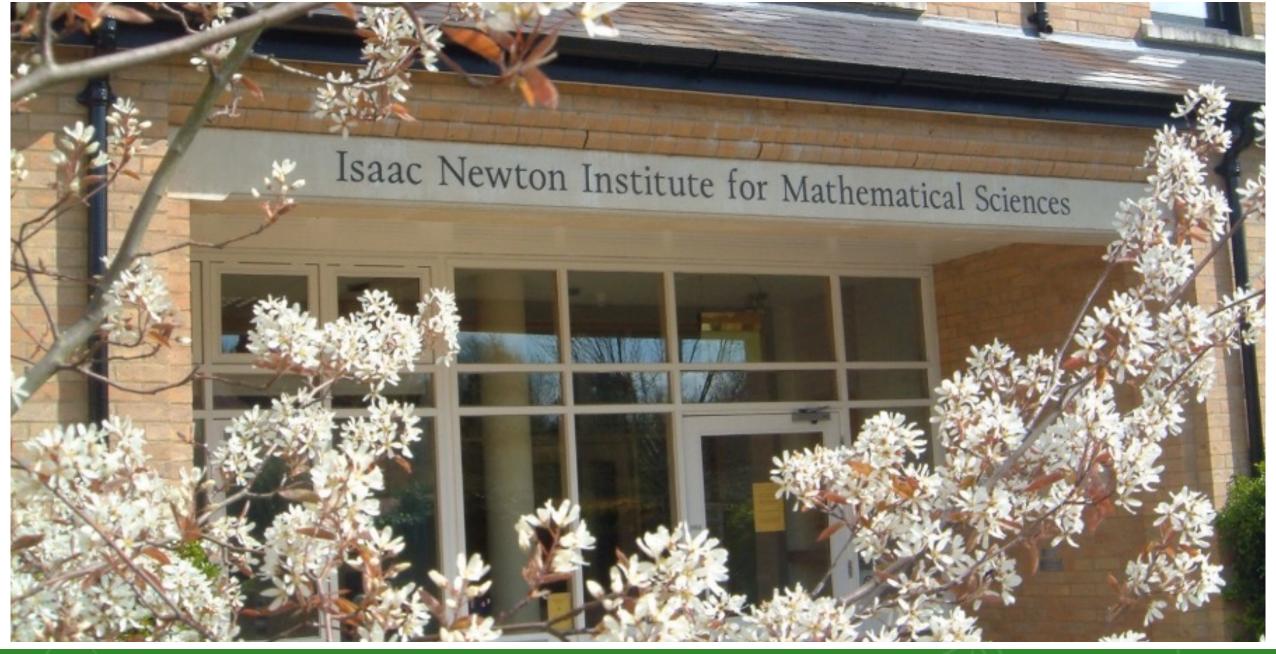


Long residency programmes at INI

How to write a successful proposal





The Isaac Newton Institute







A national and international visitor research institute

- Part of the UK's mathematics research infrastructure (with ICMS, Heilbronn)
- Themed programmes of 1, 4 or 6 months duration
- Programmes span the mathematical sciences broadly interpreted
- Includes Newton Gateway to Mathematics
- Located in Cambridge and part of CMS

This session



Ulrike Tillmann, Director of INI

- Long-term programmes
 - Benefits & barriers
 - Developing an idea & writing a proposal

Clare Merritt, Manager of the Newton Gateway

Support offered by the Newton Gateway

Samantha Skehel, Business and Operations Manager of INI

Support offered by INI

Q&A





The benefits of long-term programmes

Unique opportunity to build a community, indeed, grow a new subject area

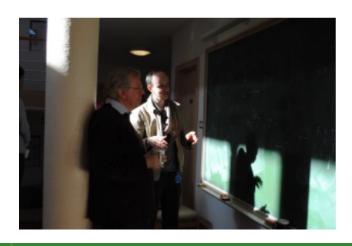
Allow organisers and participants to

- spent entire sabbaticals completely immersed
- learn new approaches and subjects
- organise project seminar series
- foster and nurture the next generation

