

**Reliability and reproducibility in computational science**

Implementing verification, validation and uncertainty quantification in silico

24 January 2020

**Agenda**

The British Library
96 Euston Road, NW1 2DB, UK

The Alan Turing Institute is located on the first floor of the British Library and can be accessed via the main doors from 9:30 onwards. Please allow 10 minutes for queuing when planning your journey.

9:30 – 10:30 Registration

10:00 – 10:15 Welcome address

10:00 - 11:15 **Invited talks**

* **Uncertainty and unresolved processes** - Professor Daan Crommelin, CWI Amsterdam
* **Semi-intrusive uncertainty quantification for reliable simulations** - Dr Anna Nikishova, University of Amsterdam
* **Towards validated multiscale simulations for fusion** - Dr Onnie Luk, Institute for Plasma Physics, Max-Planck-Gesellschaft
* Chaired by Professor Peter Coveney

11:15 - 11:35 **Coffee break**

11:35 – 12:25 **Invited talk and discussion**

* **Reducing uncertainty in agent-based simulations through real-time data assimilation** - Professor Nick Malleson, University of Leeds
* Chaired by Professor Alison Heppenstall

12:25 – 13:30 **Lunch**

13:30 – 14:45 **Reproducibility and Interactive Software parallel sessions**

* Reproducibility: co-Chairs, Professor Marco Verdicchio, Dr Laura Fortunato
* Interactive Software: co-Chairs, Dr Derek Groen, Dr Eric Daub

14:45 – 15:45 **Invited talk and discussion**

* **Importance of Gaussian Process emulation and history matching** - Dr Victoria Volodina, University of Exeter & The Alan Turing Institute
* **Reproducibility, computability and the scientific method** - Professor Peter V. Coveney, University College London & University of Amsterdam
* Chaired by Professor Alfons Hoekstra

15:45 - 16:00 **Coffee break**

16:00 - 16:50 **Reproducibility panel discussion**

* Dr Laura Fortunato
* Professor Peter Challenor
* Dr Onnie Luk
* Professor Alfons Hoekstra
* Dr Derek Groen
* Chaired by Professor Peter V. Coveny

16:50 - 17:00 **Closing address** – Professor Peter V. Coveny

17:00  **End**