

# Communicating Mathematics for the Public

Tuesday 24<sup>th</sup> - Wednesday 25<sup>th</sup> January 2023

Isaac Newton Institute, Cambridge

## Follow on Proposals

*The Isaac Newton Institute is pleased to have supported the Communicating Mathematics for the Public event and is exploring the idea of longer term follow up activities. Please find below a list of 5 proposed activities.*

### 1. Collaboration with government

Analysts exist in public sector roles who produce advanced mathematical outputs derived from models. Technical skills training is available, although there is competition for people. Communication for policy using these advanced models, across different layers and professions of government, from inside and for academic advisors, requires a development partnership. This may involve supporting existing work like the data science masterclasses for leaders.

### 2. Skills development for ECRs in mathematics

Mathematicians may get no communication training in undergraduate courses, but if they specialise to higher levels, they need to be able to advocate for their work as others outside mathematics may not understand. Apart from 3 month secondments, there are not opportunities for more general skills development, and something more universal could be developed to offer to mathematical researchers, drawing on a general offer to PhD students.

### 3. Policy primer for mathematicians

Many academics would like their work to be used in policy but have little idea how the process works. Fellowship recipients apply annually to join (n=30) a science policy intensive course to learn about processes and how to communicate very specialised material with government for impact and broader support. We can develop a pilot programme with the support of the Royal Society to test suitability for mathematical work if there are resources to run and host this.

### 4. Mathematical ambassadors

The RSS has developed training for statisticians (n=20) to be available for media requests, at a general level, of topical issues. This includes talks from experienced professionals in the media and some practice activity as well as a support network to share experiences and opportunities. The ambassadors are refreshed by a new cohort every few years and this could be expanded to include mathematicians or run separately.

### 5. Academic programme in maths comms

Misinformation is largely not about genuine misunderstanding of accurate material (irrational evidence resistance) but that can and does happen with mathematical work. Communication processes were not equal to the challenge of how to communicate many such things during the pandemic but mathematical models have broad implications. Research about the epistemology, psychology and communication of such material for the public could be scoped as a programme.