Subject Actuarial Consulting (IACA), Life (IAALS)
Speaker Stuart Reynolds

Session Title **Fraud Detection****Venue** G610**Presentation 1** *How to Apply Various Analytical Techniques in Conduct Risk Management - An Application to Sales Agents Fraud Detection -***Subject** Enterprise Risk Management (AFIR-ERM), Data Science/AI
Speaker Kazuyoshi Hashidate**Presentation 2** *Accidents That Never Happened: GenAI and Fraud in Motor Insurance***Subject** Data Science/AI
Speaker Sven Wagner et al.**Presentation 3** *From Detection to Prevention: A Machine Learning Framework for Fraud Risk Scoring in Life Insurance***Subject** Life (IAALS), Data Science/AI
Speaker Jou-An Chen et al.**Session Title** **Dynamic Lapses****Venue** G701**Presentation 1** *An Empirical Study of the Mass Lapse Events with Japanese Historical Data***Subject** Life (IAALS)
Speaker Tetsuya Kaseda et al.**Presentation 2** *Modeling and Analyzing impact of FX driven lapse behavior in Japan***Subject** Life (IAALS)
Speaker David Wang et al.**Presentation 3** *Application of Prospect Theory to Lapse Rate Projection***Subject** Life (IAALS), Enterprise Risk Management (AFIR-ERM)
Speaker Yuta Sugimura

Program - Concurrent Sessions

Monday, 9 November

16:15 - 18:00

Session Title **Private Credit**

Venue Hall A

Presentation 1 *Private Credits in Life Insurance: Trends, Opportunities, Challenges, and Strategic Insights*

Subject Investment and Finance, Life (IAALS)

Speaker JOY CHEN et al.

Session Title **Value-Based Care (I)**

Venue Hall B5(1)

Presentation 1 *Driving Value-Based Care in Private Health Insurance: The New Age Actuary's Role in Leveraging Patient-Reported Data in Value-Based Care*

Subject Health (IAAHS), Data Science/AI

Speaker Jordan Zaitman

Presentation 2 *An actuary's perspective on measuring value-based care.*

Subject Health (IAAHS), Data Science/AI

Speaker Martin J Coxon

Presentation 3 *Leveraging Real-World Data to Build Clinically-Focused Claims Groupers*

Subject Health (IAAHS), Data Science/AI

Speaker Harsha Mirchandani et al.

Session Title **Actuarial Capacity Building**

Venue Hall B5(2)

Presentation 1 *Training Actuary in National Economics University (NEU) in Vietnam – The new model for Student engagement and Industry intergration*

Subject Professionalism/Actuarial Education

Speaker The Nguyen et al.

Presentation 2 *Digital Transformation of Actuarial Education: An AI-Driven Framework for Knowledge Management and Personalized Learning*

Subject Professionalism/Actuarial Education

Speaker CHIH-JUI WU et al.

Presentation 3 *Adapting actuarial credentialing to prepare new actuaries for the challenges and opportunities ahead*

Subject Professionalism/Actuarial Education, Data Science/AI

Speaker Ken Guthrie

Session Title **AI in Actuarial Practice**

Venue Hall B7(1)

Presentation 1 *Democratizing Actuarial Expertise Through Fine-Tuned Chain of Thoughts: A Revolutionary Framework for AI-Powered Insurance Reasoning*

Subject Data Science/AI

Speaker Manuel Caccone

Presentation 2 *Democratization Cloud – A New AI-based Approach to Turning Actuarial Models into Scalable Services*

Subject Data Science/AI

Speaker Christoph Kling

Presentation 3 *Actuary + AI Generated Medium Scenario Set*

Subject Data Science/AI, Enterprise Risk Management (AFIR-ERM)

Speaker David Ingram

Session Title **IFRS17 and Life Insurance**

Venue Hall B7(2)

Presentation 1 *Connecting RBC and IFRS17: Lessons from the developing world*

Subject Life (IAALS)

Speaker Hassan Scott Odierno

Presentation 2 *Valuation of participating insurance contracts with intergenerational risks sharing under IFRS 17*

Subject Life (IAALS), Investment and Finance

Speaker Tachfine EL ALAMI

Presentation 3 *Addressing the phase shift of Interest Rate Environment: Effects of IFRS 17 and Impacts of Insurance Capital Standards*

Subject Life (IAALS)

Speaker Nick Jessop

Session Title Climate Change Scenarios**Venue** Hall C**Presentation 1** *Climate Change: Can Extreme Value Theory predict the "end of times" ?***Subject** Enterprise Risk Management (AFIR-ERM)**Speaker** Stephane Loisel**Presentation 2** *Addressing the critical gap: sharing UK experience developing "central use-case" (3°C) climate scenarios***Subject** Enterprise Risk Management (AFIR-ERM)**Speaker** Loubna Benkirane et al.**Presentation 3** *IFoA Working Party: Climate Stress and Scenario Analysis***Subject** Enterprise Risk Management (AFIR-ERM)**Speaker** Claire Booth et al.**Session Title** Asset Management: From Households to Private Markets**Venue** Hall D5**Presentation 1** *Optimal Wealth Accumulation and Asset Allocation Strategies in Japan's Evolving Economic and Demographic Landscape***Subject** Investment and Finance, Pensions and Social Security (PBSS)**Speaker** Tomohiro Ichiyama**Presentation 2** *Valuation of Non Listed Assets***Subject** Investment and Finance**Speaker** Gavin Conn et al.**Presentation 3** *Generative AI for Private Asset Onboarding***Subject** Investment and Finance, Data Science/AI**Speaker** Chadwick Cheung et al.**Session Title** Actuarial Issues in Social Security**Venue** Hall D7**Presentation 1** *Utilization of actuarial analysis in welfare program in Japan - its significance and some consequences***Subject** Pensions and Social Security (PBSS)**Speaker** Hotaka Nishio**Presentation 2** *MEASURING AND BALANCING ADEQUACY AND SUSTAINABILITY IN SOCIAL SECURITY PROGRAMS***Subject** Pensions and Social Security (PBSS)**Speaker** Assia Billig et al.**Presentation 3** *Extending the Actuarial Framework for Universal Basic Income in Small Developing States: Applications in Education and Affordable Housing***Subject** Data Science/AI**Speaker** Shubhash Gosine et al.**Session Title** Model Governance**Venue** Hall E Seminar Room(1)**Presentation 1** *Model Risk Management in ERM: Risk Management Framework, Validation, and Adapting to Emerging Regulatory Requirements***Subject** Enterprise Risk Management (AFIR-ERM)**Speaker** Shirley Song**Presentation 2** *Considerations for Developing Comprehensive Model Governance Frameworks, Including AI:**An Overview of Principles for Model Risk Management, Required Actions for Insurance Groups, and the Role of Actuaries***Subject** Data Science/AI, Enterprise Risk Management (AFIR-ERM)**Speaker** Kazuki Hashimoto et al.**Presentation 3** *A Risk-Based Framework for AI Governance: Risk Stratification, Validity Monitoring, and Governance Measures***Subject** Enterprise Risk Management (AFIR-ERM)**Speaker** PengFei Yao**Session Title** Formalization, Optimization and Sustainable Insurance**Venue** Hall E Seminar Room(2)**Presentation 1** *Formalizing Actuarial Mathematics in Proof Assistants***Subject** Life (IAALS)**Speaker** Yosuke Ito**Presentation 2** *Meeting Industry Demands with Governed Model Optimization: Faster, Sounder, and More Valuable Actuarial Models***Subject** Life (IAALS), Enterprise Risk Management (AFIR-ERM)**Speaker** Brooking Sun et al.**Presentation 3** *A Feasibility Study of Sustainable Insurance: A Case of 100% Sustainable Life Insurance by Baloise Assurances Luxembourg***Subject** Life (IAALS), Investment and Finance**Speaker** Haruyoshi Ito

Session Title	Retirement Solutions
Venue	G402
Presentation 1	<i>Balancing Stability and Equity in Target Benefit Plans: A Unified Framework for Sustainable Design</i>
Subject	Pensions and Social Security (PBSS), Actuarial Consulting (IACA)
Speaker	Chun-Ming (George) Ma
Presentation 2	<i>Empowering Retirement: Global Insights on Lifetime Income, Engagement, Defaults, and Pricing Fairness</i>
Subject	Pensions and Social Security (PBSS), Life (IAALS)
Speaker	Hamish Wilson
Presentation 3	<i>Strategic Product Development in Life and Pensions: A Danish Actuarial Perspective</i>
Subject	Pensions and Social Security (PBSS), Professionalism/Actuarial Education
Speaker	Astrid Carlsen et al.
Session Title	Advanced Topics in Motor Insurance
Venue	G409
Presentation 1	<i>Spatiotemporal Bayesian Modeling of Automobile Insurance Claims in Japan during and after the COVID-19 Pandemic</i>
Subject	Non-Life (ASTIN), Data Science/AI
Speaker	Shota Tanikawa et al.
Presentation 2	<i>Advancing the Ogden Tables: Towards Third-Generation Reduction Factors</i>
Subject	Non-Life (ASTIN), Life (IAALS)
Speaker	Sule Sahin
Presentation 3	<i>New Energy Vehicle Insurance</i>
Subject	Non-Life (ASTIN)
Speaker	Zhijian Chen et al.
Session Title	Advanced Risk Modeling
Venue	G502
Presentation 1	<i>The brains behind bots: An approach to cyber risks from the perspective of exposure to operational risks</i>
Subject	Enterprise Risk Management (AFIR-ERM), Data Science/AI
Speaker	Agatha Nogueira
Presentation 2	<i>Insolvency Risk Assessment of Non-Financial Public Companies Using Cash Flow at Risk Model</i>
Subject	Enterprise Risk Management (AFIR-ERM)
Speaker	Bruno M. Salotti
Presentation 3	<i>Dynamic Stress-Testing of Insurance Markets under Multi-Dimensional Risks</i>
Subject	Non-Life (ASTIN), Data Science/AI
Speaker	Sebastain Awondo
Session Title	AI for Emerging Risks
Venue	G510
Presentation 1	<i>Current and Emerging Applications of AI and Machine Learning in the Small Insurance Industries (Case of Armenia)</i>
Subject	Non-Life (ASTIN), Data Science/AI
Speaker	Gayane Arsenyan et al.
Presentation 2	<i>Uncertainty-Aware AI for Catastrophe and Cyber Insurance Pricing: Bridging Model Risk and Actuarial Stability</i>
Subject	Non-Life (ASTIN), Data Science/AI
Speaker	Chhavi Ahuja
Presentation 3	<i>TBD</i>
Subject	
Speaker	
Session Title	Mortality Forecasting (I)
Venue	G602
Presentation 1	<i>Deep Learning for Mortality Forecasting: A Comparative Study Using Japanese Data</i>
Subject	Data Science/AI, Life (IAALS)
Speaker	Aurelien Manera et al.
Presentation 2	<i>Application of the first exit time stochastic model with self-repair mechanism to human mortality rates</i>
Subject	Health (IAAHS), Life (IAALS)
Speaker	Noriyuki Shimoyama
Presentation 3	<i>Interpretable Generative Neural Network Model for Cause-of-death Mortality Prediction and Interval Estimation: A Convolutional Variational Autoencoder Approach</i>
Subject	Data Science/AI, Life (IAALS)
Speaker	Momoka Iwai et al.

