INTERNATIONAL CONFERENCE ON

FINTECH & FINANCIAL DATA SCIENCE

3-5 September 2019, University College Dublin (UCD), Ireland

Programme

- **Location: UCD Michael Smurfit Graduate School of Business, Carysfort Ave, Carrysfort, Blackrock, Co. Dublin – Smurfit Executive Development Suites**
- **Registration 11am - 2pm on 3rd September, and 8am – 9am on 4th September**

Tuesday, 3rd of September

11:00am – 1:40pm	**Registration open**
1:40pm	**Opening Address** **By Prof. Juho Kanniainen & Prof. Andreas Hoepner**
	Session 1: Evidencing Risk, Chair: Theodor Cojoianu
2:00pm	**Title:** How Does Diversity of Media Coverage Influence Firms' Risk Exposure? **Authors:** Miha Torkar (Jozef Stefan Institute, Slovenia); Ye Zeng (Aarhus University, Denmark) **Speaker:** Ye Zeng
2:20pm	**Title:** Data-driven methods for risk management in trading activities **Authors:** Ioannis Anagnostou (ING Bank & University of Amsterdam, Netherlands) **Speaker:** Ioannis Anagnostou
2:40pm	**Title:** The systemic dimension of counterparty risk (Chiara will also take few minutes to give a brief summary of her overall research within BigDataFinance programme (entitled "Systemic risk and financial networks") **Authors:** Chiara Perillo (University of Zurich, Switzerland); Stefano Battiston (University of Zurich, Switzerland); Sumit Sourabh (ING Bank & University of Amsterdam,Netherlands); Drona Kandhai (ING Bank & University of Amsterdam,Netherlands) **Speaker:** Chiara Perillo
3:00pm – 4:00pm	**Keynote 1** **Speaker: Hugh Christensen (BMLL Technologies)** **Title: Enabling Value Extraction from Limit Order Book Data**
4:00pm – 4:40pm	**Break, tea & coffee**

Session 2: Data Science for Intangibles, Chair: Andreas Hoepner

4:40pm	**Title:** Characterising financial markets from the event driven perspective **Authors:** Miha Torkar and Dunja Mladenič (Jozef Stefan Institute, Slovenia) **Speaker:** Miha Torkar
5:00pm	**Title:** Central Bank Communications, Uncertainty and Risk Aversion in Global Equity Markets **Authors:** Raja Shaikh (University of Durham, UK)
5:20pm	**Title:** The Worse the Better?: Firm Scandal Reductions and Women in the Boardroom **Authors:** Christopher Godfrey (University of Manchester, UK) Andreas Hoepner (University College Dublin) Ming-Tsung Lin (De Montfort University, UK) Ser-Huang Poon (University of Manchester, UK) **Speaker:** Christopher Godfrey (University of Manchester, UK)
5:40pm	**Title:** Trading on Talent: Human Capital and Firm Performance **Authors:** Anastassia Fedyk (Harvard University, U.S.A.); James Hodson (Jozef Stefan Institute, Slovenia) **Speaker:** Miha Torkar *on behalf of authors*
6:00pm – 8:00pm	**Networking drinks and canapés**

Wednesday, 4th of September

Session 3: Methodologies, Chair: Stefano Battiston

9:00am	**Title:** Intrinsic Time Directional-Change Methodology in Higher Dimensions **Authors:** Vladimir Petrov (University of Zurich, Switzerland); Anton Golub (flov technologies, Switzerland); Richard Olsen (Lykke Corp., Switzerland) **Speaker:** Vladimir Petrov
9:20am	**Title:** Modelling Transaction Costs when Trades May Be Crowded: A Bayesian Network Approach **Authors:** Marie Brière (Paris Dauphine University, PSL Research University, France & Amundi Asset Management, France); Charles Albert Lehalle (Capital Fund Management , France & Imperial College London, UK); Tamara Nefedova (Paris Dauphine University, PSL Research University, France); Amine Raboun (Paris Dauphine University, PSL Research University, France & Euronext Paris, France) **Speaker:** Amine Raboun

