The 2019 SFRA Colloquium will present topics on methodological and computational aspects of Data Science, Machine Learning and their applications and developments within Financial Risk, Financial Mathematics and Insurance

**Programme**

**Monday 04 February 2019**

**ICMS Lecture Theatre, Level 5, Bayes Centre.**

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| 09.00-09.45 | Registration and Coffee, ICMS, Level 5, Bayes Centre |
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| 09.45-10.00 | Introductory Presentation |
| 10.00-10.55 | **Conor O’Reilly** (Club Vita LLP) *Keynote Presentation – Clubbing together: How Club Vita helps pension schemes estimate their members’ life expectancy* |
| 11.05-12.00 | **Isabelle Laurent**  (European Bank of Reconstruction and Development) *Keynote Presentation – A Practitioner’s View of the Green Bond Market & Impact Reporting* |
| 12.00-13.30 | Lunch |
| 13.30-14.25 | **Ariane Chapelle** (UCL)  *Keynote Presentation – Recent trends in Operational Risk Assessment in the Financial Services* |
| 14.30-15.25 | **Monserrat Guillen** (University of Barcelona)  *Keynote Presentation - Driving Data: telematics to improve insurance rates* |
| 15.30-16.00 | Tea/Coffee |
| 16.00-16.55 | **Garry Koop** (University of Strathclyde)  *Keynote Presentation - Exchange rate predictability and dynamic Bayesian learning* |
| 17.00-17.55 | **Chris Williams** (University of Edinburgh)  *Keynote Presentation - Time Series Understanding* |

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**Programme**

**Tuesday 05 February 2019**

**ICMS Seminar Room, Level 5, Bayes Centre.**

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| 0900-09.45 | **Catherine Donnelly** (Heriot-Watt University) *Simplifying retirement by aligning communication with retirement incomes* |
| 09.45-10.00 | Tea/Coffee |
| 10.00-10.55 | **Lukasz Spruch** (University of Edinburgh)  *Martingale Functional Control variates via Deep Learning* |
| 11.05-12.00 | **Jonathan Crook**  (University of Edinburgh)  *How can we predict when a borrower becomes more or less delinquent?* |
| 12.00-13.30 | Lunch |
| 13.30-14.25 | **Pavel Shevchenko** (Macquarie University)  *Optimal Annuitisation, Housing, Consumption and Investment in Retirement under Expected Utility Stochastic Control Framework* |
| 14.30-15.25 | **Guillaume Bagnarosa** (ESC Rennes)  *Credit risk management for agri-business under weather uncertainty* |
| 15.30-16.00 | Tea/Coffee |
| 16.00-16.55 | **Miguel De Carvalho** (University of Edinburgh  *Statistical Modelling of Time-Changing Extreme Values* |
| 17.00-17.55 | **Antonio Dalessandro** (University College London)  *On the relationship between Copula functions and Radon-Nikodym derivative of discrete measures.* |

**Wednesday 06 February 2019**

**ICMS Seminar Room, Level 5, Bayes Centre.**

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| 0900-09.45 | **Amos Storkey** (University of Edinburgh) *Modern Machine Learning and AI in the Context of Risk and Finance*. |
| 09.45-10.00 | Tea/Coffee |
| 10.00-10.55 | **Nguyen Le Minh** (JAIST)  *Deep Learning on graph: A study on convolutional neural network over large-scale labeled graphs* |
| 11.05-11.35 | **Sarah Mathieson**  (IFoA) |
| 11.35-12.00 | **Lara Neira**  (InRobin)  *Using Random Forest to estimate risk profiles, probability of breakdowns and time between failures* |
| 12.00-13.30 | Lunch |
| 13.30-14.25 | **Dorota Toczydlowska** (University of Techology, Sydney)  *General Framework for Parsimonious Feature Extraction via Linear Projections* |
| 14.30-15.25 | **Andrew Cairns** (Heriot-Watt University)  *Medium Data and Socio-Economic Mortality* |
| 15.30-16.00 | Tea/Coffee |
| 16.00-16.55 | **Andrea Macrina** (University College London)  *Interest Rate Term Structures with Roll-Over Risk* |
| 17.00-17.55 | **Daisuke Murakami** (Institute of Statistical Mathematics, Japan)  *Climate change mitigation management using reinforcement learning*  **Tomoko Matsui** (Institute of Statistical Mathematics, Japan)  *Spatiotemporal analysis of urban heatwaves using Turkey g-and-h random fields models* |