Session Title **Advanced Pricing Methodologies****Venue** G610**Presentation 1** *Market-based insurance ratemaking: application to pet insurance***Subject** Non-Life (ASTIN), Actuarial Consulting (IACA)**Speaker** Pierrick Piette**Presentation 2** *Enhancing Preferred Risk Insurance through Machine Learning Models***Subject** Data Science/AI, Life (IAALS)**Speaker** Mutsuki Kojima**Presentation 3** *Specialized Analytics for Sustainable Health Insurance Pricing: Beyond Traditional Methods***Subject** Health (IAAHS)**Speaker** Sahib Khosla et al.**Session Title** **Mortality Forecasting (II)****Venue** G701**Presentation 1** *Stochastic estimation and projection of Mexican mortality using demographic and economic indicators related to gentrification***Subject** Life (IAALS), Data Science/AI**Speaker** Jose Daniel Lopez-Barrientos**Presentation 2** *A New Regression Model for Analyzing the Structure of Variation in Observed Mortality Rates:**Incorporating a Variance-Equalizing Multiplier and Complementary Double Logarithmic Transformation***Subject** Life (IAALS)**Speaker** Akira ARAI**Presentation 3** *TBD***Subject****Speaker**

Program - Concurrent Sessions

Tuesday, 10 November

10:45 - 12:30

Session Title	Climate Change and Protection Gap
Venue	Hall A
Presentation 1	<i>A Practical Study on Challenges in Product Development and Pricing for Weather Parametric Insurance (Focusing on Japan)</i>
Subject	Non-Life (ASTIN)
Speaker	Yuta Nishiyama
Presentation 2	<i>The Current Status of the Natcat Protection Gap and the Role of Japanese Actuaries</i>
Subject	Professionalism/Actuarial Education
Speaker	Tsudoi Kaminaka et al.
Presentation 3	<i>A consideration on how actuaries in Japan should address climate change and sustainability</i>
Subject	Professionalism/Actuarial Education
Speaker	Kazuki Kuriyama et al.
Session Title	Innovative Approaches in Health Insurance
Venue	Hall B5(1)
Presentation 1	<i>Reimagining Critical Illness Product Insights and Key Market Trends in Asia</i>
Subject	Health (IAAHS), Data Science/AI
Speaker	Samuel Lim et al.
Presentation 2	<i>Australian Overseas Student Health Insurance_ Market Dynamics and Actuarial Challenges</i>
Subject	Health (IAAHS)
Speaker	Xu Wang
Presentation 3	<i>Climate-Induced Health Risks Impact on Ghana's National Health Insurance Industry</i>
Subject	Health (IAAHS)
Speaker	Mark Larbi Henaku et al.
Session Title	AI and the Future of the Actuarial Profession
Venue	Hall B5(2)
Presentation 1	<i>AI: Artificial or Actuarial Intelligence – Education for the Future</i>
Subject	Professionalism/Actuarial Education, Data Science/AI
Speaker	Henning Wergen
Presentation 2	<i>Bridging Global AI Regulations: How Actuarial Principles Provide a Common Language for AI Governance and can elevating the Actuarial Voice in Responsible AI</i>
Subject	Data Science/AI, Professionalism/Actuarial Education
Speaker	Michael Storozhev et al.
Presentation 3	<i>From Black Box to Best Practice: Implementing Ethical AI in Life Insurance - Perspectives from Consulting Innovation and Enterprise Deployment</i>
Subject	Professionalism/Actuarial Education, Data Science/AI
Speaker	Matt Noyce et al.
Session Title	Actuarial Modeling and High-Performance Computing
Venue	Hall B7(1)
Presentation 1	<i>Development of Scenarios for Modeling AI Impact on Economic and Demographic Variables</i>
Subject	Data Science/AI, Pensions and Social Security (PBSS)
Speaker	Francois Boule
Presentation 2	<i>Massive acceleration of actuarial models with modern computing techniques</i>
Subject	Data Science/AI, Professionalism/Actuarial Education
Speaker	Piotr Godlewski
Presentation 3	<i>Actuarial Modeling at Light Speed : Redefining Insurance Modeling with AI and HPC</i>
Subject	Data Science/AI, Life (IAALS)
Speaker	JianGang He et al.
Session Title	Advanced ALM Modeling
Venue	Hall B7(2)
Presentation 1	<i>Machine Learning in Asset-Liability Management: Dependency-Consistent Quantile Regression for Economic Scenario Generation</i>
Subject	Enterprise Risk Management (AFIR-ERM)
Speaker	Svenja Ernst et al.
Presentation 2	<i>Parametric extrapolation of yield curves with observationally consistent dynamics</i>
Subject	Enterprise Risk Management (AFIR-ERM), Investment and Finance
Speaker	Kenta Hoda et al.
Presentation 3	<i>Connecting the Dots: Revealing Complex Interactions by Integrating Credit and Market Risk</i>
Subject	Enterprise Risk Management (AFIR-ERM)
Speaker	Tomer Yahalom

Session Title	Climate Risk Insurance
Venue	Hall C
Presentation 1	<i>On the Insurance of Environmental Risks: Modeling and Pricing with Mean-Reverting Regime-Switching Lévy Processes</i>
Subject	Non-Life (ASTIN)
Speaker	Olivier Le Courtois
Presentation 2	<i>Carbon Insurance: De-risking the Transition to a Low-Carbon Economy</i>
Subject	Non-Life (ASTIN), Enterprise Risk Management (AFIR-ERM)
Speaker	Joey Zhou et al.
Presentation 3	<i>Quantification of Climate Risk: A Framework for Emerging Markets</i>
Subject	Non-Life (ASTIN), Data Science/AI
Speaker	Eswar Prem Sai Guptha Maturi et al.

Session Title	Multi-Period Portfolio Optimization
Venue	Hall D5
Presentation 1	<i>MULTI-PERIOD PORTFOLIO OPTIMIZATION WITH MULTI-STAGE STRATEGY FOR LIABILITY DRIVEN INVESTMENT</i>
Subject	Investment and Finance
Speaker	Dila Puspita et al.
Presentation 2	<i>End-to-End Reinforcement Learning for Multi-period Portfolio Optimization with Transaction Costs</i>
Subject	Investment and Finance, Data Science/AI
Speaker	Takahiro Kobayashi
Presentation 3	<i>Dynamic Liability-Driven Investment Optimization under Interest Rate Regimes</i>
Subject	Investment and Finance, Pensions and Social Security (PBSS)
Speaker	Taiga Yokoyama

Session Title	Expanding Actuarial Roles
Venue	Hall D7
Presentation 1	<i>Doing well by doing good: consulting to international development agencies</i>
Subject	Actuarial Consulting (IACA)
Speaker	Michael Cohen
Presentation 2	<i>Diversity of Thought: Empowering the Actuarial Profession to Thrive</i>
Subject	Actuarial Consulting (IACA)
Speaker	Catherine Lyn et al.
Presentation 3	<i>Taking the lead in Product Innovation: Actuaries as Product Managers</i>
Subject	Life (IAALS), Non-Life (ASTIN)
Speaker	Masimba Zata

Session Title	Pension Participant Behavior
Venue	Hall E Seminar Room(1)
Presentation 1	<i>Analyzing the Impact of Income-Focused Communication on Retirement Plan Saving Behavior</i>
Subject	Pensions and Social Security (PBSS)
Speaker	Shaun Levitan
Presentation 2	<i>Living the Dream or Budgeting the Beans? Pension Drawdown in Practice</i>
Subject	Pensions and Social Security (PBSS)
Speaker	Adam Barrow et al.
Presentation 3	<i>Resolving the Annuity Puzzle in Japan: Institutional, Behavioral, and Market Perspectives</i>
Subject	Pensions and Social Security (PBSS), Life (IAALS)
Speaker	Kazuki Horie

Session Title	Global Perspectives on Life Insurance Products
Venue	Hall E Seminar Room(2)
Presentation 1	<i>Bridging the Protection Gap in Southeast Asia: Expanding Coverage Through Product and Structural Innovation</i>
Subject	Life (IAALS), Health (IAAHS)
Speaker	Tze Leong Chan
Presentation 2	<i>How (not) to Compare Life Insurance Products for Saving and Dissaving</i>
Subject	Life (IAALS)
Speaker	Frank Genheimer
Presentation 3	<i>Dividend Distribution as a Tool for Lapse Mitigation amid Interest Rate Normalization in Japan</i>
Subject	Life (IAALS)
Speaker	Wataru Tanabe

