

2nd Announcement –

DETAILED CONGRESS PROGRAM



www.ica2018.org

Hosted by:



INTERNATIONAL ACTUARIAL ASSOCIATION
ASSOCIATION ACTUARIELLE INTERNATIONALE



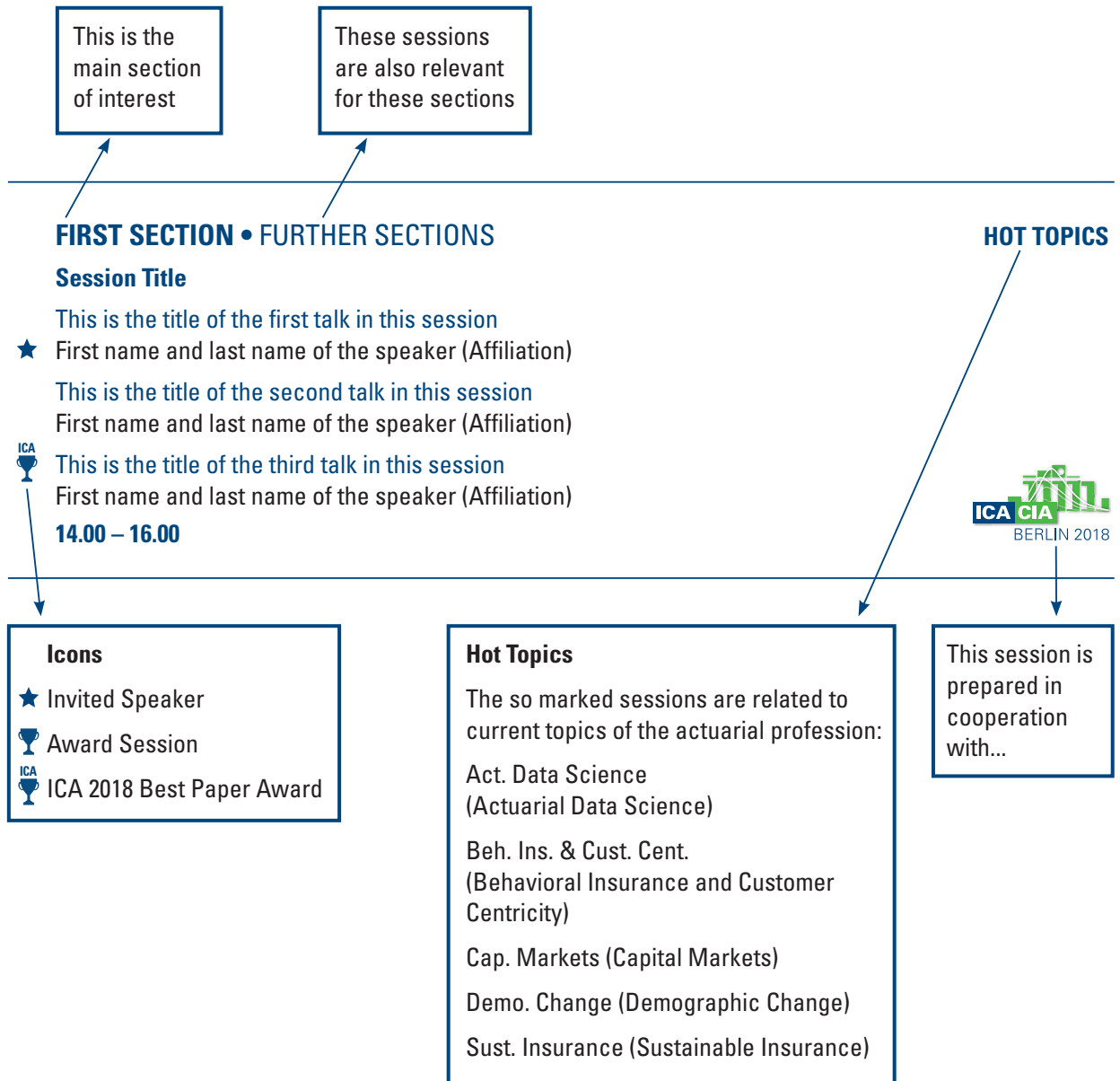
DAV

DEUTSCHE
AKTUARVEREINIGUNG e.V.



BERLIN 2018

HOW TO READ THE CONGRESS PROGRAM



PLEASE NOTE
 This congress program is provisional. The organizers reserve the right to make changes to the program before ICA 2018 starts. For an up-to-date program overview please check www.ica2018.org regularly.

THE INTERNATIONAL CONGRESS OF ACTUARIES 2018

The German Association of Actuaries (DAV), in conjunction with the International Actuarial Association (IAA), is pleased to host the 31st International Congress of Actuaries 2018 in Germany. The congress will be held from 4 – 8 June 2018 in Berlin, the vibrant and historic capital of Germany. Around 2,000 actuaries, academics and high-ranking representatives from the international insurance and financial industry as well as related institutions are expected to join the conference.

THE CONGRESS PROGRAM

The congress program of the ICA 2018 includes a wide variety of formats suitable for all kinds of talks on actuarial and financial issues.

- In daily Plenary Sessions of 90 minutes, internationally renowned guest speakers from insurance, regulation and academia present current developments.
- While plenary sessions cover general topics, around 30 Invited Speaker Sessions for up to 750 participants focus on one or two of the program threads. In these, well-known invited experts of their field present actual topics.
- Additionally, around 270 Parallel Talks regularly lasting 30 minutes each will reflect the wide variety of topics facing the actuarial profession.
- The congress program will also include various sessions in which selected national and international prize winners introduce and discuss their research results.

START OF REGISTRATION: 1 DECEMBER 2017

Full and half week tickets are available. The full week covers the scientific and social program from Sunday until Friday. The first half week ticket includes the scientific and social program from Sunday until Wednesday. The ticket for the second half includes the congress program from Wednesday until Friday. The first Early Bird Fee ends on 31 January 2018. The second Early Bird Fee ends on 31 March 2018.

SUNDAY, 3 JUNE 2018

THE OPPORTUNITY IN DIVERSITY CONFERENCE

The Diversity Conference is offered at the forefront of the ICA 2018. Although it is not an official part of the ICA 2018 all delegates participating in ICA 2018 are invited to attend this exciting discussion free of charge.

09.00 – 13.00

Registration

14.00 – 18.00

COMING TOGETHER: WELCOME EVENT „GAUSS MEETS HUMBOLDT“

Natural History Museum

20.00 – 23.00

Registration
8.30 – 9.30

Launching the ICA 2018
9.30 – 10.30

Coffee break
10.30 – 11.00

PLENARY SESSION I

Future of Demography/Longevity

- ★ Winfried Heinen (Chairman of the Board of Executive Directors, Gen Re)
- ★ Mikko Myrskylä (Executive Director of the Max Planck Institute for Demographic Research, MPIDR)
- ★ Moderation: Marcus Nagel (Chief Executive Officer Germany, Zurich)

11.00 – 12.30

Lunch
12.30 – 14.00

AFIR/ERM

AFIR/ERM/DGVFM Session: Risk Modelling & Valuation

Quantifying Model Risk

- ★ Paul Glasserman (Jack R. Anderson Professor of Business, Columbia University)

Capital Management – From Modelling to Creating Value

- ★ Tom Wilson (Chief Risk Officer, Allianz)

14.00 – 16.00



AFIR/ERM

Do Performance Fees Motivate Portfolio Managers to Increase Risk Following Poor Performance?

Evidence from Social Trading Networks

Philipp Doering (Ruhr-University Bochum)

Alexander Jonen (Helmut-Schmidt University of Hamburg)

Risk Management with Multiple Value-At-Risk Constraints

Thai Nguyen (University of Ulm)

Case Study Fitting the Generalized Pareto Distribution to Large Claims

Rene Stephan (Klemmstein & Stephan)

Scenario and Stress Testing – A Practitioners Guide

Daniel Finn (Conning & Co.)

