



PROGRAMME OUTLINE:

DAY 1 – MONDAY, 1 APRIL 2019	
13:00 – 19:00	Registration Open (Strelitzia Conservatory)
14:00 – 17:00	IAALS Board Meeting (Meeting Suite 1.54)
15:00 – 18:00	PBSS Board Meeting (Meeting Suite 1.55)
18:00 – 19:30	IACA / PBSS / IAALS Welcome Reception (Strelitzia / Jasminium)



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PROGRAMME OUTLINE:

DAY 2 – TUESDAY, 2 APRIL 2019				
07:30 – 18:00	Registration Open (Strelitzia Conservatory)			
08:30 – 08:45	Pensions (PBSS) Colloquium & Seminar Opening Ceremony	Life (IAALS) Opening Ceremony	08:30-09:45 ASTIN Workshop – Pricing	
08:45 – 09:45	Pensions (PBSS) Plenary – Keynote Speaker (Emma Sadlier)	Life (IAALS) Session 1		
		08:45-09:15 56 - Future Actuary - Data scientist, coder, business leader, entrepreneur... (Louis Rossouw, South Africa) 09:15-09:45 15 - A Neural Network Extension of the Lee-Carter Model to Multiple Populations (Ronald Richman, South Africa)		
09:45 – 10:15	Refreshment Break			
10:15 – 11:45	Pensions (PBSS) Session 1	Life (IAALS) Session 2	IACA Opening plenary and Diversity seminar	ASTIN Workshop – Pricing
	10:15-10:45 24 - A goals-based investment framework for defined-contribution retirement funds (Shaun Levitan, South Africa) 10:45-11:15 44 - Operationalising Individualised Defined Contribution Investment	10:15-11:00 92 - Impaired Lives Insurability: Dawn of a new era (Taurayi Chinowona, South Africa) 11:00 -11:45 102 - Declining mortality improvements - the UK story (Aisling Kennedy, UK)		



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	Strategies (Brnic van Wyk, Australia)			
	11:15-11:45 80 - NDC Schemes and Heterogeneity in Longevity: Proposals for Redesign (Jennifer Alonso-García, The Netherlands)			
11:45-12:00	Transition Time			
12:00 – 13:30	Pensions (PBSS) Session 2 12:00-12:30 62 - Minimum Pension and Longevity Risk: A Solution for Notional Defined Contribution Pension Schemes (Séverine Arnold, Switzerland) 12:30-13:00 65 - The way of the corporate pension design from the viewpoint of risk sharing among employees and employers in the longevity society (Yohei Noda, Japan)	Life (IAALS) Session 3 12:00-12:45 27 -A Stochastic Investment Model for South African Use (Şule Şahin, UK)	Consulting (IACA) Session 1 and Diversity seminar	ASTIN Workshop – Pricing



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	13:00-13:30 131- Exploring the impact of behavioural science on the persistency and profitability of voluntary retirement savings in the retail sector. (Nathea Nicolay)	12:45-13:30 136- Projecting Longevity and Mortality Using Stochastic Models. (Marc Slutzky)				
13:30 – 14:30	Lunch Break (Strelitzia / Jasminium)					
14:30 – 16:00	Pensions (PBSS) Session 3 14:30-15:00 105 - Professionalising actuarial advice to Defined Contribution Arrangements (Costa Economou, South Africa) Professionalism 1 Professionalism 2	Life (IAALS) Session 4 14:30-15:15 53 - PARS, Machine learning for valuation steering (Alexandre Allegrezza, Switzerland) 15:15-16:00 110 - Unleashing the force of Predictive Claims Analytics in Insurance (Shreya Seti, India)	Consulting (IACA) Session 2 14:30-16:00 137-United Nations Sustainable Development Goal (Marjorie Ngwenya and Ken Buffin)	ASTIN Workshop – Reserving	IAAHS Committee Meeting	ASTIN Committee Meeting
16:00 – 16:30	Refreshment Break					