Session Title	Pension Fund Flows
Venue	G402
Presentation 1	<i>Efficiently Exploring Indexation in Pension Expenditure Forecasts</i>
Subject	Pensions and Social Security (PBSS)
Speaker	Roman Goebel
Presentation 2	<i>Optimal Decumulation Strategy with long-term care insurance and guaranteed minimum death benefit</i>
Subject	Pensions and Social Security (PBSS)
Speaker	Jonathan Ziveyi
Presentation 3	<i>Machine learning applications in the portability of private pension plans</i>
Subject	Pensions and Social Security (PBSS), Investment and Finance
Speaker	Roberto Bomgiovani Cazzari et al.
Session Title	Emerging Topics in Non-Life Insurance
Venue	G409
Presentation 1	<i>Agricultural Work Safety as a Key to Sustainability: Actuarial Contributions to Risk Analysis and Safety Initiatives</i>
Subject	Non-Life (ASTIN)
Speaker	Tetsuharu Umeda
Presentation 2	<i>Social Inflation in Liability Insurance: Modeling, Measurement, and Capital Implications</i>
Subject	Non-Life (ASTIN)
Speaker	Harsh Jaitak et al.
Session Title	Strategic Capital Allocation (I)
Venue	G502
Presentation 1	<i>Sustainable Capital Strategies of Life Insurers in a Declining Demographic Environment</i>
Subject	Enterprise Risk Management (AFIR-ERM), Life (IAALS)
Speaker	Kazuki Takigawa
Presentation 2	<i>The art and science of shareholder value management in general insurance</i>
Subject	Enterprise Risk Management (AFIR-ERM), Non-Life (ASTIN)
Speaker	Yuriy Kravych et al.
Presentation 3	<i>TBD</i>
Subject	
Speaker	
Session Title	External Drivers of Mortality
Venue	G510
Presentation 1	<i>The determinants of mortality experience: A longitudinal study on major rapidly developing Southeast Asian Countries</i>
Subject	Life (IAALS)
Speaker	Min Liang Liew
Presentation 2	<i>Longer Term Drivers of Future Mortality</i>
Subject	Life (IAALS), Health (IAAHS)
Speaker	Allen Klein et al.
Presentation 3	<i>Mortality Analysis via Regression Modeling Using Socioeconomic and Demographic Data: Practical Applications</i>
Subject	Life (IAALS)
Speaker	Akihiro Kojima et al.
Session Title	Advanced Modeling of Extreme Weather Risks
Venue	G602
Presentation 1	<i>Hierarchical Bayesian Modeling of Hail Damage to Motor Vehicles in Japan</i>
Subject	Non-Life (ASTIN)
Speaker	Hiroki Miyakawa et al.
Presentation 2	<i>Extreme Snow Events under Climate Change: Linking Observations, CMIP6 Projections, and Insurance Losses in Japan</i>
Subject	Non-Life (ASTIN), Data Science/AI
Speaker	Yui Jimbo et al.
Presentation 3	<i>Unsupervised Representation Learning for Precipitation-Driven Insurance Risk</i>
Subject	Data Science/AI, Non-Life (ASTIN)
Speaker	Rasmus V. Munkner

Session Title Innovation in ESR Calculation
Venue G610

Presentation 1 *Modeling the Economic Solvency Ratio as a Stochastic Process and the Probability of Hitting the Threshold*
Subject Enterprise Risk Management (AFIR-ERM), Investment and Finance
Speaker Masashi Tomita

Presentation 2 *An Exploratory Study on Efficient Forecasting under Stress Scenarios Using Clustering Methods*
Subject Life (IAALS)
Speaker Yasuhiro Hamada

Presentation 3 *Valuing Economic Solvency Ratios and Decision-Making Using Quantile Regression*
Subject Enterprise Risk Management (AFIR-ERM), Life (IAALS)
Speaker Kazumasa Aoki

Session Title Recent Trends in Savings Products
Venue G701

Presentation 1 *Towards inflation immunization on retirement products: An analytical approach and a case study in Colombia*
Subject Life (IAALS), Pensions and Social Security (PBSS)
Speaker Juan Pablo Ortega et al.

Presentation 2 *Fueling Retirement: Bermuda's Role in Expanding Worldwide Retirement Capacity*
Subject Life (IAALS)
Speaker Dillon Lucas

Presentation 3 *Index-linked Product Trends and Opportunities*
Subject Life (IAALS), Investment and Finance
Speaker Keisuke Nakamura et al.

Program - Concurrent Sessions

Tuesday, 10 November

13:45 - 15:30

Session Title CERA **Venue** Hall A

Presentation 1 *Beyond Boundaries: How CERA Shapes the Future of Actuaries*
Subject Enterprise Risk Management (AFIR-ERM)
Speaker Masaaki Yoshimura et al.

Session Title Markov Models in Health Insurance **Venue** Hall B5(1)

Presentation 1 *Modeling Long-Term GLP-1 Utilization Using a Markov Framework: Insights from Commercial Claims*
Subject Health (IAAHS), Data Science/AI
Speaker John Rogers et al.

Presentation 2 *An Actuarial Multi-State Markov Model Incorporating Fertility and Mortality Rates for Projecting Membership in Indonesia's National Health Insurance Program (JKN – BPJS Kesehatan)*
Subject Pensions and Social Security (PBSS), Data Science/AI
Speaker Muhammad Ikhsan Kalla et al.

Session Title Regulation of the Actuarial Profession **Venue** Hall B5(2)

Presentation 1 *Integrating Quality Management into Actuarial Practice*
Subject Professionalism/Actuarial Education
Speaker Hiromi Kaneko

Presentation 2 *Reflections on the involvement of actuaries in the development of insurance regulation and supervision*
Subject Professionalism/Actuarial Education
Speaker John Maroney

Presentation 3 *Triangular Supervision of Actuarial Profession in Indonesia: An Effectiveness Analysis in Serving the Public Interest*
Subject Professionalism/Actuarial Education
Speaker Veronika Fadilla Fitri et al.

Session Title Accountability in the Age of AI **Venue** Hall B7(1)

Presentation 1 *Visualising Counterfactuals: Using Biplots to Enhance Interpretability in Predictive Modelling*
Subject Data Science/AI, Life (IAALS)
Speaker Adriaan I Rowan

Presentation 2 *Application of Prediction Error Decomposition in the Non-Life Insurance Business*
Subject Data Science/AI, Non-Life (ASTIN)
Speaker Takaya Taguchi et al.

Presentation 3 *Comparing the Effectiveness of AI Proxy Models Across Key Actuarial Projections in Life Insurance*
Subject Data Science/AI, Life (IAALS)
Speaker Jennifer Loftus

Session Title Earthquake Insurance in Japan **Venue** Hall B7(2)

Presentation 1 *Earthquake Insurance System for Residential Property Operated Jointly by Government and Private Sector in Japan*
Subject Non-Life (ASTIN)
Speaker Ryota Shino et al.

Presentation 2 *Japan's Long-Term Earthquake Forecasting Models : Current Limitations and Future Directions*
Subject Non-Life (ASTIN)
Speaker Yuki Kimura et al.

Presentation 3 *Challenges in Earthquake Insurance for Businesses in Japan*
Subject Non-Life (ASTIN)
Speaker Sho Nakanishi et al.

Session Title **Actuarial Climate Indices**
Venue Hall C

Presentation 1 *Development of Japanese Actuaries Climate Index*
Subject Non-Life (ASTIN), Life (IAALS)
Speaker Yohei Konishi

Presentation 2 *Quantifying Climate Peril: The Colombian Actuarial Climate Index as an Open-Source Framework for Global Insurers*
Subject Non-Life (ASTIN), Actuarial Consulting (IACA)
Speaker Camilo Andres Herrán Pérez et al.

Presentation 3 *A Machine Learning Framework for Forecasting of Climate Extremes in Actuarial Science*
Subject Enterprise Risk Management (AFIR-ERM), Actuarial Consulting (IACA)
Speaker Sylvia Sofia Pedraza Ramirez et al.

Session Title **Advanced Risk Measures**
Venue Hall D5

Presentation 1 *Warning Signs: A Markovian Approach to Crisis Anticipation*
Subject Investment and Finance, Enterprise Risk Management (AFIR-ERM)
Speaker Izadora Gomes

Presentation 2 *Measuring Welfare Gains from Income-Targeted Bond Portfolios in Retirement Decumulation*
Subject Investment and Finance, Pensions and Social Security (PBSS)
Speaker Shaun Levitan

Presentation 3 *Risk measurement under Parameter Uncertainty via Neural Networks*
Subject Investment and Finance
Speaker Salvatore Scognamiglio

Session Title **Mortality Forecasting after Covid-19**
Venue Hall D7

Presentation 1 *Cause-Specific Mortality Forecasting in the Post-COVID Era Using Machine Learning Methods*
Subject Life (IAALS), Data Science/AI
Speaker Yumi Hamaya et al.

Presentation 2 *Estimating Future Mortality After COVID-19 Through Cause-of-Death Analysis*
Subject Life (IAALS)
Speaker Kentaro Katsuno

Presentation 3 *Post-pandemic mortality projections: Scenario-based modelling across multiple countries*
Subject Life (IAALS), Health (IAAHS)
Speaker AYSE ARIK

Session Title **Future of DC Plans**
Venue Hall E Seminar Room(1)

Presentation 1 *Economically Indexed DC*
Subject Pensions and Social Security (PBSS), Investment and Finance
Speaker Ken Nakajima

Presentation 2 *Japanese-style collective DC and its benefits to participants*
Subject Pensions and Social Security (PBSS), Actuarial Consulting (IACA)
Speaker Takeshi Enta

Presentation 3 *Establishing the Unified Optimal Investment Strategy for Defined Contribution Pension Plans*
Subject Pensions and Social Security (PBSS), Investment and Finance
Speaker Yoshiki Nagayama

Session Title **Mortality Inequality**
Venue Hall E Seminar Room(2)

Presentation 1 *Changing Lifestyle Trends as a Driver of Mortality Inequality*
Subject Life (IAALS), Pensions and Social Security (PBSS)
Speaker Tim Eppert

Presentation 2 *Socio-economic Inequalities and Mortality: Evidence from National and Regional Data with a Focus on Japan and Korea*
Subject Life (IAALS), Pensions and Social Security (PBSS)
Speaker Takuro Sorihashi et al.

Presentation 3 *Socio-Economic Inequalities in Mortality*
Subject Life (IAALS), Data Science/AI
Speaker Andrew Cairns et al.

