



ISAAC NEWTON INSTITUTE

THE NEWTON GATEWAY TO MATHEMATICS

10TH ANNIVERSARY

Established in March 2013, the Gateway is the impact initiative of the Isaac Newton Institute for Mathematical Sciences (INI). Supported by INI and the University of Cambridge, the Gateway reaches out to and engages with the users of mathematics – in industry, business, public sector and other scientific disciplines. It helps to bridge the gap between those engaged in frontier mathematical research and those working in more applied areas, by stimulating the interchange of knowledge and ideas.

THROUGHOUT THE LAST DECADE, THE GATEWAY HAS BEEN INVOLVED WITH NUMEROUS PROJECTS AND INITIATIVES, INCLUDING:

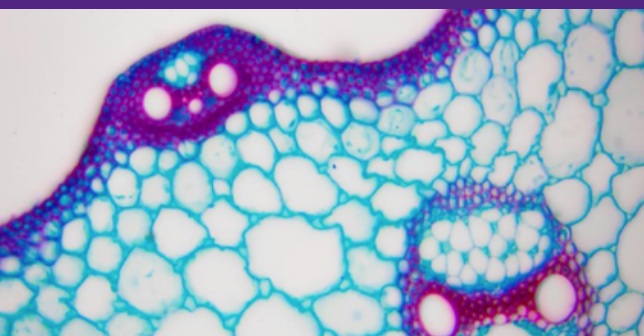
- Open for Business
- Edwards Symposia Series
- Virtual Forum for Knowledge Exchange in the Mathematical Sciences (V-KEMS)
- Rapid Assistance in Modelling the Pandemic (RAMP)
- EU-MATHS-IN
- Analysis for Innovators

OPEN FOR BUSINESS

Since established, the Newton Gateway has been developing Open for Business (OfB) events which form part of the INI's mission to foster greater links between academic research and the business world. OfB events aim to bring together academic researchers in the mathematical sciences with industrial, commercial and government organisations and individuals to enable formal and informal discussion and networking. They are organised in conjunction with Research Programme academic organisers and take place within a relevant INI Programme Workshop or as a separate standalone event.

EDWARDS SYMPOSIA SERIES

Following a successful inaugural event in September 2016, and with the support of Unilever, the Edwards Symposia Series ran annually for five years. The Edwards Symposia Series highlights the latest developments in soft matter science with a particular (but not exclusive) emphasis on theoretical and mathematical models, and on how these models can inform industrial processes, materials, and design. In 2023, in its 7th year the Edwards Symposia was awarded funding for a further 5 years with the support from CFM. The Gateway currently supports the delivery and development of the event series.





VIRTUAL FORUM FOR KNOWLEDGE EXCHANGE IN THE MATHEMATICAL SCIENCES (V-KEMS)

V-KEMS, the Virtual Forum for Knowledge Exchange in the Mathematical Sciences was set up in March 2020, in response to the pandemic. This is a partnership between the Newton Gateway to Mathematics, Isaac Newton Institute (INI), International Centre for Mathematical Sciences (ICMS) and Innovate UK KTN with various representatives from the mathematical sciences community. The main aim has been to identify a range of virtual approaches to help address challenges from business and industry, the third sector, and other groups outside academia. These challenges may have been long-standing or may have arisen directly as a consequence of the disruption to UK society.

RAPID ASSISTANCE IN MODELLING THE PANDEMIC (RAMP)

From March 2020, the Royal Society used its convening power to support efforts to model the COVID-19 pandemic and help guide the UK's response. In particular, it set up the Rapid Assistance in Modelling the Pandemic (RAMP) initiative which brought modelling expertise from a diverse range of disciplines to support the pandemic modelling community. From January 2021 until July 2022 the Newton Gateway played a key role in the RAMP Continuity Network (a UKRI funded project) and delivered a series of meetings, workshops and virtual study groups.



EU-MATHS-IN

Since 2022 the Newton Gateway to Mathematics has been the UK representative within EU-MATHS-IN - a European network that aims to establish connections between stakeholders working in industrial mathematics to facilitate interaction on mathematics and innovation. The Gateway Scientific Advisory Panel acts as the network for the UK and has presented case studies and exemplars at a number of events.

ANALYSIS FOR INNOVATORS

The Gateway became a Partner in UKRI's Analysis for Innovators Programme (A4I) in March 2022. A4I is a programme that gives UK businesses of any size access to cutting-edge R&D expertise and facilities to help solve problems that they have been unable to tackle using standard technologies and techniques. Through its established relationships with universities across the UK, within the A4I programme, the Gateway can connect businesses with the most appropriate mathematical and statistical modellers.



For more information and upcoming events:

<https://gateway.newton.ac.uk>

or scan the QR code

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