



BANK OF ENGLAND



## Call for Papers

### Modelling with Big Data & Machine Learning:

## Measuring Economic Instability

**4 - 6 November 2020, Virtual**

The confluence of access to large granular data sources ('Big Data') and the rapid advance of modelling techniques like those from machine learning promises new insights into the economy and a larger information set for policymakers. The Bank of England (BoE), the Data Analytics for Finance and Macro (DAFM) Research Centre at King's College London and the Federal Reserve Board have recently initiated a series of annual scientific conferences to discuss these advances and how they pertain to Measuring Economic Instability.

The **Coronavirus pandemic** and the widespread economic downturn in the wake of the resulting 'lockdown' in many countries have spurred an unprecedented output of research in multiple disciplines. This research is serving as a **vital guide to policymakers** in governments, central banks and international institutions around the globe as events unfold. Crucial roles in this information gathering and evaluation process are played by **novel high-frequency and low-latency data sources**, as well as **non-conventional modelling techniques** like machine learning, artificial intelligence, and interdisciplinary approaches such as those from epidemiology and economics. The conference aims to provide an opportunity to discuss recent scientific advances, especially with a focus on aiming at **quantifying potentially rapid economic fluctuations**, and to connect policy makers and academia.

We invite you to submit **empirical, methodological or theoretical work** leveraging on new granular data sources or exploring recent analytical development **relevant to decision making**. We note that *submissions do not have to be explicitly about Covid-19* but should be relevant for the assessment of large economic and financial shocks, ideally applicable in the current situation.

### Confirmed keynote speakers:

- **Kathy Yuan** (LSE)
- **Rama Cont** (Oxford)
- **Martin Weidner** (UCL)

### Logistics:

The event will be hosted **virtually**, including the presentation and discussion of accepted papers and posters, as well as chances to mingle (precise format TBD). The submission deadline is **6. September** (please email to [dafm@kcl.ac.uk](mailto:dafm@kcl.ac.uk)). Preference will be given to full papers but extended abstracts will be considered in exceptional circumstances. Authors of accepted papers will be notified by **4. October**. Full papers should be made available no later than two weeks before the conference. For questions regarding event logistics please contact [ccbsinfo@bankofengland.co.uk](mailto:ccbsinfo@bankofengland.co.uk) and [andreas.joseph@bankofengland.co.uk](mailto:andreas.joseph@bankofengland.co.uk). Please note that we aim to record the event and share material externally.

### Scientific committee:

- **Andrew Blake** (BoE)
- **Mingli Chen** (University of Warwick)
- **Stephen Hansen** (Imperial Business School)
- **Andreas Joseph** (BoE & DAFM)
- **George Kapetanios** (Committee Chair, King's College London; DAFM)
- **Christopher Kurz** (Federal Reserve Board)
- **Juri Marcucci** (Bank of Italy)
- **Fotis Papailias** (King's College London, DAFM)
- **Galina Potjagailo** (BoE)
- **Chris Redl** (IMF & DAFM)

### Important dates:

- **21. Sep.:** Submission deadline
- **11. Oct.:** Author notification
- **22. Oct.:** Final paper submission
- **4. - 6. Nov.:** Conference

Information & registration: [bit.ly/3lpAQtF](https://bit.ly/3lpAQtF)