Session Title **Climate Risks in Pension Systems**
Venue G402

Presentation 1 *Climate Risk Impacts on Social Security: Insights from Scenario Analysis for the Canada Pension Plan*
Subject Pensions and Social Security (PBSS)
Speaker Laurence Frappier

Presentation 2 *Possible approaches to assess the impact of climate change on workers' protection: a focus on occupational risks in Italy*
Subject Pensions and Social Security (PBSS)
Speaker Rocco Roberto Cerchiara et al.

Presentation 3 *A Climate-Integrated Stochastic ALM Approach to Bridge the Pension Climate Solvency Gap*
Subject Pensions and Social Security (PBSS), Investment and Finance
Speaker Kartikeya Singh et al.

Session Title **Flood Risk Modeling**
Venue G409

Presentation 1 *Alternative Approach to Inland Flood Risk Modelling*
Subject Non-Life (ASTIN)
Speaker Yanbin Xu et al.

Presentation 2 *Spatiotemporal data integration framework for improved flood cost and occurrence modeling in house insurance*
Subject Non-Life (ASTIN)
Speaker Mullah Moriah

Presentation 3 *Refining vulnerability assessment in catastrophe (CAT) models with distributional regression: Application to flood damage modelling*
Subject Non-Life (ASTIN), Data Science/AI
Speaker Zherui Li et al.

Session Title **Insurance Capital Standard**
Venue G502

Presentation 1 *Introducing Global Regulatory Standards to Overseas Subsidiaries: A Case Study in ICS Implementation*
Subject Non-Life (ASTIN), Enterprise Risk Management (AFIR-ERM)
Speaker Takehiro Suguro et al.

Presentation 2 *SCALARS IN THE IAIS AGGREGATION METHOD: CAN EMPIRICAL DATA BE USEFUL?*
Subject Enterprise Risk Management (AFIR-ERM)
Speaker Steve Jackson

Presentation 3 *TBD*
Subject
Speaker

Session Title **Value-Based Care (II)**
Venue G510

Presentation 1 *The Practical Reality: Case Studies in Healthcare Value-Based Contracts from around the world*
Subject Health (IAAHS)
Speaker Joanne Buckle

Presentation 2 *What is Healthcare Value-Based Contracting?*
Subject Health (IAAHS), Actuarial Consulting (IACA)
Speaker Maggie Alston

Presentation 3 *The Actuary's Role in Designing Successful VBCs: Insights from the CMS TEAM Model*
Subject Health (IAAHS), Actuarial Consulting (IACA)
Speaker Dane Hansen

Session Title **Economic Value-Based Financial Reporting**
Venue G602

Presentation 1 *Does Embedded Value Disclosure Reduce the Cost of Equity? Evidence from Voluntary Disclosure in Japan and a Regulatory Shock in the EU*
Subject Life (IAALS)
Speaker Yuto Sato

Presentation 2 *The Implementation of IFRS 17 in Korea: Progress and Regulatory Responses*
Subject Enterprise Risk Management (AFIR-ERM), Life (IAALS)
Speaker GY Noh

Presentation 3 *Reinsurance under Japan's New Economic value-based Solvency Regulation (J-ICS)*
Subject Enterprise Risk Management (AFIR-ERM)
Speaker Kyogo Mitsuya et al.

Session Title **Financial Risk and Valuation**
Venue G610

Presentation 1 *Design and pricing of catastrophe bonds for pandemic risk transfer*
Subject Enterprise Risk Management (AFIR-ERM), Health (IAAHS)
Speaker Chang Zhai

Presentation 2 *The Impact of Rising Interest Rates on Sony Life's ESR and Future Actions*
Subject Enterprise Risk Management (AFIR-ERM), Life (IAALS)
Speaker Mitsunobu Oyama et al.

Presentation 3 *A Market-Based, Consistent Framework for Setting Inflation and Risk-Free Discount Rates*
Subject Non-Life (ASTIN), Investment and Finance
Speaker Tim Yip et al.

Session Title **Impact of Climate Change on Mortality (I)**
Venue G701

Presentation 1 *A Machine Learning Approach to Constructing a Socio-Economic Heat Vulnerability Index Using Individual-Level Mortality Data*
Subject Life (IAALS), Data Science/AI
Speaker Jens Robben

Presentation 2 *Climate risk and mortality in Asia*
Subject Life (IAALS)
Speaker Shinichi Kamiya

Presentation 3 *Heatwaves, Mortality, and Life Insurance: Evidence from Australian Data*
Subject Life (IAALS), Health (IAAHS)
Speaker Andrew Linfoot et al.

Program - Concurrent Sessions

Wednesday, 11 November

10:45 - 12:30

- Session Title** Professionalism in the United States
Venue Hall A
- Presentation 1** *Self-regulation of the U.S. actuarial profession*
Subject Professionalism/Actuarial Education
Speaker Tricia Matson et al.
- Presentation 2** *Accountability in the U. S. actuarial profession*
Subject Professionalism/Actuarial Education
Speaker Frank Todisco et al.
- Presentation 3** *Practice Standards: Evolution in the U.S.*
Subject Professionalism/Actuarial Education
Speaker Thomas Terry et al.
- Session Title** Sustainable Health Insurance
Venue Hall B5(1)
- Presentation 1** *The Role of the Actuary in Global Health Sustainability*
Subject Health (IAAHS)
Speaker Edward Pudlowski et al.
- Presentation 2** *The Death Spiral Paradox in Non-Mandatory Health Insurance: A Differential Game Approach*
Subject Health (IAAHS)
Speaker Shuzheng Zhou et al.
- Presentation 3** *The Complex Interplay of Inflation and Healthcare Costs*
Subject Health (IAAHS), Actuarial Consulting (IACA)
Speaker Yoobin Choi
- Session Title** Cyber Risk Management
Venue Hall B5(2)
- Presentation 1** *Tradition Meets Innovation: Bayesian Insights for Actuarial Cyber Risk Management*
Subject Non-Life (ASTIN), Enterprise Risk Management (AFIR-ERM)
Speaker Marco Pirra
- Presentation 2** *Index insurance under demand and solvency constraints: an application to cyber insurance*
Subject Non-Life (ASTIN)
Speaker Daniel NKAMENI
- Presentation 3** TBD
Subject
Speaker
- Session Title** AI Assistant
Venue Hall B7(1)
- Presentation 1** *AI Assistant: Transforming Risk Assessment with GenAI*
Subject Data Science/AI
Speaker Benno UTHAYASOORIYAR et al.
- Presentation 2** *Leveraging Artificial Intelligence for the Migration of Insurance Portfolios: Applied Methods and Practical Insights*
Subject Data Science/AI, Life (IAALS)
Speaker Christian Schadel
- Presentation 3** *Agentic AI in Actuarial SaaS: Practical Lessons from Building AI Assistants*
Subject Data Science/AI, Enterprise Risk Management (AFIR-ERM)
Speaker Duc Hien Vu
- Session Title** Mortality and Healthcare in Aging Societies
Venue Hall B7(2)
- Presentation 1** *Considerations in setting mortality improvement assumptions*
Subject Life (IAALS), Actuarial Consulting (IACA)
Speaker Wendy Yuwen Wang et al.
- Presentation 2** *An extension of the mortality model using lifespan distribution and Enhanced Documentation Generation*
Subject Life (IAALS)
Speaker Yuya Takasu
- Presentation 3** *Ensemble forecasting of incomplete mortality data*
Subject Life (IAALS), Data Science/AI
Speaker Peter Vekas

- Session Title** **Advanced Climate Risk Modeling**
Venue Hall C
- Presentation 1** *Generative AI for scenario simulation of extreme events*
Subject Data Science/AI, Non-Life (ASTIN)
Speaker Olivier Lopez
- Presentation 2** *Fair Solvency: A Value-Driven Framework for Integrating Algorithmic Fairness and Capital Efficiency in P&C Climate Risk Modeling*
Subject Data Science/AI, Non-Life (ASTIN)
Speaker Baba Suseel Vydhik Kramsetty et al.
- Presentation 3** *Modelling wildfire severity in mainland Portugal - an approach with machine learning*
Subject Data Science/AI
Speaker Onofre Simoes
- Session Title** **Innovative Financial Solutions**
Venue Hall D5
- Presentation 1** *Mujin (ROSCA) Financing and Insurance Business Models*
Subject Investment and Finance, Non-Life (ASTIN)
Speaker Miwaka Yamashita et al.
- Presentation 2** *Transition mindset from within; maximizing the investment opportunity*
Subject Investment and Finance
Speaker Oliver Hampshire et al.
- Presentation 3** *Enhancing Financial Inclusion: Leveraging Actuarial Science and Behavioural Economics for Sustainable Financial Solutions*
Subject Investment and Finance, Actuarial Consulting (IACA)
Speaker Pedro Medford et al.
- Session Title** **AI and Digital Transformation**
Venue Hall D7
- Presentation 1** *The Agentic Model Office: AI Agents and the Future of Insurance Organisations*
Subject Actuarial Consulting (IACA), Data Science/AI
Speaker Daniel Ramsay et al.
- Presentation 2** *Data-Driven Optimization of Insurance Agent Compensation: An Actuarial Consulting Approach to Maximizing Earnings through Elasticity and Brand Preference Modeling*
Subject Actuarial Consulting (IACA), Data Science/AI
Speaker Omar Lopez Tronco
- Presentation 3** *From Excel to AI: Building a Modern Actuarial Consulting Practice in the Digital Age - A Global Perspective*
Subject Actuarial Consulting (IACA), Data Science/AI
Speaker Matt Noyce
- Session Title** **Declining Birth Rate**
Venue Hall E Seminar Room(1)
- Presentation 1** *Considerations regarding the declining fertility rate in Japan and South Korea - Focusing on the factors behind the rise in unmarried rates -*
Subject Pensions and Social Security (PBSS), Data Science/AI
Speaker Toki Oyama et al.
- Presentation 2** *The Impact of Population Aging on Fertility*
Subject Pensions and Social Security (PBSS)
Speaker Junko Koie
- Presentation 3** *Toward a Driver-Based immigration Projection Model*
Subject Pensions and Social Security (PBSS)
Speaker Liaw Huang et al.
- Session Title** **Impact of Pandemics on Mortality**
Venue Hall E Seminar Room(2)
- Presentation 1** *COVID-19 Impact on Japanese Mortality Dynamics: Integrating Exploratory Data Analysis with Fixed Upper-Limit Generalized Pareto Distribution Modeling*
Subject Life (IAALS), Pensions and Social Security (PBSS)
Speaker Tomoki Imai et al.
- Presentation 2** *Natural Hedging in Life Insurance under Age-Specific Pandemic Mortality Shocks*
Subject Life (IAALS)
Speaker Moritz Hanika
- Presentation 3** *Understanding Mortality Shifts Through the Pandemic: Implications for Global Life Insurance Pricing and Projections*
Subject Life (IAALS), Non-Life (ASTIN)
Speaker Dylan Strother

Session Title **Mortality in Pension Plans**
Venue G402

Presentation 1 *Balancing Disruption and Trend: Updating Canadian Mortality Assumptions and Comparing International Trends*
 Subject Pensions and Social Security (PBSS), Health (IAAHS)
 Speaker Francois Boule

Presentation 2 *When Time Runs Unequally: Health and the Annuity Puzzle in Brazil*
 Subject Pensions and Social Security (PBSS), Health (IAAHS)
 Speaker Luis Eduardo Afonso et al.

