Thursday 16 June, 2022

9.00-9.30 Opening: Room G.110 Gemelli

Elena Beccalli – Dean of the faculty of Banking, Finance and Insurance

Markus Gesmann – Member of the Scientific committee of IDS

Nino Savelli – Member of the Scientific committee of IDS and head of the organizing committee of IDS in Catholic University

9.30-10.30 Regular Sessions

Regular Session 1 – Room G.110 Gemelli	Regular Session 2 – Room G.111 Salvadori
Hybrid Mode – Speakers in-person	Speakers partially on-line partially in-person
Chair: Christopher Blier-Wong	Chair: Diego Zappa
M. Wüthrich, Eth Zurich, Deep Composite	H.B. Lim, The University of Iowa, Mortality
Regression Model	Forecasting with Neural Tangent Kernel Regression
	(with N.D. Shyamalkumar, S. Tao) on-line
R. M. Verschuren, University of Amsterdam,	A. Jose, Heriot-Watt University, Predictive
Frequency-Severity Experience Rating based on	modelling for admission rates related to respiratory
Latent Markovian Risk Profiles	diseases in the US (with A. Macdonald, G. Tzougas,
	G. Streftaris) on-line
B. DC Campo, KU Leuven, A data-driven approach	A. Streich, Analytics, Life & Health Europe at
to construct a hierarchical structure (with K.	PartnerRe, A Stochastic Compartmental Model for
Antonio, J. Robben)	Pandemic Risk Assessment (with F. Gomez, P.
	Hogan) in-person

10.30-11.00 Coffee Break

11.00-12.00 Plenary Session - Room Gemelli

Chair: Gian Paolo Clemente

Invited Speaker: Julien Trufin, Université libre de Bruxelles, *Non-life insurance pricing: boosting trees and diagnostic tools to compare competing models.*

12.00-12.30 Lightning Sessions

Lightning Session 1 – G.110 Gemelli	Lightning Session 2 – Room G.111 Salvadori
Hybrid Mode – Speakers in-person	Speakers partially on-line partially in-person
Chair: Giacomo Bormetti	Chair: Francesco Della Corte
J. Schelldorfer, Swiss Re, A discussion on the similarities and differences between insurance risk modelling and standard machine learning techniques	H. Y. J. Yung, UNSW Sydney, Modelling the mortality for China's oldest-old (with K. Hanewald, A. Villegas) - on-line
S. Ng, Vantage Risk, Applying Simple String Matching (NLP) in Casualty and Specialty Reinsurance Pricing and Risk Management	A. I. Mugwe, Strathmore University, Enhancing Food Security in Africa with a Predictive Early Warning System on Extreme Weather Phenomena (with J, Gachanja, B. Muriithi, J. Olukuru, A. Wairegi, I. Rutenberg) – on-line

J. Dambon, Swiss Re, Modeling Container Shipping	A. U. Montero, Université de Lausanne, Cost of
Delay with Random Effects: A Comparison	Dying in Switzerland: Taking a Glimpse of Medical
of Methods	Expenses in the Last Year of Life (with J. Wagner)
	on-line
S. Flaig, University of Oldenburg, Scenario	R. van der Zwaan, MavenBlue, Need for Speed -
generation for market risk models using generative	GPU acceleration for insurance (with J. van
neural networks (with G. Junike)	Bruggen, M. Smith) – in person

