

Call for feasibility study, outreach project & focused mathematics workshop bids



Forecasting severe weather events, including mid-latitude cyclones, hurricanes and river flooding, poses a significant challenge. Uncertainties in the prediction of where and how much precipitation will fall, how high storm surges will be and the direction of waves and wind that attack coastlines lie at the heart of this challenge.

The EPSRC-funded Maths Foresees network will tackle these challenges through a range of activities. Specifically, the Maths Foresees network aims to:

1. Forge collaborations between the applied mathematical sciences and environmental change communities.
2. Facilitate knowledge exchange between the academic mathematical and environmental science communities and environmental stakeholders, including government agencies.
3. Rethink the approach to the analysis of extreme weather events (quantify uncertainty).
4. Promote the mathematical modelling of environmental hazards in the wider UK community.
5. Create public awareness of the mathematical and engineering challenges involved in living with environmental change, including severe weather events, and highlight the key role of mathematics through communication and outreach projects.

To help achieve these goals, the Maths Foresees network is inviting proposals for feasibility studies, outreach projects and focused mathematics workshops.

Feasibility studies

Duration: A maximum of six months.

Applicants: Participation by an industry organisation will add strength to proposals. The project PI will be responsible for the overall organisation of the project and for reporting on research outcomes to the Maths Foresees network PI and coordinator.

Award: A maximum budget of £25,000 (inc. VAT). Costs may include staff time, consumables and the travel and subsistence of investigators travelling between organisations involved in the project. Indirect costs, estates costs and infrastructure costs cannot be claimed for.

Outreach projects

Duration: A maximum of six months.

Applicants: Participation by an industry organisation will add strength to proposals. The lead investigator will be responsible for the overall organisation of the project and for reporting on outcomes to the Maths Foresees network PI and coordinator.

Award: A maximum of £10,000 (inc. VAT), to include setting up the project and engagement with at least one public audience (e.g. public science fairs or schools). Costs may include staff time, consumables and the travel and subsistence of investigators travelling between organisations involved in the project. Indirect costs, estates costs and infrastructure costs cannot be claimed for.

Focused mathematics workshops

Duration: Two days.

Applicants: Participation by an industry organisation will add strength to proposals. The lead organiser will be responsible for the overall organisation of the project and for reporting on outcomes to the Maths Foresees network PI and coordinator.

Award: A maximum of £3,750 (inc. VAT) to include travel and subsistence costs for 15 participants at £250 per head.

Assessment criteria

1. **Topic:** Does the topic of the proposal fall within the remit of the Maths Foresees network and, in particular, does it address some of the challenges in the prediction and/or analysis of extreme environmental events?
2. **Scientific quality:** Will the proposed activity address advanced technical environmental mathematics problems using novel and/or ambitious techniques?
3. **Knowledge exchange:** Will the proposed activity foster new and existing multidisciplinary partnerships? Is there potential for the activity to lead to further collaborations?
4. (Workshops only) **Participants:** Do prospective attendees include existing Maths Foresees members? Are non-members likely to become involved in future network activities?

General terms and conditions

1. Lead applicants must be based at a UK HEI.
2. All projects and workshops must in principle be completed by the end of August 2017.
3. A formal contract will be issued by the University of Leeds following the announcement of a successful award. This will detail specific terms and conditions relating to the use of awarded funds and reporting of project outcomes.
4. Project investigators (feasibility studies and outreach projects) and workshop organisers should be members of the Maths Foresees Network. If you wish to become a member, please mention this when requesting an application form (see below). Registration is free.
5. Any employment or visa compliance implications are entirely the responsibility of the project leader and their institution.

How to apply

Please contact Tiffany Aslam (T.J.Aslam@leeds.ac.uk) to request the appropriate LaTeX application template(s). All application(s) must be returned by **Monday 8th August 2016**.

Awarding of proposals

All applications will be reviewed by the Maths Foresees Network Management Team. Where a member of the Management Team has a conflict of interest with one or more bids, another reviewer will be elected. Decisions will be announced at the Maths Foresees General Assembly in Edinburgh on Wednesday 7th September 2016.