Presentation 3 *Constructing of the First Complete Mortality Tables for the Employed Population of Trinidad & Tobago*
 Subject Pensions and Social Security (PBSS), Life (IAALS)
 Speaker Stokeley Smart et al.

Session Title **IFRS17 and Non-Life Insurance**
Venue G409

Presentation 1 *Problems and Potential Improvements of PAA Eligibility Test*
 Subject Non-Life (ASTIN), Actuarial Consulting (IACA)
 Speaker Rudi Lipovec

Presentation 2 *Stochastic Measurement of Liabilities for Incurred Claims under IFRS 17*
 Subject Non-Life (ASTIN), Enterprise Risk Management (AFIR-ERM)
 Speaker Bruno D. R. Carvalho et al.

Presentation 3 *IFRS 17 Implementation and Transformation: Regional Insights and Opportunities for Actuarial and Finance Evolution in Asia-Pacific*
 Subject Data Science/AI, Life (IAALS)
 Speaker Chao Qiao et al.

Session Title **Interpretable Machine Learning**
Venue G502

Presentation 1 *A Hybrid Approach to Enhance Traditional Lapse Rate Models for EV Calculation Using a Novel Interpretable Machine Learning Method*
 Subject Data Science/AI, Life (IAALS)
 Speaker Reiji Kozuma et al.

Presentation 2 *A Functional Decomposition Approach to Maximize the Interpretability of Black-Box Models*
 Subject Data Science/AI, Actuarial Consulting (IACA)
 Speaker Yoshihiro Matsumori et al.

Presentation 3 *Interpretable Machine Learning as an Exploratory Data Analysis Tool: An Application to Post-Pricing Validation in Japanese Health Insurance*
 Subject Life (IAALS), Health (IAAHS)
 Speaker Kaori Maruyama et al.

Session Title **Transformer**
Venue G510

Presentation 1 *Transformer-Based Multi-Head Time Series Modeling for Actuarial CRM Event Data: A Practitioner's Case Study*
 Subject Data Science/AI, Non-Life (ASTIN)
 Speaker Jan-Philipp Ruppert et al.

Presentation 2 *Integrating Big Data, Artificial Intelligence, and Means Testing for Risk-Adjusted Capitation to achieve equitable and sustainable Social Health Insurance: Evidence from Kenya*
 Subject Data Science/AI, Health (IAAHS)
 Speaker John Olukuru al.

Presentation 3 *TBD*
 Subject
 Speaker

Session Title **Disability Insurance**
Venue G602

Presentation 1 *Derivation of MOCE risk drivers considering the status of disability using life insurance actuarial methods*
 Subject Enterprise Risk Management (AFIR-ERM), Health (IAAHS)
 Speaker Kentaro Yamamoto

Presentation 2 *Advanced Analysis of Group Disability Income termination experience: Using experience from United Kingdom, South Africa and Australia*
 Subject Life (IAALS), Data Science/AI
 Speaker Koop Lubbinge et al.

Presentation 3 *Modeling the interplay between private disability insurance and public welfare benefits in Denmark*
 Subject Health (IAAHS), Life (IAALS)
 Speaker Jamaal Ahmad

Session Title **AI-Driven Changes in Actuarial Practice**
Venue G610

Presentation 1 *AI's New Risks and How to Insure Them*
Subject Data Science/AI
Speaker Federico Tassara

Presentation 2 *Discovery Orbit — A Personal Health Concierge Transforming Actuarial Intelligence in Health Insurance Through AI-Powered Engagement*
Subject Health (IAAHS), Data Science/AI
Speaker Lara Wayburne et al.

Presentation 3 *A Practical Guide for Actuaries on using AI for complex communication: delivering on opportunities and managing risks*
Subject Data Science/AI, Pensions and Social Security (PBSS)
Speaker Alexander Waite

Session Title **Innovations in Life Insurance Underwriting**
Venue G701

Presentation 1 *Simplified Underwriting - Pricing of technical and market effects*
Subject Life (IAALS)
Speaker Edo Schinzingler

Presentation 2 *Introducing Information Asymmetry (Incompleteness) into Conventional Life Insurance Underwriting Models through Game Theory*
Subject Life (IAALS), Health (IAAHS)
Speaker Yoshihisa Urushidani

Presentation 3 *Doc AI: A Multi-Agent AI Framework for Regulatory-Compliant Underwriting and Actuarial Support*
Subject Life (IAALS), Data Science/AI
Speaker Ting Hsuan Liu

Program - Concurrent Sessions

Wednesday, 11 November

13:45 - 15:30

Session Title **AI and Professionalism**

Venue Hall A

Presentation 1 *Generative AI and Professionalism*
 Subject Data Science/AI, Professionalism/Actuarial Education
 Speaker Kathleen Wong

Presentation 2 *Generative AI and Climate*
 Subject Data Science/AI
 Speaker Dorothy Andrews

Presentation 3 *US Regulatory Environment for Artificial Intelligence*
 Subject Data Science/AI
 Speaker Roberto Perez Santiago

Session Title **Preventive Health Insurance**

Venue Hall B5(1)

Presentation 1 *Visualization of the Value of the Regional Medical, Nursing, and Public Health Information Network "Usuki Sekibutsu Net" for the Citizens of Usuki City*
 Subject Health (IAAHS)
 Speaker Kosuke Iwasaki et al.

Presentation 2 *Dynamic Solvency Intelligence: From Structural Neutrality to Prevention-Focused Capital Allocation in Super-Aging Economies*
 Subject Health (IAAHS), Enterprise Risk Management (AFIR-ERM)
 Speaker Amir Kamal

Presentation 3 *Does Japan's Specific Health Guidance Reduce Medical Expenditure? A Five-Year Follow-up Study Using Real World DataBase*
 Subject Health (IAAHS), Data Science/AI
 Speaker YURI MIYAMORI

Session Title **Ethics in Actuarial Practice**

Venue Hall B5(2)

Presentation 1 *Study in communication with non-specialists regarding professional ethics: Proposal of a new perspective on model governance*
 Subject Professionalism/Actuarial Education, Enterprise Risk Management (AFIR-ERM)
 Speaker Hiroyuki Onta

Presentation 2 *Ethics from Day One: Shaping the Next Generation of Actuaries*
 Subject Professionalism/Actuarial Education
 Speaker Giovanni Gracianti

Presentation 3 *Differentiating actuaries from data scientists: focusing on actuarial value*
 Subject Professionalism/Actuarial Education
 Speaker Matthew Edwards et al.

Session Title **Trustworthy AI**

Venue Hall B7(1)

Presentation 1 *Data quality: the key to fair and accurate AI models*
 Subject Data Science/AI
 Speaker Maria Cristina Paoletti

Presentation 2 *Imbalanced Regression: Definition, Impacts and Solutions*
 Subject Data Science/AI
 Speaker Samuel Stocksieker et al.

Presentation 3 *Applications of an Intelligent Policy QA System in Actuarial Science : RAG-Based Experiments and Future Prospects*
 Subject Data Science/AI
 Speaker Jian You Chen

Session Title **Strategic Capital Allocation (II)**

Venue Hall B7(2)

Presentation 1 *Value Creation vis-à-vis Capital Drag: A Framework for Capital Allocation Decisions Under Both Economic and Regulatory Lenses*
 Subject Enterprise Risk Management (AFIR-ERM)
 Speaker Anthony Dardis et al.

Presentation 2 *Demystifying Diversification: Practical Capital Allocation in Risk-Based Frameworks Using Trigonometric Innovation*
 Subject Enterprise Risk Management (AFIR-ERM)
 Speaker Pauline PLANCKE et al.

Presentation 3 *TBD*
 Subject
 Speaker

Session Title	Pandemic Risk Modeling
Venue	Hall C
Presentation 1	<i>An Exploratory Analysis of the Relationship Between Health Check Data and COVID-19 Infection Rates</i>
Subject	Health (IAAHS)
Speaker	Takao Yabuki
Presentation 2	<i>An actuarial framework to estimate the effective reproduction number</i>
Subject	Data Science/AI, Non-Life (ASTIN)
Speaker	Xuanan Lin et al.
Presentation 3	<i>Capturing Cross-Generational Health Impact of Pandemics in Incidence Rates: A Period-Cohort Integration Approach via Scale BB Adaptation</i>
Subject	Life (IAALS), Pensions and Social Security (PBSS)
Speaker	Shuto Hoshi

Session Title	Long-Term Investment Strategies
Venue	Hall D5
Presentation 1	<i>Illiquidity Premium – A Global Perspective</i>
Subject	Investment and Finance, Life (IAALS)
Speaker	Florin Ginghina et al.
Presentation 2	<i>Implications of Ultra-Long Bond Market Volatility for Life Insurance Companies</i>
Subject	Investment and Finance, Enterprise Risk Management (AFIR-ERM)
Speaker	Hajime Fusegi
Presentation 3	<i>Bates model for pricing and risk assessment of insurance contracts under interest rate uncertainty.</i>
Subject	Investment and Finance, Pensions and Social Security (PBSS)
Speaker	Francesco Petrucci

Session Title	Risk Transfer and Hedging
Venue	Hall D7
Presentation 1	<i>Optimal Design of Reinsurance Experience Refunds: A Cooperative Game Approach</i>
Subject	Life (IAALS), Non-Life (ASTIN)
Speaker	Keiichi Kitamura
Presentation 2	<i>Hedging for participating and indexed products</i>
Subject	Life (IAALS), Investment and Finance
Speaker	Jerome Ogrodzki et al.
Presentation 3	<i>Market risk transfer reinsurance – an innovative approach to capital optimisation</i>
Subject	Life (IAALS)
Speaker	John Lim et al.