14.00 – 16.00

ASTIN • AFIR/ERM

The Impact of Insurance Premium Taxation

Anna-Maria Hamm (Leibniz University Hannover)

Calculation of Flatrated Fleets in the Commercial Motor Business on the Basis of the Credibility Approach – A Practical Application

Michael Klamsner (Allianz)

Experience Rating of (Re)Insurance Premiums under Uncertainty about Past Inflation

Michael Fackler (Self-employed)



Modelling Dynamic Policyholder Behaviour through Machine Learning Techniques

Marco Aleandri (Ageas)

14.00 – 16.00

HEALTH • AFIR/ERM ASTIN

Young Researcher Award Italy



Financial Instruments for Mitigation of Flood Risks: The Case of Florence

Giovanni Rabitti (Bocconi University of Milan)

Young Researcher Award CAS



1. Restating the National Highway Transportation Safety Administration's National Motor Vehicle Crash Causation Survey for Automated Vehicles

Jonathan Charak (Zurich)



2. Territorial Risk Classification using Spatially Dependent Frequency-Severity Models

Peng Shi (University of Wisconsin-Madison)

Health System Designs: An Integrated Approach to Achieving UHC with Multiple Stakeholders, Focusing on the Working Poor in Developing Countries

Anne Drouin (International Labour Organization)

Lisa Morgan (International Labour Organization)

14.00 – 16.00



HEALTH

Prenatal Insurance – Coverage for the Unborn

Kay Ying Shong (RGA)

Anti-Selection in the Brazilian Individual Health Insurance Market

Ana Carolina Maia (University of São Paulo)

Risk Adjustment Modelling for Medical Plans in the United States

Jed Linfield (Healthfirst)

Long-Term Health Insurance: The German Model

Clemens Frey (PwC)

David Richter (PwC)

Composition in Private Health Plans with Automatic Renewal

Thomas Neusius (Rhein-Main University of Applied Sciences)

14.00 – 16.00

LIFE • PENSIONS

Market Consistent Cash Flows for Benefits, Tax and Future Profits in Life and Pension Insurance



Thomas Møller (Head of Actuarial Innovation and Modeling, PFA Pension)

Default Retirement Income Strategy



David Blake (Director, Pensions Institute at Cass Business School)

14.00 – 16.00

LIFE • AFIR/ERM IACA

PRIP-KID: Providing Retail Investors with Inappropriate Product Information?
Stefan Graf (Ulm University, Institute for Finance and Actuarial Sciences, ifa Ulm)

German Market Standard for PRIIP Category 4 Products

Andreas Niemeyer (Allianz)

Tobias Rieck (Allianz)

Modelling the Risk of a Policyholder Run

Tobias Huber (LMU Munich)

In-Force Management in the Context of Solvency II

Olaf Schmitz (Allianz)

14.00 – 16.00

PENSIONS

Funding and Pension Protection Schemes

Measuring and Balancing Adequacy and Sustainability in Social Security Programs

Assia Billig (IAA Population Issues Working Group and Office of the Superintendent of Financial Institutions)

Aldona Skucaite (Vilnius University)

Automatic Balancing Mechanisms for Mixed Pension Systems

Carmen Boado-Penas (University of Liverpool)

Defined Benefit Pension Plan Funding and the Role of Actuaries

Charles Cowling (JLT Employee Benefits)

Optimal Pension Protection

Till Förstemann (Deutsche Bundesbank)

14.00 – 16.00

IACA • LIFE

New Developments in Insurance IT, Industrialization of Actuarial Processes

- ★ Patricia L. Renzi (Principal Life Technology Solutions, Milliman)

Preparing Digital Insurance for Take-Off

- ★ Axel Helmert (Managing Director, msg life central europe)

14.00 – 16.00

PROFESSIONALISM

SUST. INSURANCE

Regulation and the Actuarial Profession

Current Topics of Insurance Supervision

- ★ Frank Grund (Chief Executive Director of Insurance and Pension Funds Supervision, Federal Financial Supervisory Authority, BaFin)

The Role of the Actuary in Influencing Regulation

Mohamed Seghir (Swiss Re)

The Role of Actuaries in the German Supervisory System

Kay Schaumlöffel (Federal Financial Supervisory Authority, BaFin)

14.00 – 16.00

AFIR/ERM

Walter-Saxer-Versicherungs-Hochschulpreis

- 🏆 Stochastic Loss Reserving with Emphasis on the Bornhuetter-Ferguson Method
Annina Saluz (AXA)



Young Researcher Award Canada
★ Credit and Systemic Risks in the Financial Services Sector: Evidence from the 2008 Global Crisis
Jean-François Bégin (Simon Fraser University)
15.00 – 16.00



Coffee break
16.00 – 16.30

AFIR/ERM

AFIR/ERM/DGVFM Session: Risk Modelling and Valuation

Model Risk, Solvency and Risk Aggregation
★ Paul Embrechts (Professor of Insurance Mathematics, ETH Zurich)
Discussion
16.30 – 18.30



AFIR/ERM

Oprisk Assessment = Black Swans Laughing?
Eberhard Müller (riskmueller consulting)
Recovery and Resolution Plans in Banking and Insurance
Bridget MacDonnell (Milliman)
Monika Smatralova (permanent tsb)
The Paradox of Prudence – Macroprudential Regulation of Life Insurance and Macroeconomic Models of the Financial Sector
Jochen Kienberger (Allianz)
Assessment of Operational Risks of Insurance Company for Management Decision Making
Irina Voronova (Riga Technical University)
16.30 – 18.30

AFIR/ERM

Management Strategies in Multi-Year Enterprise Risk Management
Dorothea Diers (Provinzial NordWest)
Linking Insurer Strategy with ERM
David Ingram (Willis Towers Watson)
Kevin Madigan (Willis Towers Watson)
Mike Wilkinson (Willis Towers Watson)
A Formulation of Ecological Value Added
Taryn Reddy (University of the Witwatersrand)
Robert Thomson (University of the Witwatersrand)
The Internal Model Industry Forum
Philip Whittingham (XL Catlin)
16.30 – 18.30

ASTIN

Advances in Stochastic Mortality Modelling and Demographic Feature Extraction
★ Gareth Peters (Professor for Risk and Insurance Modelling, Heriot-Watt University)
Using Risk Factors in Insurance Analytics: Data Driven Strategies
★ Katrien Antonio (Professor of Actuarial Science, KU Leuven)

The Transition towards Semi-Autonomous Vehicle Insurance: The Contribution of Usage-Based Data
 Montserrat Guillen (University of Barcelona)

16.30 – 18.30

ASTIN • PROFESSIONALISM

ACT. DATA SCIENCE

Joint Modelling of Customer Loyalty and Risk in Personal Insurance

Edward Frees (University of Wisconsin-Madison)

ASTIN Big Data Working Party Phase II: Predictive Modelling

Louise Francis (Francis Analytics and Actuarial Data Mining)

Practical Use of Machine Learning in Non-Life Pricing – Smart Price Architecture

Clemens Frey (PwC)

Frank Schönfelder (PwC)

Generation Actuarial 2.0

Cristina Mano (Cantanhede Mano Consultoria em Atuária)

Elena Rasa (Zurich)

16.30 – 18.30

HEALTH • LIFE

On the Decomposition and Dynamics of Health Insurance Liabilities

- ★ Marcus Christiansen (Professor, Carl von Ossietzky University of Oldenburg)

Projection Models for Health Expenses

Jan-Philipp Schmidt (Cologne University of Applied Sciences)

Health-Linked Life Annuities: Combining Protection and Retirement Income

- ★ Ermanno Pitacco (Professor of Actuarial Mathematics and Life Insurance Technique, University of Trieste)

16.30 – 18.30

LIFE

Summer School: Aspects of Market-Consistent Valuation in Life Insurance

- ★ Frank Schiller (Chief Actuary in Life and Health Reinsurance, Munich Re)

16.30 – 18.30

LIFE • AFIR/ERM PENSIONS

Capital-Efficient Participating Annuity Products in Practice

Jürgen Bierbaum (ALTE LEIPZIGER – HALLESCHE)

Disability Insurance: Theory Versus Empirical Results

Kai Kaufhold (Ad Res)

Benoit Miclette (RGA)

General Price Bounds for Guaranteed Annuity Options

Raj Kumari Bahl (University of Delhi)

Projections and Profitability of Unit-Linked Products

Kristian Juul Schomacker (Edlund)

16.30 – 18.30

PENSIONS

BEH. INS. & CUST. CENT.

Behavioral Aspects of Retirement and Products



Optimal Social Security Claiming Behavior under Lump Sum Incentives: Theory and Evidence

Ralph Rogalla (St. Johns University)

Tatjana Schimetschek (Goethe University Frankfurt)



Saving Preferences in Retirement: the Impact of Mandatory Annuitisation, Flexibility and Health Status
Jennifer Alonso-García (UNSW Sydney)

Simplifying Retirement by Aligning Communication with Retirement Outcomes, rather than Investment Strategies

Catherine Donnelly (Heriot-Watt University)

Harmonization of Pensions and Housing

Martin Stevenson (Stevenson & Company)

16.30 – 18.30

IACA • AFIR/ERM

CAP. MARKETS

Actuaries in Banking – Raising Awareness & Accelerating Global Penetration

Martin Collins (KPMG)

Michael Florig (Crédit Agricole CIB)

Peter Temple (Gen Re, African Bank)

Michael Tichareva (National Standard)

Retakaful Under-Capacity – Growth Opportunity for Conventional Reinsurers?