12.30-14.00 Lunch

14.00-15.00 Regular and Organized Sessions

Regular Session 3	Regular Session 4	Organized Session 1 by Leithà
G.110 Gemelli	G.111 Salvadori	Room G.118 Benedetto XV
Hybrid Mode – Speakers	Hybrid Mode – Speakers in-	Hybrid Mode – Speakers in-
partially online partially	person	person
in-person		
Chair: Mathieu Pigeon	Chair: Lukasz Delong	Chair Antonio Tirri
M. Bladt, University of	J. Robben, KU Leuven, A	G. Rianna , Fondazione CMCC Centro
Lausanne, Matrix regression:	hierarchical reserving model for	Euromediterraneo sui Cambiamenti
models, algorithms, and	reported non-life insurance claims	Climatici, European Extreme Events
applications (with H.	(with J. Creveceour, K. Antonio)	Climate Index (E3CI) (with A. Tirri, F.
Albrecher, M. Bladt, J. Yslas)		Repola, F. Lo Conti, G. Barbato, P.
– in person		Mercogliano, G.A. Spedicato)
F. Ungolo, Technische	G. Pittarello, Università degli	A. Castellarin, Università di Bologna,
Universität München,	Studi – La Sapienza, <i>Bayesian</i>	Geomorphic flood hazard mapping:
Affine_mortality: R tools for	Neural Networks applied to	from floodplain delineation to flood-
estimation, comparison and	individual Chain-Ladder reserving	hazard characterization (with A.
projection of affine mortality	(with G.P. Clemente, D. Zappa)	Magnini, M. Lombardi, A. Bujari, P.
models (with M. Sherris, L. P.		Mattivi, M. Patella, G. Bitelli, F. Lo
D. M. Garces, Y. Zhou)		Conti, A. Tirri)
– in person		
S. Schnürch, Fraunhofer	J. Ko, SAS Institute, Claims	A. Petruccelli, Leithà, Terraferma: an
Institute for Industrial	reserving, simulation engines	interactive tool for insurance seismic
Mathematics, Accounting for	(with B. Fannin)	risk awareness in Italy (with A. Tirri,
COVID-19-Type Shocks in		L. Ferraresi)
Mortality Modeling: A		
Comparative Study (with T.		
Kleinow, A. Wagner) on-line		

15.00-16.00 Plenary Session: Room G.110 Gemelli

Chair: Diego Zappa

Invited Speaker: Markus Senn, Head of Analytics, Life & Health Europe at Partner Re **& Patrick Hogan**, Senior Data Scientist at Partner Re, *Some like it Bayesian: The allure, obstacles, and rewards*

16.30-17.00 Lightning Sessions

Lightning Session 3 – Room G.110 Gemelli	Lightning Session 4 – Room G.111 Salvadori
Hybrid Mode – Speakers in-person	Speakers on-line
Chair: Olivier Lopez	Chair: Markus Gesmann
J. Ponnet, KU Leuven, Estimation of the enhanced	A. Riva, Università degli Studi di Roma – La
concordance probability in linearithmic time (with	Sapienza, Strategy optimization in a dynamical
J.Raymaekers, R. Vanoirbeek, T. Verdonck)	financial analysis environment through
	evolutionary reinforcement learning
C. Giancaterino, Catholic University of Milan,	A. Zatsepin, VSK insurance company, Reserves,
Machine Learning Interpretability in Lapse	tariff rates, portfolio management. All in One:
Prediction for Non-Life Insurance Premium	Machine Learning + stochastic loss reserving (with
	A. Kvitchenño)
G. Rabitti, Heriot-Watt University, Bottom-up	U. Korn , Ledger Investing, A New Approach to
construction of rating system using sensitivity	Forecasting Insurance Loss Ratios
measures (with A. Vallarino, A.K. Chokami)	
A. Badescu, University of Toronto, On the Logit-	V. Sriram, Guy Carpenter, AI Systems for Insurance
weighted Reduced Mixture of Experts models with	Data Prep (with J, Fan, N. Liu)
insurance applications (with S. T. Chai Fung, S. Lin)	

17.10-18.10 Regular Sessions

Regular Session 5	Regular Session 6
Room G.110 Gemelli	Room G.111 Salvadori
Hybrid Mode – Speakers in-person	Speakers on-line
Chair: Markus Gesmann	Chair: Giacomo Bormetti
C. Blier-Wong, Université Laval, Insurance	Z. Li , A general framework for modelling claim
ratemaking with images (with H. Cossette, L.	count data in general insurance based on the local
Lamontagne, E. Marceu)	mixed Poisson net (with G. Tzougas)
D. Biancalana , Università degli Studi di Roma – La	Y. Havrylenko, Technical University of Munich,
Sapienza, Health insurance claims prediction with	Algorithmic detection of interacting variables for
GAMLSS (with F. Baione)	generalized linear models via neural networks (with
	J. Heger)
M. Shoun, Ledger Investing, Domain-Specific	R. Pusz, Warsaw School of Economics, Pure
Languages for Reserve Modeling	premium calculation for flood risk based on spatial
	information using R