Session Title	Transparent Non-Life Insurance Pricing
Venue	Hall E Seminar Room(1)
Presentation 1	<i>Interpretable Interaction Modeling in Insurance Ratemaking Using Factorization Machines</i>
Subject	Non-Life (ASTIN), Data Science/AI
Speaker	Jin Kubota et al.
Presentation 2	<i>Expectile and Its Application to Non-Life Insurance Pricing</i>
Subject	Non-Life (ASTIN), Data Science/AI
Speaker	Kenta Ito
Presentation 3	<i>Tree-like Pairwise Interaction Network</i>
Subject	Non-Life (ASTIN)
Speaker	Salvatore Scognamiglio

Session Title	Asset-Intensive Reinsurance
Venue	Hall E Seminar Room(2)
Presentation 1	<i>Extending the XVA Framework to Asset-Intensive Life Reinsurance: A Comprehensive Methodology for Premium Pricing and Counterparty Risk Assessment</i>
Subject	Life (IAALS), Investment and Finance
Speaker	Takeo Takumi et al.
Presentation 2	<i>Considerations for reinsurance strategy of life insurers and asset-intensive reinsurance (AIR)</i>
Subject	Life (IAALS), Investment and Finance
Speaker	Takeko Uemoto et al.
Presentation 3	<i>Asset-Intensive Reinsurance: A Global Shift in Life & Annuities</i>
Subject	Life (IAALS), Non-Life (ASTIN)
Speaker	Hammad Abro et al.

Session Title **Modernizing Liability Valuation**

Venue G402

Presentation 1 *Improving Withdrawal Rate Estimation Using Generalized Additive Models: Empirical Analysis and Practical Considerations in Defined Benefit Pension Plans*

Subject Pensions and Social Security (PBSS), Data Science/AI

Speaker Yuki Kurumadani et al.

Presentation 2 *Actuarial Simulation of PSAK 117 Implementation: Assessing Liabilities and the Case for a Dedicated Social Security Accounting Standard in Indonesia's National Health Insurance (JKN)*

Subject Pensions and Social Security (PBSS), Actuarial Consulting (IACA)

Speaker Agus Setiawan et al.

Presentation 3 *Patent-Pending Next-Generation Framework for Modelling Life Insurance and Pension Liabilities*

Subject Pensions and Social Security (PBSS), Enterprise Risk Management (AFIR-ERM)

Speaker Martin Melchior et al.

Session Title **Market-Oriented Pricing**

Venue G409

Presentation 1 *Dynamic Optimization of General Insurance Premiums with Demand-Based Pricing*

Subject Non-Life (ASTIN)

Speaker Alfiyah Hasanah

Presentation 2 *Bridging Innovation and the Realities of Adaptation: A More Sophisticated Insurance Pricing Process in Japan with Insights from Mitsui Sumitomo Insurance (MS&AD Group, Japan)*

Subject Non-Life (ASTIN), Data Science/AI

Speaker Genta Inoue et al.

Presentation 3 *Predicting Customer Behavior and Price Elasticity in Non-Life Insurance: Mathematical Foundations and Practical Considerations*

Subject Non-Life (ASTIN), Data Science/AI

Speaker Edwin Graham et al.

Session Title **Non-life Insurance Reserving and Data Science**

Venue G502

Presentation 1 *The Emergent Actuarial Digital Twin: An Agent-Based Framework for Navigating Product Complexity and Model Automation*

Subject Data Science/AI

Speaker Scarlett Bae

Presentation 2 *(Gen)AI: What's in It for Me as a Reserving or Claims Actuary?*

Subject Actuarial Consulting (IACA), Non-Life (ASTIN)

Speaker Xavier Marechal

Presentation 3 *Tensor Change-point Detection and Eigenbootstrap for Actuarial Data*

Subject Data Science/AI, Non-Life (ASTIN)

Speaker Martin Romanak

Session Title **Pension Regulation and Governance**

Venue G510

Presentation 1 *Closed Pension Funds and Their Sponsors: A Tale of Disclosure, Actuarial Fairness, and Similarities*

Subject Pensions and Social Security (PBSS), Enterprise Risk Management (AFIR-ERM)

Speaker Laryssa Cristhina Freitas et al.

Presentation 2 *Risk Based Supervisory Frameworks for Pension Plans*

Subject Pensions and Social Security (PBSS), Enterprise Risk Management (AFIR-ERM)

Speaker Sriram Krishnaswamy

Presentation 3 *Innovation in Risk Sharing and Pension Governance (the University Pension Plan of Ontario Case Study)*

Subject Pensions and Social Security (PBSS)

Speaker Jill Wagman et al.

Session Title **Interest Rate Volatility and Optionality**

Venue G602

Presentation 1 *A Theoretical Investigation of Dynamic Lapse Model*

Subject Life (IAALS), Enterprise Risk Management (AFIR-ERM)

Speaker Shota Tamura

Presentation 2 *Stochastic Valuation for Insurers: Practical Challenges*

Subject Life (IAALS)

Speaker William Halley

Presentation 3 *Valuation of Time Value of Options and Guarantees under Financial Market Shocks:*

An Empirical Assessment Using the Hull-White Model

Subject Enterprise Risk Management (AFIR-ERM), Investment and Finance

Speaker Hiroyuki Fugane

Session Title **Advanced Copula**
Venue G610

Presentation 1 *Quantifying Tail Dependence in Earthquake Risk Using the X-vine Copula*
Subject Non-Life (ASTIN), Enterprise Risk Management (AFIR-ERM)
Speaker Haruka Kawamura

Presentation 2 *Neural network estimation of extreme value copulas with applications to the analysis of natural disasters*
Subject Data Science/AI, Non-Life (ASTIN)
Speaker Richard Ahouansou

Presentation 3 *It moves in mysterious ways! Analysis of contagion risk dynamics using asymmetric dependence measures within a wavelet-copula-based framework*
Subject Enterprise Risk Management (AFIR-ERM), Non-Life (ASTIN)
Speaker Thiago Dutra de Araujo

Session Title **Post-Diagnosis Cancer Outcomes**
Venue G701

Presentation 1 *Incidence and disability persistence laws after cancer: real-life estimates*
Subject Life (IAALS), Health (IAAHS)
Speaker Samuel Cywie

Presentation 2 *Improving the accuracy of benefit incidence estimation for postoperative hormone therapy in breast cancer following medical guideline revisions*
Subject Life (IAALS), Health (IAAHS)
Speaker Kunihiro Wakuda et al.

Presentation 3 *TBD*
Subject
Speaker

Program - Concurrent Sessions

Thursday, 12 November

8:30 - 10:15

Session Title **Impact Assessment of Climate Risks**

Venue Hall A

Presentation 1 *Keeping Cool at Work: An Actuarial Framework for Managing Workplace Heat Risk*

Subject Non-Life (ASTIN)

Speaker Xi Lin

Presentation 2 *Apocalypse Now? A Comparative Study of Predictive Models for Extreme Climate Events in Brazilian Rural Insurance*

Subject Non-Life (ASTIN), Data Science/AI

Speaker Rafael Sato

Presentation 3 *Propagation of vector-borne diseases in Europe under a range of climate scenarios*

Subject Health (IAAHS), Data Science/AI

Speaker Marta Giovanetti et al.

Session Title **Universal Health Coverage**

Venue Hall B5(1)

Presentation 1 *Actuarial Readiness for Universal Health Coverage in Emerging Economies: Armenia's Example*

Subject Health (IAAHS), Non-Life (ASTIN)

Speaker Zara Mkrtchyan et al.

Presentation 2 *A Proposal for a New Framework to Enhance the Sustainability of Japan's Public Healthcare System through Partial Risk-Adjusted Premiums and Benefit Ratios*

Subject Pensions and Social Security (PBSS), Health (IAAHS)

Speaker Yoshitaka Hori

Presentation 3 *UHC - Strategic Risk Management for Developing Nations*

Subject Health (IAAHS), Enterprise Risk Management (AFIR-ERM)

Speaker Britta Hay

Session Title **Diversity and Inclusion in the Actuarial Profession**

Venue Hall B5(2)

Presentation 1 *Professional standards – are they still important for actuaries?*

Subject Professionalism/Actuarial Education

Speaker Charles Cowling

Presentation 2 *Cross-Cultural Collaboration in Multinational Firms:*

Lessons on effective actuarial communication across regulatory, cultural, and language boundaries.

Subject Professionalism/Actuarial Education

Speaker Tung Tran

Presentation 3 *Why we need to talk about female health: diversity and business opportunity gaps*

Subject Professionalism/Actuarial Education, Life (IAALS)

Speaker Adel Drew

Session Title **Transparent Modeling**

Venue Hall B7(1)

Presentation 1 *GLM Expression of GBM predictive models: unveiling the black box of a machine learning methodology*

Subject Data Science/AI, Actuarial Consulting (IACA)

Speaker Hiroki Shibata

Presentation 2 *Fast Shapley Decomposition of Year-over-Year Lapse Rates and Interpretable BEL Factor Extraction Using Heuristic Search*

Subject Data Science/AI, Life (IAALS)

Speaker Takanori Namekawa

Presentation 3 *Potential Applications of Topological Data Analysis in Actuarial Practice*

Subject Data Science/AI, Investment and Finance

Speaker Hidemasa Oda et al.