Nina Ndebele (Deloitte)

In-Force Management – Value Potential and Role of Actuaries

Bartlomiej Maciaga (Boston Consulting Group)

Nicolai von Rummell (Boston Consulting Group)

Jochen Wieland (Boston Consulting Group)

The FSB's Recommendations for Financial Disclosure of Climate Risk

Kenneth Donaldson (IAA)

16.30 – 18.30

PROFESSIONALISM • EDUCATION IACA

Emerging Associations and the Support by IAA

Actuarial Profession in Bangladesh is More Challenging than Ever

M. Ahsanul Haq (Actuarial Society of Bangladesh)

Status and Development of the Panamanian Association of Actuaries

Luis Alberto Martinez (Asociación de Actuarios de Panamá)

Quality in Actuarial Education in Small Transitional Countries – Case of Bosnia and Herzegovina

Jasmina Selimovic (University in Sarajevo)

Actuarial Prospectus in Growing Nepalese Insurance Industry

Roshan Gyawali (MetLife)

Actuarial Profession and Building Sustainable Regulation on Emerging Financial Markets

Vladimir Novikov (Russian Guild of Actuaries)

Panel Discussion: Support for IAA Members

Darryl Wagner (IAA Advice and Assistance Committee)

16.30 – 18.30

EDUCATION • ASTIN

ACT. DATA SCIENCE

EAA Session

Machine Learning Applications for Non-Life Pricing

Xavier Maréchal (reacfin)

Business Simulation Game for Non-Life Pricing as a Tool for Teaching

Xavier Maréchal (reacfin)

16.30 – 18.30



AFIR/ERM • LIFE

CRO Round Table

- ★ Tom Wilson (Chief Risk Officer, Allianz)
- ★ Sue Kean (Chief Risk Officer, Old Mutual)

9.00 – 10.30

AFIR/ERM

Economic Capital: Is There an Optimal Solution?

Darius Weglarz (SCOR)

RBC Regimes' Impact on Capital Motivated Reinsurance

Paul Sauvé (RGA)

Applying Solvency II Internal Models as Basis for Value Based Management of Life Insurance Carriers

Wolfgang Deichl (Allianz)

The Marginal Cost of Risk and Capital Allocation in a Property and Casualty Insurance Company

Qiheng Guo (Georgia State University)

8.30 – 10.30

AFIR/ERM

- 🏆 SCOR Actuarial Awards

8.30 – 10.30



AFIR/ERM

Innovation Platform: Innovative Approaches to Emerging Risks

tba

8.30 – 10.30

ASTIN • IACA

Classifying Professions by Means of Regionalization

Stefan Wolfgang Wetzel (ALTE LEIPZIGER)

Property Graphs: A Statistical Model for Fire Losses based on Graph Theory

Pietro Parodi (SCOR)

Peter Watson (Cass Business School)

Data, Decisions, and Distortions: Decision-Making in the Modern World

- ★ David Hand (Emeritus Professor of Mathematics, Imperial College London)

8.30 – 10.30

HEALTH • LIFE

Selection Behavior in the Market for Private Complementary Long-Term

Jörg Schiller (University of Hohenheim)

Old-Age Care Prevalence in Switzerland: Drivers and Future Development

Michel Fuino (University of Lausanne)

- 🏆 Long-Term Care Models and Dependence Probability Tables by Acuity Level: New Empirical Evidence from Switzerland

Joël Wagner (University of Lausanne)



Modelling Life History in Advanced-Age Period by Care-Cycle and Creating Multi-State Life Table
Shuji Tanaka (Nihon University)

8.30 – 10.30

LIFE • HEALTH

Cause-Of-Death Mortality and Socio-Economic Status: A Study of a Portfolio Dynamics
Heloise Labit Hardy (ARC Centre of Excellence in Population Aging Research)

★ Can Frailty Models Improve Actuarial Calculations in Health Insurance?
Ermanno Pitacco (Professor of Actuarial Mathematics and Life Insurance Technique, University of Trieste)

Making a Success in the Changing World of Disability Insurance
Zoe Woodroffe (Gen Re)

8.30 – 10.30

LIFE • PENSIONS

Deep Dive into Thomas Møller's Talk "Market Consistent Cash Flows for Benefits, Tax and Future Profits in Life and Pension Insurance"

★ Thomas Møller (Head of Actuarial Innovation and Modelling, PFA Pension)

8.30 – 10.30

LIFE • PENSIONS

An Actuarial Study of Micro-Insurance in Bangladesh Formal Life Insurance Industry
M. Ahsanul Haq (Actuarial Society of Bangladesh)

An Overview of the Life Insurance Industry and Current Topics in Japan
Yuho Murate (Dai-ichi Life)
Ryo Yonamine (Dai-ichi Life)

Pricing and Profit Testing of a Life Insurance Product: "Savings and Individual Retirement"
using Simulation Approach
Woundjiague Apollinaire (Jomo Kenyatta University of Agriculture and Technology)

Underwriting around the World – An Update
Allen Klein (Milliman)

The Costs of Underwriting Simplification
John Turner (Swiss Re)

8.30 – 10.30

PENSIONS • LIFE

Intergenerational Fairness

Population Aging, Shadow Prices, and Pay-As-You-Go Social Security
John Turner (Pension Policy Center)

Cohort Specific Measures of Lifetime Pension Benefits and Contributions in Finland
Ismo Vesa Antero Risku (Finnish Centre for Pensions)

Intergenerational Equity: Metrics for Conditional Indexation in Pension Plans
Louis Adam (Laval University)

Actuarial Perspectives on Inequality
Assia Billig (IAA Population Issues Working Group, Office of the Superintendent of Financial Institutions)

Gender Outcomes in Retirement Systems – Why are Women Still Getting such a Bad Deal?
Simon Brimblecombe (International Social Security Association)

8.30 – 10.30

IACA • ASTIN PROFESSIONALISM

ACT. DATA SCIENCE, BEH. INS. & CUST. CENT.

Managing Environmental, Social and Governance (ESG) Factor Integration
Randy Bauslaugh (McCarthy Tétrault)

Digital Disruption: The Impact of Information Management on New Products and
Business Models for Society

★ Tom Jenkins (Chair of the Board, OpenText)

8.30 – 10.30

EDUCATION

Wider Opportunities for Actuaries
organized in cooperation with CERA Global Association

8.30 – 10.30

Coffee break

10.30 – 11.00

PLENARY SESSION II

Future of Insurance

- ★ Scott Cochran (Executive Vice President, Corporate Development and Acquisitions, RGA)
- ★ Denis Kessler (Chief Executive Officer, SCOR) *not yet confirmed*
- ★ Alf Neumann (Member of the Board of Management, Allianz)
- ★ Andrew Rear (Chief Executive, Munich Re Digital Partners)
- ★ Moderation: John Haley (Chief Executive Officer, Willis Towers Watson)

11.00 – 12.30

Lunch Box

12.30 – 13.00

FIELD TRIPS THROUGH BERLIN

Available tours:

- Highlights of Berlin
- Berlin by Bus and Boat
- Jewish Heritage Tour
- History of Berlin
- Berlin – its Hidden Places
- Modern Architecture in Berlin

FIELD TRIPS

or alternatively **LIMITED ATTENDANCE EXPERIENCES** (sponsored by SCOR)

AFIR/ERM • LIFE

Alternative Investments

- ★ Dirk Popielas (Managing Partner, TC Advisory)
Allianz Stiftungsforum

ASTIN

Application of Machine Learning Techniques in Non-Life Insurance

- ★ Gero Nießen (Director, Willis Towers Watson)
Classic Remise

ASTIN

NatCat Modelling Session: 45 Years of Natural Disaster Research at Munich Re:
Lessons From the Past And For the Future

- ★ Gerhard Berz (Honorary Professor of Meteorology, LMU Munich)
- ★ Peter Höpfe (Head of Geo Risks Research/Corporate Climate Centre, Munich Re)
Feuersozietät – kindly provided by  FEUERSOZIETÄT

HEALTH • LIFE PENSIONS

Inherited Heart Disorders: Implications for Life Insurance and Health Insurance

- ★ Angus MacDonald (Professor, Heriot-Watt University)

Predicting Incidences of Acute Myocardial Infarctions:

Are Big Data and Machine Learning Algorithms Useful for Predictive Models?

