Intersections Between Resilience and Risk



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About BRIM

EPSRC funded "Engineering Grand Challenge Network +"

1st Mar 2016 to 28th Feb 2019

The aim:

To nurture the development of novel methodologies and tools of building resilience into networked risk management of critical infrastructure systems.

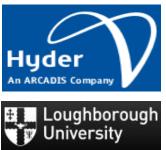
Network Themes:

- Risk and resilience paradigms: specified and general resilience, conceptual frameworks, relationships between risk and resilience

- Networked risks and tipping points: system of systems, cascaded uncertainty modelling, and system interdependence

- Metrics and intervention strategies: performance indicators, structural and non-structural measures, adaptive pathways









About BRIM

Network activities

Conferences, workshops and seminars We provide a range of

mechanisms to develop new ideas and collaborations.

- Flood risk and resilience (Sep 2016)

- The Influent of Weather and Climate Variability on Water Resources Management (Jan 2017)

- Urban Flooding and Sponge Cities (July 2017)

For researchers: funding is available to facilitate pilot studies, hot topic workshops, staff exchanges and international collaborations.

- 1 awarded pilot studies
- 1 awarded embedded research
- 1 awarded meeting fund

For engineers: develop collaboration with the research community, steer research efforts etc.







About BRIM

Incoming call for Feasibility Studies

Pilot Studies - Up to £25K can be awarded for studies that will run for up to six months. These projects should aim to conduct original research on a specific topic, which could potentially lead to a full grant proposal at the end of the study.

Embedded Research - Up to £5K can be awarded for research of up to three months. This could be for secondment of one researcher to another organisation.

Mini-project/Meeting Fund - This fund is up to £2K and for up to one month which can be used for short collaborative visits or for small meetings.











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About the Workshop

Aims:

- To identify key issues and challenges on risk and resilience.
- To examine strategies and architectures for resilience by looking at the intersections between resilience and risk across inter/transdisciplinary domains.
- To discuss new ways of modelling resilience and risk.
- To inform a second workshop that will be held early in the new year, which will be run along the lines of a sandpit where we are planning to fund one or more feasibility study projects that will lead to a research proposal being submitted to EPSRC or Innovate UK.

Agenda

Session 1: Perspectives on Resilience and Risk

10:15 Key Issues and Challenges – Prof Roy Kalawsky

10:30 Keynote Speaker: Prof Katherine Royse - Science Director GeoAnalytics and Modelling - British Geological Survey

- 11:00 EPSRC presentation: Dr Nick Cooper EPSRC
- 11:10 Morning Coffee
- 11:30 Quad chart presentations from attendees 10 mins per person
- 13:00 Lunch

Agenda

Session 2: Modelling Resilience and Risk

- 14:00 Quad chart presentations from attendees 10 mins per person
- 14:30 Discussion: Modelling Intersections between Resilience and Risk
- 15:30 Afternoon Tea
- 16:00 Feedback from Discussion
- 16:15 Recommended topics for Sandpit Event
- 16:30 Closing Remarks Guangtao Fu