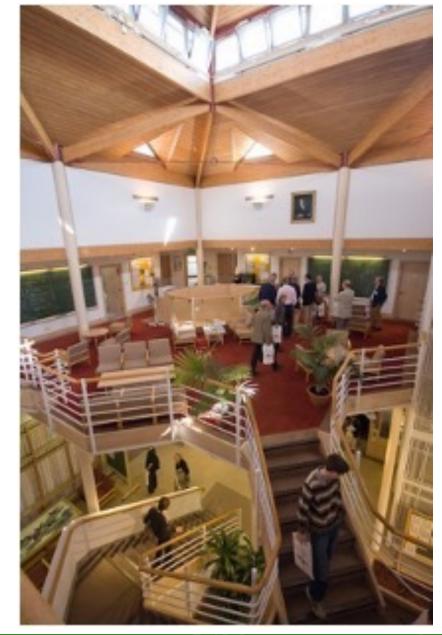


Bespoke building

- Opened in July 1992
- Designed to nurture collaborative research
- Two seminar rooms of capacity 100 and 60
- Office space for 57 long term participants







Barriers to participation

INI has developed schemes for removing barriers to participation:

- Provision of Care Scheme for caring responsibilities or needs
- DAC-Listed Countries Scheme

Assistance with sourcing:

- schooling and sourcing/funding early years childcare;
- housing to accommodate family or carers





2023 Programmes

6-month programmes

- Mathematical theory and applications of multiple wave scattering
- Rich and Nonlinear Tomography a multidisciplinary approach
- The mathematical and statistical foundations of future data-driven engineering
- New statistical physics in living matter: non equilibrium states under adaptive control
- Mathematics of movement: an interdisciplinary approach to mutual challenges in animal ecology and cell biology
- Uncertainty qualification and stochastic modelling of materials

4-week programme

GeomPack: Geometry and packing in material structure and biology



Developing an idea

- What are the exciting new developments?
- What is the goal of your programme?
- Have there been recent programmes in this area?

The Director and Deputy Director will be happy to discuss these points at any stage of the development of your plans.



Writing a proposal

- Mathematical/scientific case:
 - background,
 - state of the art,
 - ambitions and future directions
- Main goals of programme
- Names of 60 potential participants
- EDI plan



https://www.newton.ac.uk/events/submit-a-proposal/

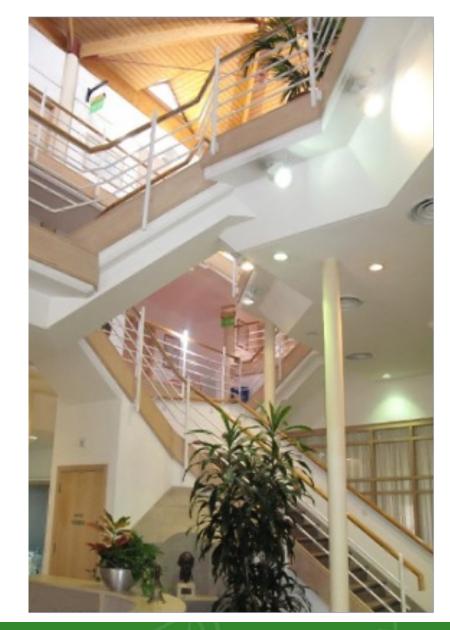
Programme structure

Should suit the science!

Standard: 3-4 workshops

Variations: replace a workshop with

- a research school;
- a satellite workshop;
- an international split site school or workshop;
- deep dive sessions;
- open for business events (through Newton Gateway)



Timeline

X-24m proposal submitted

X-20m proposal reviewed by referees

X-19m programme considered by Scientific Steering Committee

X-18m programme approved by Management Committee

X programme starts at INI

X+6m programme finishes

X+8m final report due

- Two years from proposal submission to programme start.
- Add 6 months in case a revision is needed.