Noriyuki Kogo (Milliman)

Berlin Museum of Medical History at the Charité – The Lecture Hall Ruin

LIFE • HEALTH

tba

Ottobock Science Center

PENSIONS • IACA

New Products in Occupational Pension Systems I

Development of Alternative Retirement Income Products in Australia –
the Comprehensive Income Products for Retirement System

Tim Furlan (Russell Investments)

Martin Stevenson (First State Super)

Sustainable Old-Age Provision in Times of Falling Discount Rates and Rising Life Expectancy?

Richard Herrmann (Heubeck)

Moderation: Alfred E. Gohdes (Rentenberatung Gohdes)

German Museum of Technology

13.00 – 17.30

ACT. DATA SCIENCE

ACT. DATA SCIENCE

TUESDAY


The Art & Science of Risk

GETTING CLOSER: GARDEN EVENT

ESTREL Summer Garden

19.00 – 22.00

sponsored by

Willis Towers Watson 

Registration

7.30 – 8.30

PLENARY SESSION III

Future of Low Interest Rate Environment

- ★ Peter Praet (Member of the Executive Board, European Central Bank, ECB)
- ★ Moderation: Ken Mungan (Chairman of the Board and leads Milliman Financial Risk Management, Milliman)

8.30 – 10.00

Coffee break

10.00 – 10.30

AFIR/ERM

CAP. MARKETS

Optimal Portfolios Under Possible Stress Scenarios

Ralf Korn (University of Kaiserslautern)

Liability Driven Investments with a Link to Behavioral Finance

Markus Wahl (Technical University of Munich)

Go Green – Changing Dynamics of the Investment Mandates

Shivam Singhania (Ernst & Young)



Population Structure and Asset Values

Kathleen Rybczynski (University of Waterloo)

A Third Order Factor for Immunization: Implications into Solvency II

J. Iñaki De La Peña (University of the Basque Country)

10.30 – 12.30

AFIR/ERM • ASTIN LIFE

AFIR/ERM/DGVFM Day

Flood Risk Modelling: Methodology and Challenges

- ★ Hansjörg Albrecher (Professor of Actuarial Science, University of Lausanne)

Contagion and Systemic Risk

- ★ Paul Glasserman (Jack R. Anderson Professor of Business, Columbia University)

10.30 – 12.30



AFIR/ERM

Society of Actuaries Students Research Case Study Competition

tba

10.30 – 12.30



ASTIN

Chances of Advanced Data Requirements Under Solvency II –
In Context of Undertaking Specific Parameters (USP)

Marius Reitz (ROKOCO)

Annual Press Conference 2018: How Feldafinger Brandkasse Applies Its Internal Model in Enterprise Risk Management

Peter Ackermann (Generali)

Steve Brüske (HDI)

Dorothea Diers (Provinzial NordWest)

Bjoern Hille (HDI)

Carsten Peters (Beltios)

Peter Müller (BaFin)

Issues of Group Solvency Calculations Based on the ICS 1.0

Mirko Kraft (Coburg University of Applied Sciences and Arts)

10.30 – 12.30

ASTIN

Individual Claims Reserving: Opportunity as a Challenge

Alexandre Boumezoued (Milliman)

Laurent Devineau (Milliman)

Prediction of the Amount of a Claim Using a Copula Model in Micro-Level Reserving

Olivier Lopez (Laboratoire de Statistique Théorique et Appliquée)

Modified Chain Ladder

Alois Gisler (ETH Zurich)

Granular Loss Modelling with Copulae

Michal Pesta (Charles University, Prague)

10.30 – 12.30

ASTIN

ASTIN Summer School

Aspects of Market-Consistent Valuation in Non-Life Insurance

- ★ Alexander McNeil (Professor of Actuarial Science, University of York)

10.30 – 12.30

LIFE • HEALTH

Looking at Concentration and Composition in the Life Insurance Context

- ★ Josée Kaulich-Bartz (Manager of Experience Studies & Analytics, Swiss Re)
- ★ Walter Olbricht (Professor, University of Bayreuth)

Modern Data Analytic Methods for the Prediction of German Disability Incidence Rates

- ★ Frank Schiller (Chief Actuary in Life and Health Reinsurance, Munich Re)

10.30 – 12.30

LIFE • AFIR/ERM PENSIONS

Probability of Sufficiency of the Risk Margin for Life Companies under IFRS 17

Eric Dal Moro (SCOR)

Igor Rudenko (SCOR)

Reserving for Life Insurance in a Low Interest Rate Environment – Additional Interest Provisions

Wolfgang Siegert (Allianz)

The Evolution of Yield Curves in a 2 Factor Hull White Model

Franziska Diez (Frauenhofer ITWM)

Ralf Korn (University of Kaiserslautern)

Maximum Technical Interest Rates in Life Insurance under Solvency II

Michael Pannenberg (HDI)

10.30 – 12.30

PENSIONS

PENSIONS/IVS Session on Employer's Accounting for Pensions

Employer Accounting for Pensions: Insurance Accounting vs. Employer Accounting under IFRS

Andreas Johannleweling (KPMG)

Valuation of Pension and Similar Obligations for the Purposes of a Corporate Transaction

Graham Pearce (Mercer)

Alternative Approaches for Unwinding the Discount –

With Particular Focus on Determining Interest Cost under US-GAAP and IFRS

Alfred E. Gohdes (Rentenberatung Gohdes)

Interest Rates: In Search of a "New Normal"

Rolf Ketzler (German Insurance Association)

A Markov-Chain-Type Approach for Pension Benefits

Rainer Berntzen (Gutachterbüro Karras)

10.30 – 12.30



PENSIONS • AFIR/ERM IACA

PENSIONS/IVS Session on Investment Strategies in Retirement and Product Design

The Retirement Income Frontier and Its Application in Constructing Investment Strategies at Retirement

John Anderson (Alexander Forbes)

Steven Empedocles (Sygnia Asset Management)

Personalizing ALM-Based Investment Strategies for Default DC Members

Brnic Van Wyk (QSuper)

Interrelations between Certain Regulatory Requirements, Investment Strategies and Security of Benefits in Occupational Pension Institutions (IORPs)

Stefan Nellshen (Bayer-Pensionskasse)

DC: Profiting Responsibly of Abandoning Guarantees – Risk-Bearing Investments in the Payout Phase: Method and Consequence

Ruud Smits (Aegon)

10.30 – 12.30



IACA • ASTIN

Big Data Analytics As an Opportunity for Fraud Management in the Insurance Sector

Oyugi Margaret Achieng (Resolution Insurance)

Estimation of Claim Amounts Using Bivariate Hidden Markov Models

- ★ A. Sevtap Kestel (Middle East Technical University)

Big Data Analytics, Mining your Catastrophe Claims Data for Competitive Advantage

- ★ Karen Clark (CEO of Karen Clark & Co.)

10.30 – 12.30

ACT. DATA SCIENCE

EDUCATION • IACA PROFESSIONALISM

Staying Fit: CPD and Life Long Learning Strategies

Life Long Learning in the IFoA

Chris Bristow (Institute and Faculty of Actuaries)

Joanne Buckle (Milliman)

CPD in South Africa

Tobe Hope (Hollard Health)

Mickey Lowther (Actuaries Mickey Lowther)

CPD in Spain

Rafael Moreno Ruiz (University of Málaga)

Followed by

Discussion on CPD on an International Level

10.30 – 12.30

Lunch

12.30 – 14.00

AFIR/ERM

Macro-Prudential Surveillance beyond Banking: Recent Developments and Perspectives

★ Benjamin Weigert (Director General, Deutsche Bundesbank)

IAA Risk Book

Sam Gutterman (self-employed)

Eberhard Müller (riskmueller consulting)

Dave Sandberg (Allianz)

Stuart Wason (former OSFI)

14.00 – 16.00

AFIR/ERM

AFIR/ERM/AAE Session

Limit Systems under Solvency II

Michael Klueggens (Willis Towers Watson)

Klaus-Peter Nischke (R+V, University of Dortmund)

An Analysis of the Solvency II Structure Regulatory Framework's Smith-Wilson Model for the Term Structure of Risk-Free Interest Rates

Peter Løchte Jørgensen (Aarhus University)

Robust Evaluation of Solvency Capital Requirement for Participating Life Insurances Under Solvency II

Donatien Hainaut (University of Louvain)

Panel Discussion: 2 Years of Solvency II from a European Point of View

Thomas Béhar (AAE)

14.00 – 16.00



AFIR/ERM

Architecture of Internal Models

Tigran Kalberer (Milliman)

Validation of Internal Models and Related Governance Aspects

Sandra Kurmann (Milliman)

Economic IRR and Its Application

Naoki Sunamoto (Fukoku Mutual Life)

Temporal Clustering and Renewal Processes in Empirical and Modelled Data

Stefan Reimann (Swiss Re)

14.00 – 16.00

ASTIN

ASTIN/DGVFM Day

Uncertainties

- ★ Paul Embrechts (Professor of Insurance Mathematics, ETH Zurich)
- ★ Alexander McNeil (Professor of Actuarial Science, University of York)

14.00 – 16.00



ASTIN • IACA

Back to the Future – Peer-To-Peer Start-Ups Rediscover the Roots of Insurance

Serhat Guven (Casualty Actuarial Society)

Evaluation Report of the ASTIN Working Party ANCRM

Magda Schiegl (University of Applied Sciences Landshut)

Will Asian Insurers Leapfrog the Global Insurance Industry?