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	(Strelitzia / Jasminium)				
16:30 – 18:00	Pensions (PBSS) Session 4 & Seminar Closing	Life (IAALS) Session 5	Consulting (IACA) Session 3	ASTIN Workshop – Reserving	ASTIN Committee Meeting
	16:30-17:15 130- De-Risking (Abraham Hernández, Portugal)	16:30-17:15 90 - African Economic Basis Survey (Morne de Vos, South Africa)	16:30 – 18:00 Public policy (Tim Vierya, Sherry Chan and TBC)		
	17:15-18:00 34 - Defined Benefit Pension Plan Funding and the Role of Actuaries (Charles Cowling, UK)	17:15-18:00 98 - Practical Issues in Applying IFRS 17 in Developing Countries (Kyle Rudden, Trinidad & Tobago)			
18:00 – 18:15	Transition Time				
18:15 – 19:30	ASTIN / IAAHS Welcome Reception				

PROGRAMME OUTLINE:

DAY 3 – WEDNESDAY, 3 APRIL 2019						
07:30 – 18:00	Registration Open					
08:30 – 08:45	IAALS / ASTIN Opening Ceremony					
08:45 – 09:45	Joint Plenary Session – Keynote Speaker					
09:45 – 10:15	Refreshment Break (Strelitzia / Jasminium)					
10:15 – 11:45	Life (IAALS) Session 6 10:15-10:45 71 - The Actuary at the Kraal (Zandile Gobe, South Africa)	Pensions (PBSS) Session 4 10:15-10:45 41 - Risk Index (Alexandre Allegrezza, Switzerland) OR 42 - Mortality Study of the Swiss Banking Industry (Alexandre Allegrezza, Switzerland)	Pensions (PBSS) Session 5 10:15-10:45 66 - Measuring Pension Plan Risk from an Economic Capital Perspective (Aniketh Pittea, UK)	Health (IAAHS) Session 1 10:15-11:00 18 - The modern actuary in healthcare – how can we help public healthcare systems under strain? (Tanya Hayward, UK)	Non-Life (ASTIN) Session 1 10:15-10:45 2 - AI in Actuarial Science (Ronald Richman, South Africa)	Non-Life (ASTIN) Session 2 10:15-10:45 28 - From the Chain Ladder to Individual Claims Reserving using Machine Learning techniques (Alessandro Carrato, Germany)



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	<p>10:45-11:15 70 - An Evaluation Of Machine Learning Techniques On South African Accidental Mortality Data (Rendani Mbuva, South Africa)</p>	<p>10:45-11:15 73 - Desirable structure of DC Governance in Japan (Bui Nagashima, Japan)</p>	<p>10:45-11:15 74 - Consideration on fairness among generations of "Risk Sharing Corporate Pension" in Japan (Satoshi Fukumoto, Japan)</p>	<p>11:00-11:45 115 - Pre-funding of Healthcare Benefits After Retirement (Ibrahim Muhanna, Lebanon)</p>	<p>10:45-11:15 20 - Unravelling black box machine learning technique predictions using biplots (Adriaan Rowan, South Africa)</p>	<p>10:45-11:15 88 - Big Data Analytics as an opportunity for Fraud Management in the Insurance Sector (John Olukuru, Kenya)</p>
	<p>11:15-11:45 57 - The Journey Through the Line (Louis Rossouw, South Africa)</p>	<p>11:15-11:45</p>	<p>11:15-11:45 100 - Good and bad of the Automatic Balancing Mechanism of Japan's Public Pension Plans (Nobuhiro Shimizu, Japan)</p>		<p>11:15-12:15 ASTIN AGM</p>	<p>11:15-12:15 Consulting (IACA) Session 4</p>
11:45 – 12:15		PBSS AGM		IAAHS AGM		
12:15 – 13:15	Lunch Break (Strelitzia / Jasminium)					
	Life (IAALS) Session 7	Social Afternoon / Tour				



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13:15 – 14:45	Professionalism 1 Professionalism 2 Professionalism 3	ASTIN / PBSS / IAAHS
14:45 – 15:15	Refreshment Break (Strelitiza / Jasminium)	
15:15 – 16:45	Life (IAALS) Session 8 & Seminar Closing 15:15-16:00 25 - A critical evaluation of the justification of discrimination in risk underwriting in the life insurance industry in South Africa (Andries Francois Marais, South Africa) 16:00-16:45 124- Dynamic Risk Assessment (Katie Henry)	
17:30 – 18:00	IAALS AGM	
19:30 – late	Gala Dinner for all sections GOLD Restaurant	



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PROGRAMME OUTLINE:

DAY 4 – THURSDAY, 4 APRIL 2019					
07:30 – 18:00	Registration Open (Strelitzia Conservatory)				
08:30 – 08:45	Non-Life (ASTIN) – Seminar Opening	Life (IAALS) Session 9	Health (IAAHS) Session 2	Pensions (PBSS) Session 6	Pensions (PBSS) Session 7
08:45 – 09:45	Non-Life (ASTIN) – Plenary Session – Keynote Speaker (Arthur Goldstuck)	08:45-09:15 3 - Life reserving portfolio by using mixed-Methods (Balde Alpha Mamoudou, Guinea)	08:45-09:45 29 – Role of the Health Care Actuary – Panel Discussion (Adrian Baskir – UK)	08:45-09:45 11 - Actuaries & Market Conduct: A retrospective and prospective view (Peter Johnstone, South Africa)	08:45-09:15 49 - Investigation of Pension Buy-out Price in a Markovian Setting (Ayse Arik, UK)
		09:15-09:45 39 - Forward transition rates (Mogens Steffensen, Denmark)			09:15-09:45 82 - Solvency Analysis of Deferred Annuities (Khadija Gasimova, UK)
09:45 – 10:15	Refreshment Break (Strelitzia / Jasminium)				



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10:15 – 11:45	Non-Life (ASTIN) Session 3	Life (IAALS) Session 10	Life (IAALS) Session 11	Health (IAAHS) Session 3	Pensions (PBSS) Session 8	Pensions (PBSS) Session 9
	10:15-10:45 7 - A Fuzzy Least Squares Estimation of a Hybrid log-Poisson Regression and its Goodness of Fit for Loss Reserves in Insurance (Woundjiague Apollinaire, Kenya)	10:15-10:45	10:15-10:45 50- The Actuary's Duty to the Public Interest(Simon Louw, South Africa)	10:15-11:00 30 – Anti-selection in Health Insurance (Roseanne Harris, SA)	10:15-10:45 47 - Pension, Benefits and Social Security Scenario in Bangladesh (M. Ahsanul Haq, Bangladesh)	10:15-10:45 17 - A new notional defined contribution system for public pension schemes based on risk sharing (Hélène Morsomme, Belgium)
	10:45-11:15 9 - Impact of an aggregation tree over the skewness of the final risk distribution (Eric Dal Moro, Switzerland)	10:45-11:15 109 - Machine Learning for Experience Studies in Life Insurance (Shreya Seti, EY)	10:45-11:15 64- Growing Insurance Challenges Emerging Markets with a focus on Africa(Jean Gerin, South Africa)	11:00-11:45 95 - Impact of improved lifestyle on management of chronic disease - can Type 2 Diabetes Mellitus be reversed? (Sarah Bennett – SA)	10:45-11:15 48 - A new proposal for the secondary pension in Greece (Georgios Symeonidis, Greece)	10:45-11:15 23 - The Importance of Internal Actuarial Governance (Edmond Vigoureux, South Africa)
	11:15-11:45 55 - Consistent Development Patterns (Walther Neuhaus, Portugal)	11:15-11:45 121 - Generalized Binomial Estimator: a bridge between Actuarial Science and Data Science	11:15-11:45 108- Insurance companies and their ethics as reflected in their public dealing		11:15-11:45 85 - An Analysis of Solvency and Sustainability of the United States Social Security System (Kenneth	11:15-11:45 114 - The Modern Actuary and Self-Regulation of the Professions: The US Model (Cecil



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		(Romain Meridoux, France)	(Tanya Gupta, India)		Buffin, United States of America)	Bykerk, United States of America)
11:45-12:00	Transition Time					