Session Title **Disability Pensions**

Venue Hall B7(2)

Presentation 1 *MORTALITY AFTER COVID-19: NEW SURVIVAL SCENARIOS FOR ITALIAN DISABLED WORKERS*

Subject Pensions and Social Security (PBSS)

Speaker DANIELA MARTINI et al.

Presentation 2 *ITALIAN WORKERS' PROTECTION: TECHNICAL SOLUTIONS TO ADDRESS THE CHALLENGE OF A SUPER-AGEING POPULATION*

Subject Pensions and Social Security (PBSS)

Speaker LAURA BARADEL et al.

Presentation 3 *Features of the Japanese Public Disability Pension and Issues Regarding Its Future Benefit Levels*

Subject Pensions and Social Security (PBSS)

Speaker Ryouhei Yoshizawa

Session Title	Impact of Climate Change on Mortality (II)
Venue	Hall C
Presentation 1	<i>Impacts of Climate Change on Mortality and Morbidity and Scenario Analysis Methodology</i>
Subject	Life (IAALS), Enterprise Risk Management (AFIR-ERM)
Speaker	Yukimura Suzuki
Presentation 2	<i>Modelling the impacts of climate change on deaths caused by heat and cold waves with age-period-cohort models</i>
Subject	Life (IAALS), Pensions and Social Security (PBSS)
Speaker	Jean-Francois Begin
Presentation 3	<i>Mortality modelling for short term climate stress test in France : impact of extreme heat</i>
Subject	Life (IAALS), Enterprise Risk Management (AFIR-ERM)
Speaker	Stephane Loisel et al.
Session Title	Investment Strategies and Risk Management
Venue	Hall D5
Presentation 1	<i>Time-Series Embeddings and Generative AI for Trend Similarity and Investment Performance: Evidence from Taiwan Futures</i>
Subject	Investment and Finance, Data Science/AI
Speaker	Kan-Sheng Hsu et al.
Presentation 2	<i>Rethinking the FTSE/JSE Responsible Investment Index</i>
Subject	Investment and Finance
Speaker	Taryn Reddy et al.
Presentation 3	<i>Dynamic Hedging for Insurance Companies</i>
Subject	Investment and Finance, Enterprise Risk Management (AFIR-ERM)
Speaker	Hiroshi Kano et al.
Session Title	Fairness in Pricing
Venue	Hall D7
Presentation 1	<i>Operationalizing Fairness in Actuarial Pricing: From Principle to Practice</i>
Subject	Non-Life (ASTIN), Data Science/AI
Speaker	Olivier Cote
Presentation 2	<i>Fairness-Aware Insurance Pricing: A Multi-Objective Optimization Approach</i>
Subject	Non-Life (ASTIN), Data Science/AI
Speaker	Tim J. Boonen
Presentation 3	<i>TBD</i>
Subject	
Speaker	
Session Title	Risk Prediction in Aging Societies
Venue	Hall E Seminar Room(1)
Presentation 1	<i>Dynamic Prediction of Nursing Home Length of Stay: An Actuarial Application of Landmark Models</i>
Subject	Health (IAAHS)
Speaker	Mengyi Xu
Presentation 2	<i>Prediction of proportion of people requiring care using publicly available data of diseases</i>
Subject	Life (IAALS), Health (IAAHS)
Speaker	Fumiya Niinomi
Presentation 3	<i>TBD</i>
Subject	
Speaker	
Session Title	Cancer and Critical Illness Insurance
Venue	Hall E Seminar Room(2)
Presentation 1	<i>Future Projections of Cancer Incidence Rates in Japan and Future Profitability of Cancer Insurance</i>
Subject	Life (IAALS), Health (IAAHS)
Speaker	Takuya Kozuki
Presentation 2	<i>How cancer developments are shaping insurance benefits and innovation</i>
Subject	Life (IAALS)
Speaker	Jenny Ingram
Presentation 3	<i>TBD</i>
Subject	
Speaker	

Session Title	Future of DB Plans
Venue	G402
Presentation 1	<i>LDI and Japan's DB Pension Plans: Possibility of Widely Adoption in an Upward Interest Rate Environment</i>
Subject	Pensions and Social Security (PBSS), Investment and Finance
Speaker	Hirotsugu Fukatsu et al.
Presentation 2	<i>The Challenges of Visualizing Individual Benefits in Defined Benefit Pension Dashboards: Technical Options and Their Limitations</i>
Subject	Pensions and Social Security (PBSS)
Speaker	Tokimitsu Tanaka
Presentation 3	<i>The Bright Future for DB Plans in Japan</i>
Subject	Pensions and Social Security (PBSS)
Speaker	Akitomo Sugiura
Session Title	Natural Catastrophe Modeling
Venue	G409
Presentation 1	<i>Post-event Loss Estimation for Natural Catastrophes using Geospatial Correlation</i>
Subject	Non-Life (ASTIN)
Speaker	Joseph Hoang-Luu et al.
Presentation 2	<i>Various initiatives to advance natural catastrophe model: A case study in Japan</i>
Subject	Non-Life (ASTIN), Data Science/AI
Speaker	Rikito Hisamatsu
Presentation 3	<i>Drought Risk in France Better Valuation</i>
Subject	Non-Life (ASTIN)
Speaker	Thomas Kermorvant et al.
Session Title	Insurance Portfolio
Venue	G502
Presentation 1	<i>Portfolio monitoring in insurance using information theory</i>
Subject	Enterprise Risk Management (AFIR-ERM), Non-Life (ASTIN)
Speaker	Pietro Parodi et al.
Presentation 2	<i>On asymptotic behavior of portfolio risks and goodness of elliptical approximations</i>
Subject	Enterprise Risk Management (AFIR-ERM)
Speaker	Atte E. Pyryla
Presentation 3	<i>Matrix Factorization for Modeling High-Dimensional Interactions in Class Rate-Making</i>
Subject	Non-Life (ASTIN), Data Science/AI
Speaker	Nana Kato et al.
Session Title	Pension Reforms
Venue	G510
Presentation 1	<i>Recent reforms in 13 countries that have privatized public pensions</i>
Subject	Pensions and Social Security (PBSS), Actuarial Consulting (IACA)
Speaker	Ken Sugita
Presentation 2	<i>Toward Work Style Neutral Pensions: Policy Options and Implementation Challenges</i>
Subject	Pensions and Social Security (PBSS)
Speaker	Takashi Kato
Presentation 3	<i>Actuarial Valuation of the Reform to Article 123 of the Mexican Constitution</i>
Subject	Pensions and Social Security (PBSS)
Speaker	Carmen Fernandez et al.
Session Title	Lifestyle and Health
Venue	G602
Presentation 1	<i>Epidemiological evidence-based computation of biological age accounting for relative risks of all-cause mortality based on lifestyle factors</i>
Subject	Health (IAAHS), Life (IAALS)
Speaker	Rikuta Hamaya
Presentation 2	<i>Sleep and Insurance</i>
Subject	Life (IAALS)
Speaker	Kazunori Kanda
Presentation 3	<i>Consideration of health-promotion-type insurance policies using sleep data</i>
Subject	Life (IAALS)
Speaker	Yuya Tokuda et al.

Session Title **Mental Health**
Venue G610

Presentation 1 *Socioeconomic Determinants and Mental Health Outcomes in a South African Medical Scheme: Evidence from 2019–2024*

Subject Health (IAAHS)
Speaker Jacob Thenga et al.

Presentation 2 *UNMASKING MENTAL HEALTH RISK - AN ACTUARIAL PERSPECTIVE ON SILENT COSTS AND SYSTEMIC RISKS IN ACTUARIAL MODELS FOR PRICING AND RESERVING*

Subject Health (IAAHS)
Speaker MARGARET OYUGI et al.

Presentation 3 *Innovating Mental Wellness Insurance: Balancing Risk, Support, and Product Design*

Subject Life (IAALS)
Speaker Yusuke Wada

Session Title **Insurance Purchasing Behavior**
Venue G701

Presentation 1 *Global Health and Life Insurance Demand Trends for Gen Z and Millennials*

Subject Life (IAALS), Health (IAAHS)
Speaker Xiao Xu et al.

Presentation 2 *The Science of Simplicity: Behavioral Techniques for More Effective Customer Journeys*

Subject Life (IAALS), Pensions and Social Security (PBSS)
Speaker Peter Hovard

Presentation 3 *Construction and Application of a Life Insurance Market Demand and Supply Model*

Subject Life (IAALS)
Speaker Hidekazu Yoshida

Program - Concurrent Sessions

Thursday, 12 November

11:00 - 12:45

Session Title **Climate Risk and Resilience**

Venue Hall A

Presentation 1 *Dynamic Financial Analysis (DFA) of General Insurers under Climate Change*

Subject Non-Life (ASTIN)
Speaker Bernard Wong et al.

Presentation 2 *Pooling together - An Investigation into the Efficacy of Collaborative Structures Against Correlated Climate Risk*

Subject Non-Life (ASTIN)
Speaker Justin Chinakidzwa

Presentation 3 *Becoming a morally ambitious actuary*

Subject Professionalism/Actuarial Education
Speaker Shashini Abeygunawardena

Session Title **Health Risk and Finance**

Venue Hall B5(1)

Presentation 1 *The "Winner-Loser Hypothesis" and the West-East Divide in Japanese Healthcare*

Subject Health (IAAHS)
Speaker Yusuke Fukuda

Presentation 2 *Bridging Tradition and Innovation: Mukando-Inspired Healthcare Finance for Zimbabwe's Informal Economy*

Subject Health (IAAHS)
Speaker Kumbirai Matika

Presentation 3 *A category theory principle for financial derivative instruments on healthcare indices.*

Subject Health (IAAHS), Professionalism/Actuarial Education
Speaker Koji Yamamoto

Session Title **Corporate Pensions: Strategy and Accounting**

Venue Hall B5(2)

Presentation 1 *Optimizing Total Rewards: Integrating Salaries, Corporate Pensions, and Non-Monetary Rewards*

Subject Pensions and Social Security (PBSS), Enterprise Risk Management (AFIR-ERM)
Speaker Shota Sekiguchi

Presentation 2 *Corporate Pension Redesign in a Total Rewards Framework: A Practitioner's View*

Subject Pensions and Social Security (PBSS), Actuarial Consulting (IACA)
Speaker Satoshi Nomura

Presentation 3 *Peculiarities in the Amortization of Pension Gain/Loss under JGAAP: Insights from Monte Carlo Simulation and Implications for Global Convergence*

Subject Pensions and Social Security (PBSS)
Speaker Tsuyoshi Fujita

Session Title **Modernizing Lapse Modeling**

Venue Hall B7(1)

Presentation 1 *Privacy-Preserving Machine Learning for Policyholder's Lapse Prediction: Integrating GLM and Ad-Industry engineering with Homomorphic Encryption*

Subject Data Science/AI
Speaker Kyson Suh et al.