Wesley Cui (Willis Towers Watson)

Karsten Wantia (Willis Towers Watson)

Decoding Machine Learning Algorithms

Tvisha Gupta (Ernst & Young)

Prabakar Rajasekaran (Ernst & Young)

Satraajeet Mukherjee (Ernst & Young)

14.00 – 16.00

ASTIN • EDUCATION



Pricing of Cyber Insurance Contracts in a Network Model

Matthias Fahrenwaldt (Heriot-Watt University)

Stefan Weber (Leibniz University of Hannover)

Kerstin Weske (Leibniz University of Hannover)

General Insurance Claims Modelling with Factor Collapsing and Bayesian Model Averaging

Sen Hu (University College Dublin)

Protection Against Accumulating Casualty Loss and Earnings Volatility Using a Structured Forward-Looking Approach on Quantifying Policy Clash

Salomon Billeter (Swiss Re)

Christian Wirtz (Swiss Re)

Randomly Indexed Central Order Statistics through Examples and Applications

Aneta Gacovska-Barandovska (Ss. Cyril and Methodius University, Skopje)

14.00 – 16.00

HEALTH • LIFE

A Universal Actuarial Model to Improve Health and Lower Costs

Ken Beckmann (Central States Indemnity)

Health Insurance and Prevention: Using Customer Behavior Study and Targeting in Order to Maximize the Effectiveness of Prevention Programs

Céline Blattner (ACTUARIS)

Jean-Louis Rulliere (ISFA, Lyon1 University)

Forecasting the Role of Lifestyle Factors on Lifespan with Severe Disability: A Simulation Approach in Healthy 50+ Adults Driven from the French National Hospital Discharge Database 2008-2013

Quentin Guibert (Institut de Science Financière et d'Assurances)

Frédéric Planchet (Institut de Science Financière et d'Assurances)

Role of Medical Advances in Population Longevity Improvement – A Case Study on Statins

Lisanne Gitsels (University of East Anglia)

14.00 – 16.00

LIFE • ASTIN PENSIONS

On Cash Flows Dependent on Investment Returns in Life and Pension Insurance

Kristian Buchardt (PFA Pension)

Thomas Møller (PFA Pension)

Longevity Bond Pricing in Equilibrium

Petar Jevtic (Arizona State University)

Unisex Tariffs: Equilibria, Social Welfare and Implications

Jörn Sass (University of Kaiserslautern)

Empirical Bayes Credibility for the Classic Markov Chain Life Insurance Setting

Christian Furrer (University of Copenhagen / PFA Pension)

14.00 – 16.00

LIFE • HEALTH

Friends with Benefits

Neil Parkin (RGA)

Why Insurance Works Better with Some Adverse Selection

Pradip Tapadar (University of Kent)

A Semi-Markov Model with Pathologies for Long-Term Care Insurance

Guillaume Biessy (SCOR)

Geospatial Analysis of Survival Models Applied to Mortality and Lapse Risks in Life Insurance

Fabian Agudelo Avila (Natixis Assurances)

14.00 – 16.00

PENSIONS

PENSIONS/IVS Session on Pure DC in Germany

DC in a DB Country

- ★ Heribert Karch (Managing Director, Metallrente)

Pure DC in Germany – Justification, Specification and Stakeholders' Feedback

Stefan Decking (Mercer)

Pure DC in Germany – How Does It Work?

Thomas Hagemann (Mercer)

Georg Thurnes (Aon Hewitt)

Pure DC in Germany – General Regulations and Implementation of Asset Management
Reiner Dietz (HQ Trust)

Comparison of New German Pure DC with DC Plans in Other Countries
Jürgen Fodor (Willis Towers Watson)

14.00 – 16.00



PENSIONS • LIFE

PENSIONS/IVS Session on New Pension Products



The Impact of Longevity and Investment Risk on a Portfolio of Life Insurance Liabilities
An Chen (Ulm University)

About Being Accurate for the Best Estimate: Product Designs for Participating Life Annuities
Sandy Bruszas (Goethe University Frankfurt)
Raimond Maurer (Goethe University Frankfurt)

Setting Up a New Corporate Pension Scheme with Sharing Risks: Japanese Case Study
Kosuke Yoshida (Institute of Actuaries of Japan)

Doubly Enhanced Annuities: A Potential Solution to the Annuity Puzzle
Colin Ramsay (University of Nebraska-Lincoln)

14.00 – 16.00



PROFESSIONALISM

ACT. DATA SCIENCE, BEH. INS. & CUST. CENT., DEMO. CHANGE, SUST. INSURANCE

Future of the Profession

Actuary 4.0
Peter Devlin (Deloitte)
Marcus von Hermann (Deloitte)

The Frog in the Water – The Future of the Actuarial Profession
Jules Gribble (International Association of Insurance Supervisors)
Lesley Traverso (Talent Insights)

The Robots are Coming: The Future of the Actuary
Caroline Bennet (Deloitte)
Marc Fakkell (Deloitte)
Nathan Pohle (Deloitte)
Darryl Wagner (Deloitte)

Developing an IAA Younger Actuaries' Toolkit
Chintan Gandhi (Aon Hewitt)

14.00 – 16.00

Coffee break

16.00 – 16.30

AFIR/ERM • ASTIN

Cyber Risk: Actuarial Economic Theory of Cyber Risk

- ★ Shaun Wang (Professor of Actuarial Science, Nanyang Technological University)

Information Security

- ★ Stephan Gerhager (Chief Information Security Officer, Allianz) *not yet confirmed*

16.30 – 18.30

AFIR/ERM

ACT. DATA SCIENCE, CAP. MARKETS

Stochastic Interest Rate Models in Valuation

Ingo Kraus (ERGO)

Model Calibration Using Overlapping Data

Stuart Jarvis (BlackRock)

Applying Neural Nets to Interest Rate Forecasting

Anna Knezevic (M&A Solutions)

Matthew Lightwood (Conning & Co.)

Predicting Long-Term Asset Returns Using Demographic Data

Jaideep Oberoi (University of Kent)

Algorithmic Differentiation – The Silver Bullet to Overcome the Post Solvency II Challenge

Sven Ludwig (FIS)

16.30 – 18.30

AFIR/ERM

A Statistical Perspective on Catastrophe Models

Mathias Raschke (R+V)

Climate Change and Mortality

Sam Gutterman (self-employed)

Actuaries Climate Index and SOA Climate Research

Dale Hall (Society of Actuaries)

Modelling the Frequency and Severity of Cyber Incidents

Christos Mitas (Risk Management Solutions)

16.30 – 18.30

ASTIN

Insurability of Non-Life Risks

Maria Heep-Altiner (Cologne University of Applied Science)

Actuarial and Risk Communication – An Introduction on How to Better Interact With Your Business Partners

Caroline Grégoire (CG4 Coaching)

The Determination of Optimal Prices for Insurance Products

Holger Theismann (Helvetia)

16.30 – 18.30

HEALTH • LIFE

ACT. DATA SCIENCE

Technology Changes – And How the Work of Actuaries is Becoming Even More Critical to the Insurance Industry

★ Jürgen Huschens (Industry Technical Leader, IBM)

An Overview of Enhanced Statistical Models Used in Healthcare Analysis with a Focus on Providers

★ Fabian Winter (Head of Health Analytics, Munich Re)

Predicting the Occurrence and Progression of Illnesses in Individuals

Daniela Rode (RISK-CONSULTING Prof. Dr. Weyer)

16.30 – 18.30

LIFE • PENSIONS

LIFE/DGVFM Day

Pension Saving Decision Making under Lifetime and Investment Uncertainty

- ★ Mogens Steffensen (Professor of Life Insurance Mathematics, University of Copenhagen)

GAUSS Prize Lecture of DAV and DGVFM

tba

16.30 – 18.30



LIFE • PENSIONS

Review of the German Annuity Table – Mathematical Methods and Actuarial Considerations

Franziska Foellmer (ERGO)

Johannes Lörper (DAV)

Latest in SOA Mortality Research

Dale Hall (Society of Actuaries)

Is the Party Over for Mortality Improvements?