9:40am	**Title:** Classification and survival analysis for the dependence structure of financial time series using Random Forests and Functional Data Analysis **Authors:** Haiyan Liu (University of Leeds, UK & The Alan Turing Institute, UK); Ziyan Wang (University of Leeds, UK); Georgios Aivaliotis (University of Leeds, UK & The Alan Turing Institute, UK) **Speaker:** Georgios Aivaliotis
10:00am	**Title:** Financial ratios and stock returns reappraised through a topological data analysis lens **Authors:** Pawel Dlotko (Swansea University, UK); Wanling Qiu (University of Liverpool, UK); Simon Rudkin (Swansea University, UK) **Speaker:** Simon Rudkin
10:20am	**Title:** Mid-price Movement Prediction in Limit Order Books Using Feature Engineering and Machine Learning **Authors:** Adamantios Ntakaris (Tampere University, Finland); Giorgio Mirone (Danmarks Nationalbank, Denmark); Juho Kanniainen (Tampere University, Finland); Moncef Gabbouj (Tampere University, Finland); Alexandros Iosifidis (Aarhus University, Denmark) **Speaker:** Adamantios Ntakaris
10:40am – 11:00am	**Break, tea & coffee**
11:00am	**Keynote 2** **Speaker: Nikolaus Hautsch (Department of Statistics and Operations Research, University of Vienna, Austria)** **Title: Limits to Arbitrage in Markets with Stochastic Settlement Latency**
	Session 4: Machine Learning, Chair: Kim Christensen
12:00pm	**Title:** Deep Execution in Decentralized FX Markets: A Reinforcement Learning Approach **Authors:** Olle Dahlen (ING Bank, Netherlands); Ioannis Anagnostou (ING Bank & University of Amsterdam, Netherlands); Georgios Pierris (ING Bank, Netherlands) **Speaker:** Georgios Pierris
12:20pm	**Title:** Assessing Deep Learning Models for the Forecasting of Non-Stationary Crude Oil Price Series **Authors:** Malika Bendechache (Dublin City University, Ireland); Mark Cummins (Dublin City University, Ireland); Patricia Endo (Universidade de Pernambuco, Brazil); Theo Lynn (Dublin City University, Ireland);

Guto Santos (Universidade de Pernambuco, Brazil);
Iago Silva (Universidade de Pernambuco, Brazil);
Speaker: Mark Cummins

12:40pm **Title:** Ascertaining price formation in cryptocurrency markets with Deep Learning
Authors: Fan Fang (University of Essex, UK)
Waichung Chung (University of Essex, UK)
Carmine Ventre (University of Essex, UK)
Leslie Kanthan (University College London, UK)
Lingbo Li (Turing Intelligence Technology Limited, UK)
Michail Basios (Turing Intelligence Technology Limited, UK)
Fan Wu (Turing Intelligence Technology Limited, UK)
Speaker: Fan Fang (University of Essex, UK)

1:00pm – 2:00pm Lunch

Session 5: Regime and/or Volatility Modelling, Chair: Chris Godfrey

2:00pm **Title:** Regime switching models for smart beta investing
Authors: Elizabeth Fons (AllianceBernstein & University of Manchester, UK);
Paula Dawson (AllianceBernstein, UK);
Jeffrey Yau (AllianceBernstein, U.S.A.);
Xiao-Jun Zeng and John Keane (University of Manchester, UK)
Speaker: Elizabeth Fons

2:20pm **Title:** How Does Mutual Fund Flow Respond to Oil Market Volatility?
Authors: Bader J. Al Jawid (Loughborough University, UK)
Giovanni Calice (Loughborough University, UK)
Andrew Vivian (Loughborough University, UK)
Speaker: Andrew Vivian (Loughborough University, UK)

2:40pm **Title:** Self-Evolving Neuro-Fuzzy System with Applications in High Frequency Trading Predictions
Authors: Dongjiao Ge and Xiao-Jun Zeng (University of Manchester, UK)
Speaker: Dongjiao Ge

3:00pm **Title:** Volatility modeling and limit order books analytics with high-frequency data
Authors: Martin Magris (Tampere University, Finland) ;
Adamantios Ntakaris (Tampere University, Finland);
Alexandros Iosifidis (Aarhus University, Denmark);
Dat Thanh Tran (Tampere University, Finland);
Esa Räsänen (Tampere University, Finland);
Jiyeong Kim (Tampere University, Finland);
Juho Kanniainen (Tampere University, Finland);
Moncef Gabbouj (Tampere University, Finland)
Speaker: Martin Magris