Presentation 2 *Predicting Lapse Rates Using Continuous and Discrete-Time Survival Models*

Subject Data Science/AI, Life (IAALS)
Speaker Tomoki Katayama et al.

Presentation 3 *Evaluating Machine Learning Methods for Enhancing Predictive Accuracy of Best-Estimate Lapse Assumptions Using Multi-Year Data*

Subject Data Science/AI, Life (IAALS)
Speaker Masafumi Suzuki

Session Title **Economic Value-Based Solvency Regulation in Asia**

Venue Hall B7(2)

Presentation 1 *The trend of evolution of solvency regulations – Its Impact and Significance on the Japanese Insurance Market*

Subject Enterprise Risk Management (AFIR-ERM)
Speaker Junji Furuki et al.

Presentation 2 *Effectiveness and Limitations of Economic Value-Based Solvency Regulation: An Analysis of Japan's New Regulatory Framework*

Subject Enterprise Risk Management (AFIR-ERM), Life (IAALS)
Speaker Yasutomo Iida et al.

Presentation 3 *Evolving Insurance Solvency Standards: Regulatory Developments in Sri Lanka's Risk-Based Capital Framework and Lessons learned in Asia*

Subject Enterprise Risk Management (AFIR-ERM)
Speaker Thanuja Krishnaratna

Session Title **Advancing the Actuarial Profession**
Venue Hall C

- Presentation 1** *Shaping the Future Together: Community Building through the Young Actuaries Initiative*
Subject Professionalism/Actuarial Education
Speaker Martin Oymanns et al.
- Presentation 2** *Actuary analyses actuaries – data-driven compass for successful career*
Subject Professionalism/Actuarial Education
Speaker Nobuhiko Nakatsuka
- Presentation 3** *The Value of Actuaries to Society: A Comprehensive Analysis*
Subject Professionalism/Actuarial Education, Actuarial Consulting (IACA)
Speaker Mukami Njeru et al.

Session Title **ALM Strategies**
Venue Hall D5

- Presentation 1** *Implications for the ALM strategy due to the yield curve extrapolation method applied under the ESR*
Subject Investment and Finance, Life (IAALS)
Speaker Toshio Shinohara
- Presentation 2** *Enhancing the Insurance ALM Process—From Stochastic Modeling to Practical Implementation*
Subject Investment and Finance
Speaker Warren Fok
- Presentation 3** *Assessing the Impact of Regulatory Carbon Allocation on Brazilian (Re)Insurers'Portfolios through ALM and Mean-CVaR Optimization*
Subject Investment and Finance, Enterprise Risk Management (AFIR-ERM)
Speaker Nathalia Fonseca

Session Title **AI Applications in Life Insurance**
Venue Hall D7

- Presentation 1** *AI Agents in Life Insurance Actuarial Experience Analysis: A Comparative Study of Automation and Analytics*
Subject Life (IAALS), Data Science/AI
Speaker Timothy Lam et al.
- Presentation 2** *From Models to Clients: Generative AI as a Bridge Between Actuarial Design and Customer Needs*
Subject Life (IAALS), Data Science/AI
Speaker CHIHHAN CHI
- Presentation 3** *Global Overview of Leveraging (Generative) AI in Life Insurance*
Subject Life (IAALS), Data Science/AI
Speaker Keiichiro Yamada

Session Title **Non-Life Insurance Reserving**
Venue Hall E Seminar Room(1)

- Presentation 1** *The over-dispersed Skellam reserving model: extending the over-dispersed Poisson reserving model*
Subject Non-Life (ASTIN), Data Science/AI
Speaker Andreas Zimmermann
- Presentation 2** *Beyond our means? - A distributional approach to actuarial reserving*
Subject Non-Life (ASTIN)
Speaker Alan Xian et al.
- Presentation 3** *Transforming Reserving: Integrating Machine Learning with Traditional Triangle Models*
Subject Non-Life (ASTIN), Data Science/AI
Speaker Sairaj Patro et al.

Session Title **Cause-Specific Mortality**
Venue Hall E Seminar Room(2)

- Presentation 1** *A Study of a Method for Estimating Mortality Rates at Very Advanced Ages through Extrapolation of Cause-Specific Mortality Rates*
Subject Life (IAALS)
Speaker Yu Takahashi
- Presentation 2** *A Cause-Specific Mortality Model Incorporating the Interdependent Structure among Causes of Death*
Subject Life (IAALS), Health (IAAHS)
Speaker Jun Sawada
- Presentation 3** *Pandemics and Peace: Unpacking Mortality Trends in Colombia (1989-2023) through an Actuarial Lens*
Subject Life (IAALS)
Speaker Andres F. Torres Mancipe et al.

Session Title Innovative Solutions for Retirement Systems
Venue G402

- Presentation 1** *A reinsurer's perspective on offshore funded reinsurance*
Subject Pensions and Social Security (PBSS), Life (IAALS)
Speaker Dominic Lim
- Presentation 2** *Modelling of Retirement Systems: Insights from Australia and Singapore*
Subject Pensions and Social Security (PBSS), Life (IAALS)
Speaker Iris Deng et al.
- Presentation 3** *An Assessment Framework for Equitable Longevity Pooling Products*
Subject Pensions and Social Security (PBSS)
Speaker Andres Villegas et al.

Session Title Advanced Reinsurance Pricing
Venue G409

- Presentation 1** *Fair Cost of Reinstatement in Non-Proportional Reinsurance*
Subject Non-Life (ASTIN), Enterprise Risk Management (AFIR-ERM)
Speaker Edgar Anguiano
- Presentation 2** *Optimal Mix of Reinsurance and ILS Under Counterparty Credit Risk*
Subject Non-Life (ASTIN), Investment and Finance
Speaker Tatsuya Mizobuchi et al.
- Presentation 3** *Secondary Perils and Broad Application of Model Adjustment*
Subject Non-Life (ASTIN)
Speaker Akira Kinefuchi

Session Title Catastrophe Risk Modeling and Management
Venue G502

- Presentation 1** *Building Resilience: Integrating AI, Cooperative Insurance Data, and Spatial Analysis in Post-Tohoku Disaster Risk Management*
Subject Enterprise Risk Management (AFIR-ERM), Data Science/AI
Speaker Hiroki Saruta et al.
- Presentation 2** *Challenges in Image-Based Building Attribute Estimation for Catastrophe Risk Assessment in Data-Scarce Markets*
Subject Data Science/AI, Non-Life (ASTIN)
Speaker Hibiki Ayabe
- Presentation 3** *Managing NatCat Volatility: pricing and portfolio management of accumulations*
Subject Non-Life (ASTIN)
Speaker James Dawson

Session Title Random Forest
Venue G510

- Presentation 1** *Loss prediction using variable selection in GRF*
Subject Data Science/AI, Non-Life (ASTIN)
Speaker Yuito Susuga et al.
- Presentation 2** *Extreme Quantile Estimation with Extremal Random Forests and Neyman-Orthogonal GPD Inference*
Subject Data Science/AI
Speaker Ren Ishiyama et al.
- Presentation 3** *Model-free Estimation of Process Error and Flexible Adjustment of Model Error in Prediction Error Decomposition*
Subject Data Science/AI
Speaker Eisuke Nakagawa et al.

Session Title Genetics and Epigenetics
Venue G602

- Presentation 1** *Is epigenetics the hidden key to understanding health and insurance risk?*
Subject Life (IAALS), Health (IAAHS)
Speaker Christelle Oosthuizen et al.
- Presentation 2** *Navigating the Financial Challenges of Gene Therapy*
Subject Health (IAAHS), Enterprise Risk Management (AFIR-ERM)
Speaker Kristi Bohn
- Presentation 3** *Implementation of Biological Age Methodology in Japanese Life Insurance Markets: A Comprehensive Analysis of Regulatory Compliance and Operational Feasibility*
Subject Life (IAALS), Health (IAAHS)
Speaker Misato Tamura

Session Title ICS in Life Insurance
Venue G610

Presentation 1 *Strategic Asset Allocation under ICS: Balancing Return and Solvency through Capital-Aware Optimization*
Subject Investment and Finance, Life (IAALS)
Speaker Akihiro Ishibashi

Presentation 2 *Management Actions for the Insurance Capital Standard (ICS)*
Subject Life (IAALS), Investment and Finance
Speaker Josh Corrigan et al.

Presentation 3 *Comparative Analysis of the Standard Method and Aggregation Method in the Insurance Capital Standard Framework by Jurisdiction*
Subject Life (IAALS), Enterprise Risk Management (AFIR-ERM)
Speaker Spenser Allen

Session Title Modernizing Health Insurance Pricing
Venue G701

Presentation 1 *An Actuarial Study on Insurance Premium Calculation Based on Regional Healthcare Adequacy in Japan*
Subject Life (IAALS)
Speaker Daisuke Nagashima

Presentation 2 *Insurability of critical illness for people living with HIV*
Subject Life (IAALS), Health (IAAHS)
Speaker Francesco Ungolo et al.

Presentation 3 *The Discrepancy between Medical Progress and Insurance Underwriting: Challenges Facing HIV-Positive Individuals in Japan's Commercial Insurance Market*
Subject Life (IAALS), Data Science/AI
Speaker Fuminori Kobuki et al.