Paul Murray (Swiss Re)

Home Equity Release for UK Seniors: A Twenty-First Century Product Design

Douglas Andrews (University of Waterloo)

16.30 – 18.30

PENSIONS

Risk, Risk Sharing and Sustainability

Assessing the Sustainability of the Canada Pension Plan through Actuarial Balance Sheets

Jean-Claude Ménard (OSFI)

Risk Index

Alexandre Allegrezza (Willis Towers Watson)

Christian Heiniger (Willis Towers Watson)

Risk Sharing for Public Pension Schemes Based on an Adapted Notional Defined Contribution System

Hélène Morsomme (University of Louvain)

A Study of Whole Life Annuity in Japan Utilizing “Risk-Sharing Corporate Pension”

Satoshi Fukumoto (Nippon Life)

16.30 – 18.30

PENSIONS • AFIR/ERM LIFE

DEMO. CHANGE

PENSIONS/IVS Session on Mortality and Longevity

An International Look at Recent Trends in Longevity – Where and Why is Life Expectancy

No Longer Increasing and What Impact Might Recent Longevity Trends Have?

Adrian Gallop (UK GAD)

Brian Ridsdale (IAA Mortality Working Group)

Mortality Development in Pensions – Data Basis, Models and Results in UK and Germany

Richard Herrmann (Heubeck)

Cathy Love Soper (Barnett Waddingham)

Development of Mortality Tables Covering Multinational Populations –
The Case of the UN Pension Fund
Stuart Schulman (Conduent HR Services)

Unraveling Relevant Risk Factors Explaining Pension Fund Mortality:
A Case Study in the Netherlands
Frank van Berkum (University of Amsterdam)

16.30 – 18.30



IACA • PROFESSIONALISM

BEH. INS. & CUST. CENT.

IACA Jubilee

Improving Actuarial Communication
Zachary Brown (Milliman)

A Toolbox for a Professional Communication with Non-Actuaries
Matthias Bonikowski (m}bonikowski)

The Actuary in the Courts
Ignacio del Barco Martinez (CPPS)

Outsourcing Actuarial Functions – Do's and Don't's'
Dieter Köhnlein (Roever Broenner Susat Mazars)
Michael Tripp (Mazars)

16.30 – 18.30



IACA

Young Researcher Award France

Mortality Tables Update Through Multi-Population Models. Application to Longevity Risk Transfer
and Shock Computation
Naoufal El Bekri (Institut des Actuaire)

Index-Based Solutions to Protect Income in the Agriculture & Agri-Food Industry – The Case of France
Victor Bouton (Institut des Actuaire)

Agricultural Insurance and Financial Arbitrage with Satellite Images
Pierrick Piette (Institut des Actuaire)

Modelling of Drought-Induced Subsidence and Consequential Building Damages in France
Jana Friederike Sculte (Institut des Actuaire)

Johan de Witt-Prize tba

Actuaris van het Jaar People are No Numbers, But Numbers Can Describe People Dirk Jonker (Crunchr)

16.30 – 18.30



AFIR/ERM

DEMO. CHANGE



Basis Risk in Index Based Longevity Hedges: A Guide for Longevity Hedgers
Andrew Cairns (Heriot-Watt University)



A Class of Random Field Memory Models for Mortality Forecasting
Yahia Salhi (Claude Bernard Lyon 1 University)

The Implications of Mortality Heterogeneity on Longevity Sharing Retirement Income Products
Andres Villegas (UNSW Sydney)

Market Price of Longevity Risk for a Multi-Cohort Mortality Model with Application to Longevity Bond Option Pricing
Jonathan Ziveyi (UNSW Sydney)

Conditions of Interest of a Longevity Megafund for Pension Funds
Edouard Debonneuil (Institut de Science Financière et d'Assurances)
Frédéric Planchet (Institut de Science Financière et d'Assurances)

8.30 – 10.30

AFIR/ERM

AFIR/ERM/EAJ Session

The European Actuarial Journal
Ralf Korn (University of Kaiserslautern)

Perspectives on Bridging Actuarial Theory and Practice



Hansjörg Albrecher (Professor of Actuarial Science at University of Lausanne)



Neural Networks Applied to Chain-Ladder Reserving
Mario V. Wüthrich (ETH Zurich)

8.30 – 10.30



AFIR/ERM

Scenario-Based Capital Requirements for the Interest Rate Risk of Insurance Companies
Sebastian Schlütter (University of Applied Sciences Mainz)

Potential Macroprudential Instruments in Insurance Supervision to Address Systemic Risk – State of the Regulatory Discussion in the IAIS and EIOPA

Stefan Andresen (Federal Financial Supervisory Authority, BaFin)

Johannes Bartels (Insurance and Pension Funds Supervision, Federal Financial Supervisory Authority, BaFin)

Impact of Solvency II on Governance Structures and Business Strategy: Experiences and Outlook
Oliver Faulhaber (SV SparkassenVersicherung)

Earthquake Catastrophe Risk Management
Gayane Arsenyan (Central Bank of Armenia)
Armen Vardanyan (Central Bank of Armenia)

Preparing Financial Regulation for the Next Crises
Eckhard Platen (University of Technology Sydney)

8.30 – 10.30

AFIR/ERM

Multi-Year Analysis of Solvency Capital in Life Insurance
Karen Tanja Rödel (Ulm University)

Risk Analysis of Annuity Conversion Options with a Special Focus on Decomposing Risk

Alexander Kling (Institute for Finance and Actuarial Sciences, ifa Ulm)

Katja Schilling (Allianz)

An Evaluation of Withdrawal Benefits in Variable Annuities via Machine Learning

Hongjun Ha (Saint Joseph's University, Philadelphia)

The Life Cycle Model with Recursive Utility: Defined Benefit vs. Defined Contribution

Knut Kristian Aase (Norwegian School of Economics)

8.30 – 10.30

ASTIN

Modelling Clusters of Extremes

Johanna Genest Neslehova (McGill University, Montreal)

Advanced Modelling for Flood Insurance in Europe

Laurent Marescot (Risk Management Solutions)

NatCat Modelling

Yörn Tatge (AIR Worldwide)

8.30 – 10.30

ASTIN • AFIR/ERM LIFE

ACT. DATA SCIENCE

Machine Learning vs. Actuarial Methods in Claim Prediction

Friedrich Loser (Techniker Krankenkasse)

Fatal Shock Models in Large Dimensions

Matthias Scherer (Technical University of Munich)

Fuzzy Demographic Robust Analysis Using Fuzzy Regression Clustering –

A Case on the Impact of Demographic Factors on Stock Market in Canada

Soheyl Sadinejad (Sadi-Nezhad) (University of Waterloo)

Actuarial Challenges in an Insurtec

Dieter Kiesenbauer (FRI:DAY)

8.30 – 10.30

HEALTH

Medical Inflation and Health Insurance

- ★ J.-Matthias Graf von der Schulenburg (Director, Institute for Risk and Insurance at University of Hannover)

The Medicalization Hypothesis, Drug Related Expenses and the Demographic Change

Christian O. Jacke (Scientific Institute of Private Health Insurance Association)

- ★ Frank Wild (Director, Scientific Institute of the Private Health Insurance)

Predicting Survival of Patients in Hospice Using Time-Dependent Survival Models

Ian Duncan (University of California Santa Barbara)

8.30 – 10.30

LIFE • HEALTH

Securities Lending in Insurance

- ★ Enrico Biffis (Associate Professor of Actuarial Finance, Imperial College Business School London)

Different Benefit Triggers and Their Impact on Long-Term Care Life Insurances

- ★ Thorsten Hiester (Senior Actuarial Analyst, Allianz)

8.30 – 10.30

PENSIONS

Pension Systems for International Organizations

United Nations Joint Staff Pension Fund

Carolyn Kaiser (Chief Risk Management and Technical Services at United Nations Joint Staff Pensions Fund)

- ★ Denis Latulippe (Laval University Québec and Chairman of the Committee of Actuaries of the United Nations Joint Staff Pensions Fund)

Panel Discussion

Peter Devlin (Deloitte)

- ★ Gurvan Le Guern (European Patent Office)

Moderation: Alfred E. Gohdes (Rentenberatung Gohdes)

8.30 – 10.30

IACA • PENSIONS

Pension Splitting on Break-Down of Marriage-Like Relationships

Korbinian Meindl (Neuburger & Partner)

Low Investment Returns and the Expected Impact on Retirement Savings –

How the Low Investment Return Expectations Impact the Retirement Savings Planning

Alfred E. Gohdes (Rentenberatung Gohdes)

Making Retirement Income Last a Lifetime

Ted Goldman (American Academy of Actuaries)

Ken Hohmann (American Academy of Actuaries)

Martin Stevenson (Actuaries Institute Australia)

Target Benefits – A Bold Innovation in Pension Plan Design

Randy Bauslaugh (McCarthy Tétrault)

8.30 – 10.30

PROFESSIONALISM

Ethics, Standards and Emerging Fields

Ethics, Standards and Regulations – Where are We Heading?

