CENTRE FOR
FINANCIAL RISK
*Faculty of Business and Economics*

MACQUARIE
University

# 3rd Australasian Commodity Markets Conference

PROGRAM

**4-5 APRIL 2019**
**MACQUARIE UNIVERSITY CITY CAMPUS**
LEVEL 24/123 PITT STREET, SYDNEY, NSW

## DAY ONE
### THURSDAY 4 APRIL

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| **8.30am** | **Registration** | | |
| **9am** | **Welcome** | | |
| **9.10am – 10.40am** | **Keynote and plenary session** | | |
| **9.10am – 10.10am** | **Keynote: A Financial-Economics Approach to Forecasting Crude-Oil Spot Prices**<br>**Speaker:** Professor Ehud Ronn, University of Texas at Austin | | |
| **10.10am – 10.40am** | **Development of the CSIRO Climate Analysis Forecasting Ensemble System for the Prediction of the Climate over Decadal Timescales**<br>**Speaker:** Dr Richard Matear, CSIRO | | |

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| **10.40am – 11am** | **Morning tea** | | |
| | **SESSION 1: Momentum in Commodity Markets**<br>**Chair:** John Fan | **SESSION 2: Renewable Energy and Batteries**<br>**Chair:** Juri Hinz | **SESSION 3: Interaction and Spillovers**<br>**Chair:** Peter Exterkate |
| **11am – 11.45am** | **Speaker:** Chardin Wese<br>**Title:** Curve Momentum<br>**Discussant:** Robert Bianchi | **Speaker:** Rohan Best<br>**Title:** Capital impacts on Australian small-scale solar installations<br>**Discussant:** Piyachat Leelasilapasart | **Speaker:** Ravipa Rojasavachai<br>**Title:** The interaction between stock market returns, exchange rates, local and global oil price shocks<br>**Discussant:** Andrew Vivian |
| **11.45am – 12.30pm** | **Speaker:** Robert Bianchi<br>**Title:** Commodity Futures Momentum: Economic Risks or Behavioural Bias?<br>**Discussant:** Chardin Wese | **Speaker**: Piyachat Leelasilapasart<br>**Title:** Optimal Integration of Renewables and Battery Energy Storage Systems<br>**Discussant:** Rohan Best | **Speaker:** Andrew Vivian<br>**Title:** The Dynamic Spillovers across Carbon, Energy and Financial Markets: A Spillover Index Approach<br>**Discussant:** Ravipa Rojasavachai |

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| **12.30pm – 1.30pm** | **Lunch** | |
| | **SESSION 4: Climate Risk Exposed Investments**<br>**Chair:** Lurion DeMello | **SESSION 5: Carbon Bubbles and Oil Price Shocks**<br>**Chair:** Rohan Best |
| **1.30pm – 2.20pm** | **Speaker:** Vassili Kitsios, CSIRO<br>**Title:** Idealised demonstration on the utility of the CSIRO climate analysis forecast ensemble system for decision making on climate risk exposed investments | **Speaker:** Jan Wollmann<br>**Title:** A mathematical model of the carbon bubble<br>**Speaker**: Christoph Funk<br>**Title:** Oil Price Shocks and the Cost of Debt in the Oil Industry – Empirical Analysis |

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| | **SESSION 6: Commodity Trading Strategies**<br>**Chair**: Ke Tang | **SESSION 7: Ownership and Markets**<br>**Chair:** Lurion De Mello | **SESSION 8: Electricity Markets**<br>**Chair:** Abhay Singh |
| **2.30pm – 3.15pm** | **Speaker:** John Fan<br>**Title:** Speculative Pressure<br>**Discussant:** Duminda Kuruppuarachchi | **Speaker:** Sami Aoude<br>**Title:** Vertical Integration of Generation and Retail: Foreclosure in the Electricity Futures Market<br>**Discussant:** Bin Li | **Speaker:** Peter Exterkate<br>**Title:** A regime-switching stochastic volatility model for forecasting electricity prices<br>**Discussant:** Guan Yan |
| **3.15pm – 4pm** | **Speaker:** Duminda Kuruppuarachchi<br>**Title:** Futures Spread Trading in Australian Commodities: Efficiency and Symmetry<br>**Discussant:** Marcel Rothenberger | **Speaker:** Bin Li<br>**Title:** Ownership, capital structure and performance: Evidence from the global water industry<br>**Discussant:** Sami Aoude | **Speaker:** Guan Yan<br>**Title:** Network Dynamics and the Predictive Power of Interconnectedness Measures for Electricity Markets<br>**Discussant:** Peter Exterkate |