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12:00 – 13:30	Non-Life (ASTIN) Session 4	Life (IAALS) Session 12	Consulting (IACA) Session 5	Health (IAAHS) Session 4	Pensions (PBSS) Session 10	Pensions (PBSS) Session 11
	12:00-12:30 13 - Predictive analytics of insurance claims using multivariate decision trees (Emiliano Valdez, United States of America)	12:00-12:45 59 - The Value of With-Profits to Consumers (Rosalind Rossouw, UK)	12:00 – 13:30 Essence of Communication – Honing consulting skills (Caroline Gregoire, Tim Vieyra, Vincent Heys)	12:00-12:45 135- Aligning incentives: value-based purchasing of primary care (Shivani Ranchod, SA)	12:00-12:30 96 - Pension System in Algeria : a way of reform (Farid Flici, Algeria)	12:00-12:30 72 - Mortality by socio-economic class and its impact on the retirement schemes: How to render the systems fairer? (Anca Jijiie, Switzerland)
	12:30-13:00 21 - Modeling risks with cellular automata (Frank Cuypers, Switzerland)	12:45-13:30 84 - Capital Optimisation for Shareholder Value Generation (Idelia Hoberg, South Africa)		12:45-13:30 140- Population Health Management - an international perspective (Kevin Manning, Ireland)	12:30-13:00 106 - Spanish CDC models, is it the solution to DC and DB problems? (Ignacio Del Barco, Spain)	12:30-13:00 76 - How does a fixed career length affect pensions? An analysis per socioeconomic groups (Carmen Boado Penas, UK)
	13:00-13:30 69 - Estimation of foreseeable and unforeseeable risks in motor insurance (Alfredo Egidio dos Reis, Portugal)				13:00-13:30 38 - Theoretical Replacement Rates And Injured Workers in Italy (Raffaello Marcelloni, Italy)	13:00-13:30
13:30 – 14:30	Lunch Break (Strelitzia / Jasminium)					



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14:30 – 16:00	Non-Life (ASTIN) Session 5	Non-Life (ASTIN) Session 6	Pensions (PBSS) Session 12	Pensions (PBSS) Session 13	Health (IAAHS) Session 5	Life (IAALS) afternoon social (tours)
	14:30-15:00 19 - The Use of Big Data and the Role of Actuaries in Inclusive Insurance Markets (Cristina Mano, Brazil)	14:30-15:00 113- One in a million – Operating as an actuary in a unique market(Mukami Njeru, Kenya)	14:30-15:00 31 - Command Economy and Market Economy in Pensions: Designs and Consequences (Krzysztof Ostaszewski, United States of America)	14:30-15:00 51 - Is the pension system relevant to the migration decision? A study of the Brazilian workers moving to Spain or to Portugal (Luís Eduardo Afonso, Brasil)	14:30-15:15 75 - Continuous professional development – Learnings for integrating AI, Data Science and Actuarial (Alex Brownlee, SA)	
	15:00-15:30 52 - A tractable method for unravelling and modelling unobservable or complex dependence drivers (with granular data) (Benjamin Avanzi, Australia)	15:00-15:30 101- Impact assessment of the methodological change on rate of return calculus for Natural Gas downstream in Mexico (Brenda Martinez, Mexico)	15:00-15:30	15:00-15:30 54 - Dynamic pricing of disability risk using credibility theory: application in a life insurance company (Jimmy Paul, Norway)	15:15-16:00 112 - Unconventional areas for application of Actuarial Analytics (Anitya Ajmani, India)	



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	15:30-16:00 125- Dynamic and granular loss modeling embracing dependencies (Michal Pesta)	15:30-16:00 118- Future directions of the actuarial profession (Julian Gribble, Switzerland)	15:30-16:00 117 - Pension systems: the logical sustainability discrete model in a stochastic framework under variable mortality (Massimo Angrisani, Italy)	15:30-16:00		
16:00 – 16:30	Refreshment Break (Strelitzia / Jasminium)					
16:30 – 18:00	Non-Life (ASTIN) Session 7 & Seminar Closing		Pensions (PBSS) Session 13 & Closing		Health (IAAHS) Session 6	
		16:30-17:15 33 - Mitigating the global pension crisis: a compilation of actuarial innovative ideas (Abraham Hernández, Portugal)		16:30-17:15 35 - Actuarial and Risk Communication: an introduction on how to better interact with your business partners. (Caroline Gregoire, Germany)		



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	Professionalism 2	17:15-18:00 32 - Global Pension Solutions for Globetrotters (Carl Hansen, Geurnsey)	17:15-18:00 22 - Becoming “the modern actuary”: the usefulness of humanities and social sciences to develop critical thinking (Christian Walter, France)	
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PROGRAMME OUTLINE:

DAY 5 – FRIDAY, 5 APRIL 2019				
07:30 – 18:00	Registration Open (Strelitzia Conservatory)			
08:30 – 08:45	Health (IAAHS) Session 6 & Seminar Opening	Non-Life (ASTIN) Session 8	Non-Life (ASTIN) Session 9	ASTIN Workshop – Solvency
08:45 – 09:45	Health (IAAHS) Seminar –Keynote Speaker – Bruce Fordyce	08:45-09:15 10 - A Quasi Risk Factor Dependency Model for Non-Life Insurance Portfolios (Alessandro Ferriero, Switzerland)	08:45-09:15 99 - Aggregation and Risk Measurement for a Portfolio of Exchangeable Bernoulli Risks, assuming Dependence Uncertainty (Etienne Marceau, Canada)	
		09:15-09:45 60 - Fitting and estimating risk dependence using composite models for financial and insurance data (Francesco Acri, Italy)	09:15-09:45 77- Optimal reinsurance of dependent risk (Alexandra De Moura, Portugal)	
09:45 – 10:15	Refreshment Break (Strelitzia / Jasminium)			
10:15 – 11:45	Health (IAAHS) Session 7	Non-Life (ASTIN) Session 10	Consulting (IACA) Session 6	ASTIN Workshop – Solvency
	10:15-11:00 127 - Health reform options for South Africa (Barry Childs, SA)	10:15-10:45 79 - Multivariate claim frequencies modelling in P&C insurance using multiple guarantees and multiple policyholders from the same		



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		household (Florian Pechon, Belgium)		
	11:00-11:45	10:45-11:15 87 - On The Necessity And Nature Of Standardising When Using Shrinkage Methods (Stefan W. Wetzel, Germany)		
		11:15-11:45 97 - Cyber Risk - the dark side of the phenomenon (Yuriy Krvavych, United Kingdom)		
11:45-12:00	Transition Time			
12:00 – 13:30	Health (IAAHS) Session 8	Non-Life (ASTIN) Session 11	Consulting (IACA) Session 7	ASTIN Workshop – Solvency
	12:00-13:00 Professionalism for 1 hour	12:00-12:30 63 - The Genesis of Storm Clustering: What Impact on Reinsurance Treaties Hours Clause? (Vincent Noel & Marc Bagarry, France)		
		12:30-13:00 68 - Japanese Double Debt Problem (Corina Constantinescu, United Kingdom)		
	13:00-13:30 107 – The actuary in the courts (Ignacio Del Barco, Spain)	13:00-13:30 122- ASTIN WP on Implications of IFRS on Non-Life Insurers, Products and Markets (Walther Neuhaus)		



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13:30 – 14:30	Lunch Break (Strelitzia / Jasminium)			
14:30 – 16:00	Health (IAAHS) Session 9	Non-Life (ASTIN) Session 12	Non-Life (ASTIN) Session 13	ASTIN Workshop - Reinsurance
	14:30-15:15 133 - Internet of Medical Things (IoMT) & Health Care (Ashleigh Theophanides, SA)	14:30-15:00 104 - A Quantile Mixing Approach for the Combination of Experts' Models (Thierry COHIGNAC & Nabil Kazi-tani, France)	14:30-15:30 58- A Standardized Machine Learning based approach to Conversion Rate Estimation (Lorenzo Invernizzi, Italy)	
	15:15-16:00 Simon Henderson	15:00-15:30 119 - Managing Insurance Capital Standards with Limit Systems (Klaus-peter Nischke, Germany)	15:30-16:00 111 - Decoding Neural Networks (Anitya Ajmani, India)	
16:00 – 16:30	Refreshment Break (Strelitzia / Jasminium)			
16:30 – 18:00	Health (IAAHS) Session 10 & Closing	Non-Life (ASTIN) Session 13 & Closing	Consulting (IACA) Session 8 & Closing	ASTIN Workshop - Reinsurance
	16:30-17:15 134- Health Insurance across Africa: Not for the faint of heart (Warren Daly)	16:30-17:15 116 - Scenario Testing for Flatrated Fleets during the yearly price adjustment process - a practical example (Michael Klamsner, Germany)	16:30-18:00 Tree Actuaries- A breadfruit production. Taking the risks of tree cropping to a financially sound business. (Shubhash	



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			Gosine & S. Michael McLaughlin)	
	17:15-18:00 46 - International PMI vs Domestic PMI (Anne Hung, UK)	17:15-18:00 120 - Automated cars and insurance - results of joint Working Party of ASTIN & AIDA (Przemysław Klusik, Poland)		