Hillevi Mannonen (AAE Standards Project)

Godfrey Perrott (IAA Actuarial Standards Committee)

tba

Moderation: Birgit Kaiser (DAV)

Working Alone in Non-Standard Areas Away from your Home Country –

What Does “Professionalism” Mean in Practice?

Simon Brimblecombe (International Social Security Association)

Serving the Public through Self-Regulation in the United States

Cecil Bykerk (American Academy of Actuaries)

8.30 – 10.30

EDUCATION • IACA PROFESSIONALISM

New Standards in the Actuarial Qualification

The New IAA Syllabus

Andrew Gladwin (Old Mutual)

The Certified Actuarial Analyst Qualification

Clifford Friend (Institute and Faculty of Actuaries)

The New AAE Syllabus for Actuarial Qualification

tba

8.30 – 10.30

Coffee break

10.30 – 11.00

PLENARY SESSION IV

Future of Mobility

- ★ Alexander Sixt (Member of the Executive Board (CAO), Sixt)
- ★ Frank Sommerfeld (Member of the Board of Management, Allianz)
- ★ Moderation: Bernhard Lang (Member of Board of Directors, msg systems)

11.00 – 12.30

Lunch Box

12.30 – 13.00

FIELD TRIPS THROUGH BERLIN


Available tours:

- Highlights of Berlin
- Berlin by Bus and Boat
- Jewish Heritage Tour
- History of Berlin
- Berlin – its Hidden Places
- Modern Architecture in Berlin

or alternatively **LIMITED ATTENDANCE EXPERIENCES (sponsored by SCOR)**

ASTIN

From Big Data to Big Information – Obstacles, Traps and Opportunities

- ★ Göran Kauermann (Professor, Ludwig-Maximilian University of Munich)
Feuersozietät – kindly provided by  FEUERSOZIETÄT

ASTIN

The P&C Actuary Using Data Science – Business Cases for Data Science Within P&C Companies

- ★ René Billing (Head of Pricing Non-Life, HDI)
- ★ Frank Schönfelder (Senior Manager Actuarial Services, PwC)
German Museum of Technology

HEALTH • LIFE PENSIONS

How Shared Value Insurance Works

- ★ Emile Stipp (Chief Health Actuary, Discovery)

Vitality Shared Value Insurance: A New Insurance Product Category

Karen Salmon (Vitality Group)

Ottobock Science Center

LIFE • ASTIN HEALTH

Epidemic Risk Solutions – Laying Pricing Foundations for an Emerging New Market Segment

- ★ Gunther Kraut (Head of Epidemic Risk Solutions, Munich Re)
Berlin Museum of Medical History at the Charité – The Lecture Hall Ruin

PENSIONS • IACA

New Products in Occupational Pension Systems II

Intergenerational Fairness in a CDC Pension System

- ★ Oskar Goecke (Professor, Cologne University of Applied Sciences)
Moderation: Alfred E. Gohdes (Rentenberatung Gohdes)
Allianz Stiftungsforum

IACA

Digitalisation – A Challenge for an Actuary?

- ★ Klaus-Dieter Engelhardt (Managing Director, Neuburger und Partner)
- ★ Ferdinand Helmer (Partner, Neuburger und Partner)
Museum for Communication

13.00 – 17.30

SCOR
The Art & Science of Risk

STAYING IN TOUCH: FAREWELL EVENT „TRADITIONAL FUNFAIR“

Kalkscheune

19.30 – 24.00

AFIR/ERM • ASTIN

Expectiles, Omega Ratios and Stochastic Dominance
Alfred Müller (University of Siegen)

Solutions to Biometric, Mortality and Longevity Risks

- ★ Stéphane Loisel (Professor at ISFA, Claude Bernard Lyon 1 University)

Managing Risk and Uncertainty at Munich Re

- ★ Bernhard Kaufmann (Group Chief Risk Officer, Munich Re)

8.30 – 10.30

AFIR/ERM

Bob Alting von Geusau Prize

- 🏆 Consistent Yield Curve Prediction

Josef Teichmann (Professor, ETH Zurich)

Mario V. Wüthrich (Professor, ETH Zurich)

Behavioral Characteristics of a Unique Group of Individuals

Loïc Berger (IÉSEG School of Management)

Part of the Problem or Part of the Solution – Are Actuaries Carbon Neutral?

Esko Kivisaari (Finance Finland)

8.30 – 10.30



AFIR/ERM

Adverse Selection in Secondary Insurance Markets: Evidence from the Life Settlement Market

Jochen Russ (Institute for Finance and Actuarial Sciences, ifa Ulm)

As You like It: Explaining the Demand for Life-Cycle Funds with Multi Cumulative Prospect Theory

Stefan Schelling (Ulm University)

Financial Literacy and Demand of Life Insurance across Europe

Christiana Sintou (University of Glasgow)

Why the Deferred Annuity Makes Sense

Anran Chen (Cass Business School)

8.30 – 10.30

ASTIN

A Generalized Loss Ratio Method Dealing with Uncertain Volume Measures

Ulrich Riegel (Munich Re)

Valuation of Non-Life Liabilities from Claims Triangles

Mathias Lindholm (Stockholm University)

Reserving 4.0 – A Vision of Real-Time Reserving

Marcel Wiedemann (Esslingen University of Applied Sciences)

Capital Relief Criteria Derivation for Comparing the Economic Efficiency of Reinsurance Risk Transfer Instruments

Guillaume Ominetti (SCOR)

Benjamin Schannes (Mercer)

8.30 – 10.30

ACT. DATA SCIENCE

ASTIN • EDUCATION

Integrating Core Non-Life Actuarial Activities by Incorporating Individual Policy Risk

Yoeri Arnoldus (Deloitte)

Jurjen Boog (Deloitte)

Application of Classical Reserving Techniques alongside Machine Learning Algorithms and Big Data

Kajal Mittal (Ernst & Young)

Satraajeet Mukherjee (Ernst & Young)

Anushree Vijayaraghavan (Ernst & Young)

Excess Frequency Fitting for Long Tailed Risks

Markus Knecht (Exin Re)

ASTIN General Meeting and Closing Ceremony

8.30 – 10.30



HEALTH

Optional Covers in German Public Health Insurance

- ★ Hanno Reich (Head of the Life and Health Actuarial Practice, KPMG)

Approaches to Capital Requirements in Health Insurance

- ★ Hanno Reich (Head of the Life and Health Actuarial Practice, KPMG)

Results of the 3rd High Cost Claims Analysis of Phi in Germany

Jürgen Fischer (Munich Re)

Alternative Funding Models for High Cost Health Technologies

Joanne Buckle (Milliman)

Didier Serre (Milliman)

8.30 – 10.30

LIFE • HEALTH

Future Diagnostics – What Impacts Will Liquid Biopsy and Other Imaging Techniques Have on the Sustainability of Living Benefit Products? Is a Fundamental Rethink Required?