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| **4pm – 4.30pm** | **Afternoon tea** | | |
| | **SESSION 9: Commodity Price Behaviour**<br>**Chair:** Stephane Goutte | **SESSION 10: Exploration and Securitisation**<br>**Chair:** Pavel Shevchenko | **SESSION 11: Volatility and Correlation**<br>**Chair:** Thai-Ha Le |
| **4.30pm – 5.15pm** | **Speaker:** Robert Bianchi<br>**Title:** Long-Run Reversal in Commodity Returns: Insights from Seven Centuries of Evidence<br>**Discussant:** Yulia Veld-Merkoulova | **Speaker:** Alexander Novikov<br>Title: Commodity risk reduction by predictive modeling at exploration stage<br>**Discussant:** Pavel Shevchenko | **Speaker:** Akihiro Omura<br>**Title:** Does national gas consumption affect Bitcoin volatility: Evidence from HAR-RV model<br>**Discussant:** Sm Rajibur Reza |
| **5.15pm– 6pm** | **Speaker:** Yulia Veld-Merkoulova<br>**Title:** Predictive Abilities of Speculators in Energy Markets<br>**Discussant:** Marcel Prokopczuk | **Speaker:** Stephen James<br>**Title:** Power Purchase Agreements and Solar Securitisation: Modelling Risk Factors and Returns<br>**Discussant:** Alexander Novikov | **Speaker:** Sm Rajibur Reza<br>**Title:** An Investigation of Water Investment Markets in Asia: Implications for Diversification Using DCC-GARCH Model<br>**Discussant:** Akihiro Omura |

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| **7pm – 9.30pm** | **Conference Dinner: Little Snail Restaurant and Bar**<br>50 Murray St, Pyrmont |

## DAY TWO
**FRIDAY 5 APRIL**

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| **9.30am – 11am** | **Plenary session** | | |
| **9.30am – 10am** | **The changing nature of electricity demand and implications for the future electricity generation mix**<br>**Speaker:** Alan Rai, Australian Energy Markets Commission | | |
| **10am – 10.30am** | **Machine Learning, real-time estimation and other essential applications to the water sector**<br>**Speaker:** Theo Gazos, Predictive Analytics Group | | |
| **10.30am – 11am** | **Tight Belt and Bumpy Road for Commodities? The China Factor**<br>**Speaker:** Clyde Russell, Reuters | | |
| **11am – 11.30am** | **Morning tea** | | |
| | **SESSION 12: Market Behaviour**<br>**Chair:** Ehud Ronn | **SESSION 13: Emissions in the Electricity Sector**<br>**Chair:** Stefan Trueck | **SESSION 14: Volatility and Mutual Fund Performance**<br>**Chair:** Abhay Singh |
| **11.30am – 12.15pm** | **Speaker:** Christina Nikitopoulos<br>**Title:** An anatomy of the volatility term structure in crude oil futures markets<br>**Discussant:** Yubo Tao | **Speaker:** Fatemeh Nazifi<br>**Title:** Emission Intensities in the Australian National Electricity Market – An Econometric Analysis<br>**Discussant:** Sami Aoude | **Speaker:** Andrew Vivian<br>**Title:** The Impact of Oil Market Volatility on Mutual Fund Performance in Saudi Arabia<br>**Discussant:** Christoph Funk |
| **12.15pm – 1pm** | **Speaker:** Yubo Tao<br>**Title:** Financialisation and Commodity Market Serial Dependence<br>**Discussant:** Christina Nikitopoulos | **Speaker:** Ming Wei<br>**Title:** $CO_2$ Emissions from Electricity Generation in Australia – A Decomposition Analysis<br>**Discussant:** Fatemeh Nazifi | |
| **1pm – 2pm** | **Lunch** | | |
| | **SESSION 15: Uncertainty and Risk Premiums in Commodity Markets**<br>**Chair:** Marcel Prokopczuk | **SESSION 16: Mathematical Models**<br>**Chair:** Yulia Veld-Merkoulova | **SESSION 17: Non-linear and asymmetric effects on price behaviour**<br>**Chair:** Chardin Wese |
| **2pm – 2.45pm** | **Speaker:** Ke Tang<br>**Title:** Political Uncertainty and Commodity Markets<br>**Discussant:** Stephane Goutte | **Speaker:** Juri Hinz<br>**Title:** Variables reduction in sequential resource allocation problems<br>**Discussant:** Kim-Leng Tan | **Speaker:** Thai-Ha Le<br>**Title:** Oil price fluctuations and energy commodity prices: An analysis of asymmetric effects<br>**Discussant:** Long Vo |
| **2.45pm – 3.30pm** | **Speaker:** Stephane Goutte<br>**Title:** Commodities risk premia and regional integration in gas-exporting countries<br>**Discussant:** Ke Tang | **Speaker:** Kim-Leng Tan<br>**Title:** Multifractality and Market Efficiency of Energy Spot and Futures<br>**Discussant:** Juri Hinz | **Speaker:** Long Vo<br>**Title:** Why don't agricultural prices always adjust towards parity?<br>**Discussant:** Thai-Ha Le |
| **3.30pm** | **Conference concludes** | | |