Selection criteria

Scientific case:

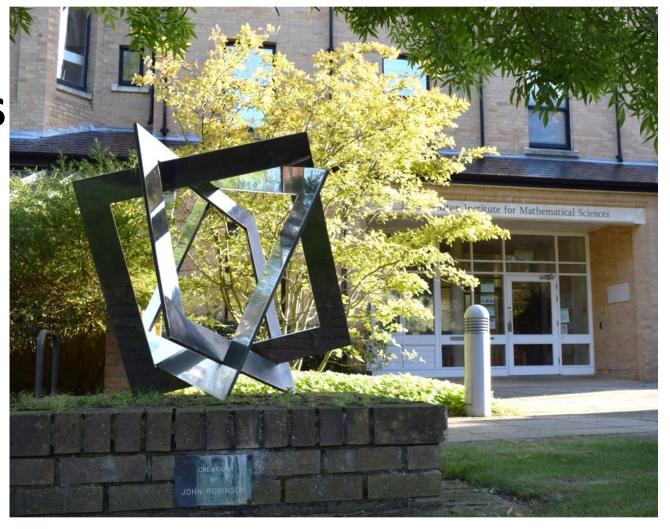
- timely, novel, ambitious
- lasting impact on the field
- interdisciplinary or intra-disciplinary interactions
- Experience and commitment of organiser team
- Right mix of participants
- Commitment to diversity



Submission deadlines

31 January

31 July



Newton Gateway to Mathematics

The Newton Gateway to Mathematics

- The impact initiative of INI
- Engage with the users of mathematics
- Help to bridge the gap between those engaged in frontier mathematical research and those working in more applied areas
- Develop and deliver activities for mathematical sciences Knowledge Exchange
- KE support/impact for Isaac Newton Institute Research Programmes



Open for Business Events

- Developed and delivered by the Newton Gateway to Mathematics
- We work with INI Programme organisers to identify applications and choose speakers from academia, industry & or government
- These can be associated with an INI
 workshop or run separately as a standalone
 event within the Programme

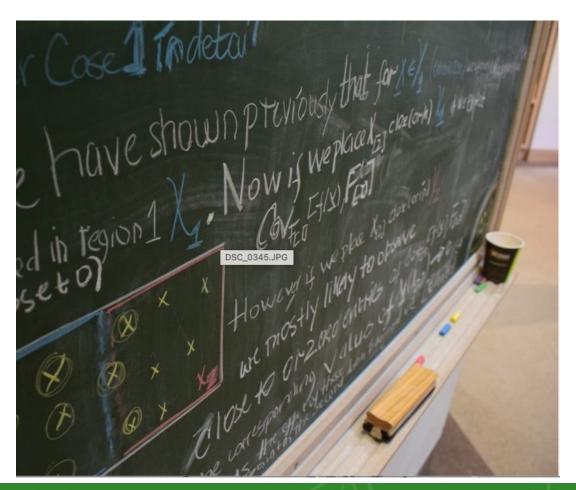




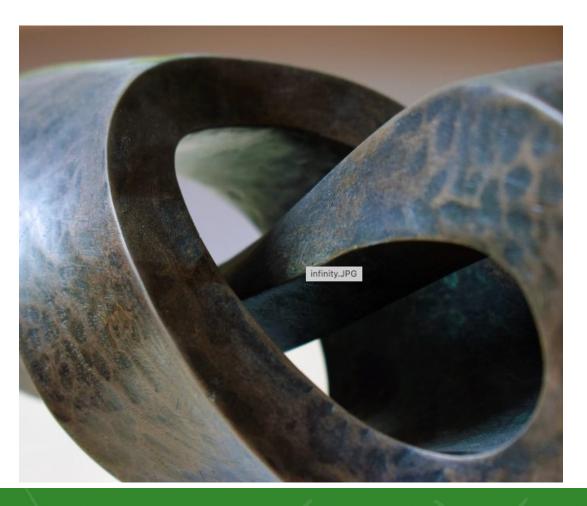
Administration

The administrative burden is shouldered by the INI's team.

Organisers (for both programmes & workshops) advise and make decisions, which the INI team put into action.



Funding



- **Funding** is allocated from INI's grant to support the programme and workshops.
- Programme and workshop organisers can supplement this with other funding sources, which can help to enhance the programme and workshops.
- INI's Admin team manage all aspects of the budgets and finances, liaising with Programme and Workshop organisers where appropriate.

4 JEST ON