3:20pm – 3:40pm	**Break, tea & coffee**
	Session 6: Empirical Finance, Chair: Qian Li
3:40pm	**Title:** Investor Networks and their Clusters around Initial Public Offerings **Authors:** Margarita Baltakienė, Kęstutis Baltakys, Juho Kanniainen (Tampere University, Finland); Dino Pedreschi (University of Pisa, Italy); Fabrizio Lillo (University of Bologna, Italy) **Speaker:** Kęstutis Baltakys
4:00pm	**Title:** The Anatomy of a Fee Change - Evidence from Cryptocurrency Markets **Authors:** Alexander Brauneis (University of Klagenfurt, Austria); Roland Mestel (University of Graz, Austria); Ryan Riordan (Queen's University, Canada); Erik Theissen (University of Mannheim, Germany) **Speaker:** Roland Mestel
4:20pm	**Title:** Asset Allocation with Aversion to Blackbox-ness of Machine Learning Models **Authors:** Yuji Sakurai (Federal Reserve Bank of Richmond, U.S.A); Keiichi Goshima (Waseda University, Japan) **Speaker:** Keiichi Goshima
4:40pm	**Title:** HHCAM: A household credit assessment model for financial stability **Authors:** Giorgio Mirone (Danmarks Nationalbank, Denmark); Simon Hajaj Ruby Harmat (Danmarks Nationalbank, Denmark) **Speaker:** Giorgio Mirone
5:00pm	**Title:** Is firm-level clean or dirty innovation valued more? **Authors:** Antoine Dechezlepretre (London School of Economics, UK); Cal Muckley and Parvati Neelakantan (University College Dublin, Ireland) **Speaker:** Parvati Neelakantan
5:20pm	**Title:** Corporate Social Irresponsibility and Portfolio Performance: A Global Perspective **Authors:** Maretno Harjoto (Pepperdine University, USA) Andreas Hoepner (University College Dublin) Qian Li (University of Cardiff, UK) **Speaker:** Qian Li (University of Cardiff, UK)
5:40pm	**The Close of Day 2**
6:30-8:30pm	**Conference Dinner**

Thursday, 5th of September

9:00am	**Keynote 3** **Speaker: Jyrki Piilo (Turku Centre for Quantum Physics, Department of and Astronomy, University of Turku, Finland)** **Title: Networks of investors in financial markets**
	Session 7: Machine Learning, Chair: Juho Kanniainen
10:00am	**Title:** The potential for machine learning in investment research: Evidence from risk assessments as predictors of share price volatility **Authors:** Alistair Haig and William Rees (The University of Edinburgh, UK)**Speaker:** Alistair Haig
10:20	**Title:** Distributed and real-time machine learning for financial data analysis **Authors:** Sergio Garcia-Vega; Xiao-Jun Zeng; John Keane (University of Manchester) **Speaker:** Sergio Garcia-Vega
10:40am – 11:00am	**Break, tea & coffee**
11:00am	**Keynote 4** **Speaker: Mark Andrew Chen (Georgia State University, U.S.A.)** **Title: Implications of FinTech Innovation for Firms and Human Capital**
	Session 8: Risk Management of/with Machine Learning , Chair: Andrew Vivian
12:00pm	**Title:** Performance and Tail Risk of Optimal and Naïve Diversification **Authors:** Thomas Conlon and John Cotter (University College Dublin, Ireland); Enrique Salvador Arago (University Jaume I, Spain) **Speaker:** Enrique Salvador Arago
12:20pm	**Title:** Neural Networks and Value at Risk **Authors:** Alexander Arimond (Sociovestix Labs, Scotland, UK); Damian S. Borth (University of St. Gallen, Switzerland); Andreas G. F. Hoepner (University College Dublin, Ireland); Michael Klawunn and Stefan Weisheit (Warburg, Germany) **Speaker:** Andreas Hoepner
12:40pm	**Title:** Artificial Intelligence for Anti-Money Laundering - A Review and Extension **Authors:** Jingguang Han, Yuyun Huang and Sha Liu **Speaker:** Sha Liu

1:00pm – 2:00pm	**Lunch**
2:00pm	**Keynote 5** **Speaker: Ser-huang Poon (Alliance Manchester Business School, University of Manchester, UK)** **Title: Responsible NLP for Modern Slavery**
	Session 9: Frontiers in Finance, Innovation & Data Science, Chair: Simon Rudkin
3:00 pm	**Title:** Nonparametric correlation sign prediction from high-dimensional asset price correlation matrices **Authors:** Christian Bongiorno and Damien Challet (CentraleSupelec, France) **Speaker:** Christian Bongiorno
3:20pm	**Title:** Application of Cointegrated State Space models to Financial and Economic data **Authors:** Bernard Hanzon and Miaad Al-qurashi (University College Cork, Ireland) **Speaker:** Miaad Al-qurashi
3:40pm	**Title:** Financial market sentiment index **Authors:** Rytis Simanaitis (University of Manchester, UK) **Speaker:** Sergio Garcia-Vega *on behalf of author*
4:00pm	**Closing Note by Prof. Xiao-Jun Zeng & Dr. Theodor Cojoianu**