### CONFERENCE CHAIRS

- Lurion De Mello
- Stefan Trueck
- Abhay Singh
- Pavel Shevchenko

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# Risk Analytics Lab

The Risk Analytics Lab at Macquarie University is a cross-disciplinary research team collaborating with academia and industry on innovative risk analytics solutions across several domains: demography, economics, energy, environmental finance, finance, insurance and superannuation. It was established by the Department of Applied Finance and Actuarial Studies at Macquarie University in 2016 with the following objectives:

- Develop and apply innovative risk analytics solutions through fundamental research and industry-linked projects
- Facilitate knowledge exchange between academia, industry and policymakers
- Strengthen and promote the connection between fundamental research and industry practice.

**OUR MAIN RESEARCH AREAS**

- Claims reserving in insurance
- Energy and commodity markets
- Financial derivatives
- Mortality modelling
- Operational risk, credit risk, market risk
- Portfolio optimisation
- Retirement income products

For more information, visit the Risk Analytics Lab website **mq.edu.au/research/risk-lab**

If you are interested in joining the lab or in collaboration opportunities on industry or research projects, contact Lab Director

**Professor Pavel Shevchenko, email: pavel.shevchenko@mq.edu.au**

# Centre for Financial Risk

The Centre for Financial Risk was established in 2010 in the Faculty of Business and Economics at Macquarie University. Researchers at the centre investigate uncertainty in capital markets. We examine the spectrum of financial risks faced at all levels of the economy. We collaborate with industry, regulators, governments and leading overseas universities to ensure research outcomes are robust, realistic and relevant. We offer optimal value to our research partners through our pragmatic, commercially aware and creative approach.

The nature and management of financial risks are investigated by a team of leading interdisciplinary researchers with expertise in financial economics, econometrics and innovative modelling approaches.

**OUR RESEARCH FOCUS**

- Banking, finance and asset pricing
- Behavioural economics and financial literacy
- Climatic change and catastrophic risks
- Complex industry and corporate issues
- Energy and utility markets
- Insurance and risk analysis
- International and domestic issues
- Regulation and government policy
- Superannuation

**THE CENTRE PROMOTES**

- The exchange of ideas
- Pioneering research
- Solutions to real-world problems
- A comprehensive program of workshops, seminars and masterclasses

**CO-DIRECTORS**

Professor Jeffrey Sheen, Professor Pavel Shevchenko and Professor Stefan Trueck are co-directors of the Centre for Financial Risk.

For more information, visit
**mq.edu.au/research/centre-for-financial-risk**

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