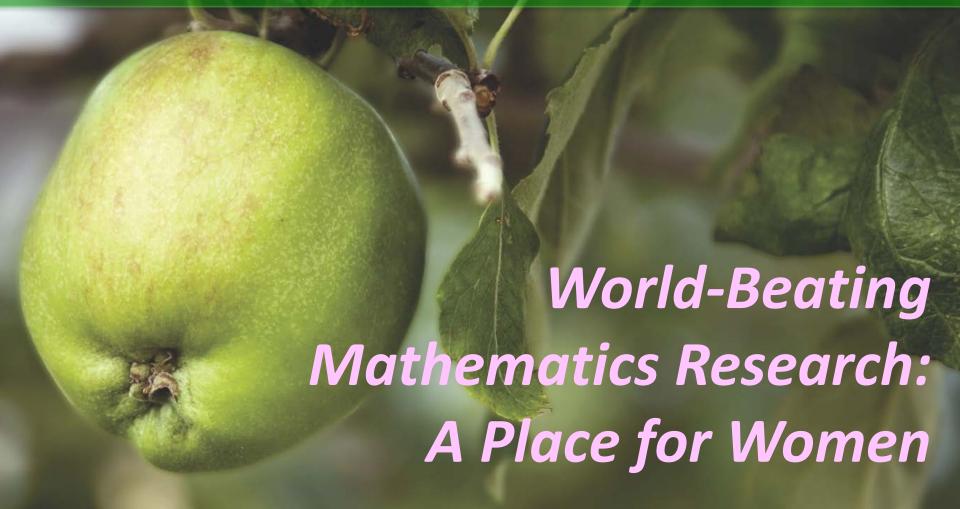


# **Isaac Newton Institute for Mathematical Sciences**





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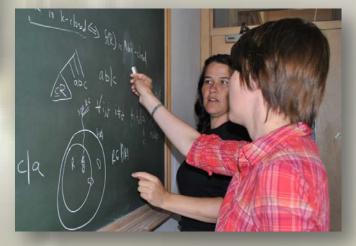
# About the Institute

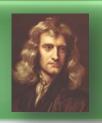












#### The Isaac Newton Institute

- Opened in July 1992
- Located at Cambridge University, following a national competition
- Established to be the UK's national mathematics research institute
- Acknowledged as a global leader in pure and applied mathematics research





## Purpose-built facilities

- Open, elegant, light-filled, spacious and timeless building
- Designed to liberate and support collaboration
- Access to Cambridge University libraries.
- Even the elevator and toilets contain blackboards – and they are used!



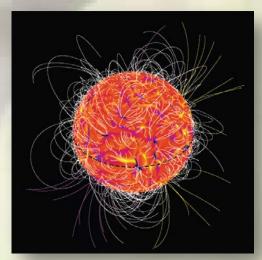


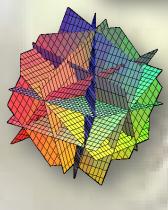






# Mathematical sciences in the broadest sense



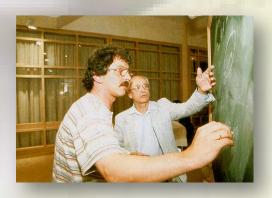




- Geometry, number theory, algebra, topology, combinatorics and many more
- Computer vision, computer security and cryptology, high dimensional data analysis
- Climate models, turbulence in fluid flow, the cracking and failure of materials
- The spread of epidemics, understanding how the heart beats, evolutionary biology
- The operation of financial markets and economic trading
- Particle physics and general relativity...



# The Institute selects only the very best programmes



J-P Serre: Fields medallist and winner of the Wolf and Abel prizes, who participated in 1997 and 2009



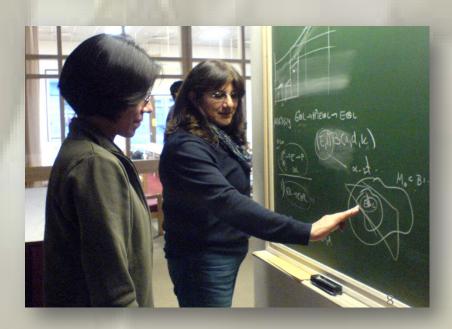
Wolf and Abel prize winner John Tate, who participated in 1998

- Great scientific merit
- High quality leadership, participation and structure
- At the forefront of current developments
- Aimed at breakthroughs rather than consolidation
- More than 40 major prize winners (Nobel, Abel, Fields, Wolf) have participated in Institute programmes and workshops



#### Programmes

- The Institute facilitates collaborative research on problems drawn from across mathematics and mathematical sciences
- Research is conducted through structured programmes lasting
  4 to 6 months with 30 or more core participants
- > 100 research programmes over 20 years
- > 1,000 people come to work at the Institute each year
- Interdisciplinarity is encouraged





### Defining moments

- Andrew Wiles announces his outline proof of Fermat's last theorem
- Stephen Hawking and Roger Penrose debate fundamental ideas about gravity
- Queen's Anniversary Prize awarded for world class achievement in education



Andrew Wiles



Stephen Hawking and Roger Penrose