Friday, 17 June, 2022

9.30-10.30 Regular Sessions

Regular Session 7 – Room G.110 Gemelli	Regular Session 8 – Room G.111 Salvadori
Hybrid Mode – Speakers in-person	Hybrid Mode – Speakers partially in-person and
	partially on-line
Chair: Mario Wuthrich	Chair: Ronald Richman
H. Zakrisson, Stockholm University, A Collective	B. Wong & Y. Li, University of New South Wales,
Reserving Model With Claim Openness (with M.	Stochastic Ensemble Loss Reserving (with B. Avanzi, A.
Lindholm)	Xian) – in-person
J. Schelldorfer, Swiss Re, LocalGLMnet: A Deep	R. Metulini, University of Salerno, Forecasting flood
Learning Architecture for Actuaries	risk exposure using mobile phone traffic flows' data,
	(with M. Carpita) – in-person
E. J. Menvouta , KU Leuven, <i>Comparing machine</i>	O. Lopez, Sorbonne University and Detralytics,
learning models for micro-level reserving (with	Identification of the network structure to evaluate the
R. Vanoirbeek, T. Verdonck)	impact on cyber attacks on an insurance portfolio
	(with C. Hillairet, L. d'Oultremont, B. Spoorenberg, M.
	Thomas) – in-person

10.30-11.15 Coffee Break

11.15-12.15 Plenary Session: Room G.110 Gemelli

Chair: Nino Savelli

Invited Speaker: Fausto Parente, Executive Director of the European Insurance and Occupational Pensions Authority (*EIOPA*), *AI, data and insurance: Protecting policyholders*

12.15-14.00 Lunch

14.00-14.30 Lightning Sessions

Lightning Session 5 – Room G.110 Gemelli	Lightning Session 6 – Room G.111 Salvadori
Hybrid Mode – Speakers partially in-person	Speakers on-line
and partially on-line	
Chair: Michael Ludkovski	Chair: Fabio Baione
W. F. Chong, Heriot-Watt University, Pseudo- Model-Free Hedging for Variable Annuities via Deep Reinforcement Learning, (with H. Cui, Y. Li) – in-person	G. Stupfler , ENSAI & CREST, Extreme conditional risk estimation in heavy-tailed heteroscedastic regression models (with S. Girard, A. Usseglio-Carleve)
D. Giorgi , CNRS, Sorbonne Université, IBMPopSim: a package for the efficient simulation of individual-based population models (with S. Kaakaï, V. Lemaire) – in-person	S. Sangari , Kennesaw State University, <i>Under-reporting correction in Cyber Incidents</i> (with E. Dallal)
S. R. Kessy , University of New South Wales, Combination of Mortality Rate Forecasts From Multiple Starting Points (with M. Sherris, A. Villegas, J. Ziveyi) – online	S. Levantesi , Sapienza University of Rome, <i>Multi-country clustering-based forecasting of healthy life expectancy</i> (with A. Negri, G. Piscopo)
M. Vhudzijena, UNSW Sydney, Mortality Heterogeneity and Clustering using Joint Body Mass Index and Self-Reported Health Trajectories (with M. Sherris, A. Villegas, J. Ziveyi) - online	O. Laverny , University of Lyon & SCOR SE, <i>Estimation</i> of high dimensional gamma convolutions through random projections

14.40-15.40 Regular Sessions

Regular Session 9	Regular Session 10
Room G.110 Gemelli	Room G.111 Salvadori
Hybrid Mode – Speakers in-person	Speakers on-line
Chair: Wing Fung Chong	Chair: Roland Schmid
M. Marino, Sapienza University of Rome, Transfer learning for boosting mortality table (with G.A. Spedicato)	A. Dræge , Frende Forsikring, <i>Using cosine similarity for recommending insurance products</i> (with H. Midtgarden Golid, F. Dorn)
S. Scognamiglio, University of Naples "Parthenope", Calibrating the Lee-Carter and the Poisson Lee-Carter models via Neural Networks	K. Bett , Strathmore University, Weather index-based Crop Insurance using Machine Learning, J. Olukuru
M. Ludkovski, University of California Santa Barbara, Joint modeling of State-level mortality in US (with D. Padilla)	V. Arannil, Amazon Web Services, Applying computer vision for high precision 360 degree car damage assessment (with A. Roy)

15.40-16.00 Closing Remarks: Room G.110 Gemelli

Andreas Tsanakas— Member of the Scientific committee of IDS

Gian Paolo Clemente, Francesco Della Corte, Silvia Facchinetti, Gabriele Pittarello, Nino Savelli, Diego

Zappa - Local Organizing committee of IDS