Natalie Kelly (Swiss Re)

Lawrence Tsui (Swiss Re)

Genomics, Personalized Medicine and Insurance

- ★ Emile Stipp (Chief Health Actuary, Discovery)

Super-Healthy Lives: Implications for Mortality Rating and Longevity Improvements

Tim Crayford (Just)

Matthew Edwards (Willis Towers Watson)

Validation and Estimation of Actuarial Assumptions in Life and Health Insurance

Jonas Hirz (BELTIOS)

8.30 – 10.30

LIFE

ACT. DATA SCIENCE

Genetics and Life Insurance

Jessica Chen (Westpac Banking Corporation)

Damjan Vukcevic (University of Melbourne)

The Importance of Genetics on Mortality and Morbidity Risk, in the Presence of Detailed Health and Lifestyle Data – A Study based on Half a Million Lives in the UK Biobank Cohort

Peter Banthorpe (RGA)

Cathryn Lewis (King's College London)

8.30 – 10.30



LIFE • AFIR/ERM HEALTH PENSIONS

Long-Term Drivers of Future Mortality
Allen Klein (Milliman)

On the Integration of Deterministic Opinions into Mortality Projection Models
Viani A. Djeundje Biatat (University of Edinburgh)

Stochastic Mortality in a Levy Process Framework and Application to Longevity Products
Pierre Devolder (Catholic University of Louvain)

How Big an Impact does Socio-Economic Status have on Cause of Death Rates?
Andrew Cairns (Heriot-Watt University)

8.30 – 10.30

PENSIONS

Risk Management and Solvency

Hedging Retirement Longevity: Tontines vs. Annuities
Moshe Milevsky (York University)

The Impact of Risk Classification in Life & Pension under Solvency II:
An Analysis of Underwriting Risk, Underwriting Costs and Classification Systems
Alexander Bohnert (University of Erlangen-Nuremberg)

Biometric Risks in Pension Block Portefeuilles
Andrea Staehr (Hannover Re)
Sven Wiesinger (Hannover Re)

Examining Pension Plan Risk in an Economic Capital Framework
Douglas Andrews (University of Waterloo)
Pradip Tapadar (University of Kent)

8.30 – 10.30

PENSIONS

SUST. INSURANCE

Social Security and Sustainability

Using the World Bank Criteria to Assess Six Countries' Pension Systems
Carmen Boado (University of Liverpool)
Adam Poulson (Barnett Waddington)
Radhika Ravi (Willis Towers Watson)
Amrit Summan (Moody's)

Resetting the Age of Eligibility for Social Security
Shantel Aris (University of Waterloo)

What are the Effects of Population Aging on the Pension Systems in Brazil, Spain and France?
Luis Eduardo Afonso (University of São Paulo)

Determination of Retirement and Eligibility Ages: Actuarial, Social and Economic Impacts
Assia Billig (IAA Population Issues Working Group, Office of the Superintendent of Financial Institutions)

8.30 – 10.30

IACA • ASTIN LIFE PENSIONS

ACT. DATA SCIENCE

History of Economic Scenario Generators
Parit Jakhria (Prudential)

Optimal Level and Allocation of Cybersecurity Spending: Model and Formula
Shaun Wang (Nanyang Technological University)

Actuarial Data Science versus Data Protection – Update Against the Background of the General Data Protection Regulation

Stefan Nörtemann (msg life central europe)

Blockchain – A New Technology with High Impact on Insurance?

Mathias Ott (HBA-Consulting)

8.30 – 10.30

Coffee break

10.30 – 11.00

PLENARY SESSION V

Future of Regulation

- ★ Gabriel Bernardino (Chairman of the European Insurance and Occupational Pensions Authority, EIOPA)
- ★ Yannick Hausmann (Group General Counsel, Zurich Insurance Group)
- ★ Felix Hufeld (President of the German Federal Financial Supervisory Authority, BaFin)
- ★ Patrick Raaflaub (Group Chief Risk Officer and Member of the Group Executive Committee, Swiss Re)
- ★ Victoria Saporta (Executive Director of Prudential Policy Directorate, Bank of England)
- ★ Moderation: Nils Dennstedt (Partner Deloitte, B&W Deloitte)

11.00 – 12.30

Passing the Baton on to Sydney

12.30 – 13.00

Lunch

13.00 – 14.00

SELECTED INTENSIFIED BREAKOUT SESSIONS

ASTIN

IBNR Robot – An Actuarial Application on Artificial Intelligence

Shu Yi Lim (Nicholas Actuarial Solutions)

Nicholas Chee Lek Yeo (Nicholas Actuarial Solutions)

Multi-Year Non-Life Insurance Risk – A Case Study

Lukas Hahn (Ulm University, Institute for Finance and Actuarial Sciences, ifa Ulm)

Marc Linde (BELTIOS)

Marine Insurance Trends – Challenges and Opportunities for Actuaries

Astrid Seltmann (Nordic Association of Marine Insurers (Cefor))

Analyzing the Disconnect between the Reinsurance Submission and Global Underwriters' Needs

John Buchanan (Verisk / ISO)

14.00 – 16.00

HEALTH • LIFE

ACT. DATA SCIENCE

Pre-Funding Healthcare Benefits after Retirement

Ibrahim Muhanna (i.e. Muhanna & Co)

An Analytical Framework for Medical Trends and Potential Mitigations

- ★ Stephen Bishop (Head of the Health Corporate Underwriting Department, Munich Re)

Health Actuaries and Big Data

Ian Duncan (University of California Santa Barbara)

Application of Machine Learning in Health Insurance to Reduce Claims Leakage and Improve Underwriting

Kajal Mittal (Ernst & Young)

Satraajeet Mukherjee (Ernst & Young)

Anushree Vijayaraghavan (Ernst & Young)

14.00 – 16.00

HEALTH • LIFE

Capital Funding versus Pay-As-You-Go in Long-Term Care Financing

Christine Arentz (Scientific Institute of Private Health Insurance Association)

★ Frank Wild (Director, Scientific Institute of the Private Health Insurance)

Long-Term Care Reform in Germany – At Long Last

Sabrina Link (Gen Re)

Planning Model for the Training of Medical Specialists for the Care of Old Age

Carlos Contreras Cruz (Inter-American Center for Social Security Studies)

Long-Term Care: An Actuarial Perspective on Societal and Personal Challenges

Sam Guttermann (Self-employed)

14.00 – 16.00

LIFE • HEALTH PENSIONS

Extension, Compression and Beyond – A Unique Classification System for Mortality Evolution Patterns

Martin Genz (Ulm University and Institute for Finance and Actuarial Sciences, ifa Ulm)

Modelling Old Age Mortality Rates: An Extrapolation Method Based on the Mode and the Compression of Mortality

Santiago Fiallos (PwC)

Vincent Gibrais (PwC)

Vincent Noel (PwC)

A New Toolkit for Mortality Data Analytics

Sarah Krömer (University of Erlangen-Nuremberg)

A Set of New Stochastic Trend Models

Johannes Schupp (Ulm University and Institute for Finance and Actuarial Sciences, ifa Ulm)

14.00 – 16.00

PENSIONS

Risk Management and Sustainability

Retirement – A New Frontier of the over 80s Market

Jules Gribble (International Association of Insurance Supervisors)

Cary Helenius (Equity Risk Management)

Financial Sustainability of the Algerian Retirement System: A Perspective Analysis of the 50 Upcoming Years

Farid Flici (Centre for Research in Applied Economics for Development CREAD)

20 Years after the Pension Reform

Carmen Fernandez (Mexican Social Security Institute)

Risk Management for Annuity by Longevity Bond and Longevity Swaps

Tadashi Uratani (Hosei University)

14.00 – 16.00

PENSIONS

Aspects of Retirement

A Coverage Factor for Managing Elderly Pension Benefits

Iñaki De La Peña (University of the Basque Country)

On the Discount Rate of the Defined Benefit Plans

Mitsuko Nakajima (Mitsubishi UFJ Trust and Banking)

Communicating Longevity Risk to the Public

Ted Goldman (American Academy of Actuaries)

Andrew Peterson (Society of Actuaries)

Quantifying Longevity Risk in Annuities by Means of the Generalized Age-Period-Cohort Model

Peter Vekas (Corvinus University of Budapest)

14.00 – 16.00

IACA • AFIR/ERM LIFE PENSIONS

Integrated Risk Management in Practice

Marian Elliott (Institute and Faculty of Actuaries, Deloitte)

Lessons Learnt from the Ongoing IFRS 17 Implementation in Asia-Pacific

Steve Cheung (Ernst & Young)

Banking Actuaries: The South African Experience

Michael Tichareva (National Standard)

The Impact of Public Pensions and Health Care on Fiscal Sustainability on

Small Island Developing States in the Caribbean

Ravi Rambarran (Sagicor Financial Corporation)

14.00 – 16.00

PROFESSIONALISM

ACT. DATA SCIENCE

Panel Discussion on: The Role of Actuarial Associations in Data Sciences

Thomas Béhar (President AAE, Institut des Actuaire)

Bob Beuerlein (President, American Academy of Actuaries)

Esko Kivisaari (IAA Big Data Working Group)

Stephen Lowe (Casualty Actuarial Society)

tba

14.00 – 16.00

EDUCATION • IACA PROFESSIONALISM

Development of Next-Generation-Actuaries; Inclusion of the DGVFM and International Associations

Jenni Hughes (Institute and Faculty of Actuaries)

Régis de Larouillère (Institut des Actuaire)

Thomas Adrian Schmidt (HDI)

Jochen Wolf (University of Applied Sciences Koblenz)

14.00 – 16.00

Platinum



Gold



Silver



Bronze





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