## Gender Balance Initiatives





### A Multi-faceted Approach

#### • Policy

Gender Balance Action Plan UKRC CEO Charter Athena Swan Charter



#### Events

European Women in Mathematics Panel European Girls' Mathematical Olympiad LMS Women in Mathematics Days

- Statistical analysis
- Practical and financial support





#### **Gender Balance Action Plan**



- Developed in 2010 by Ben Mestel, the then Deputy Director of the Newton Institute
- Compared INI participation rates of women between 2004 and 2008, both collectively and by seniority, with the 2007 profile of women in mathematics departments in UK HEIs as published by UKRC
- Identified concrete steps and targets for redressing the gender balance



#### Gender Balance Action Plan -Observations

- INI participation rate of women at that time (15%) mirrored that of women across UK HEIs
- The marked skewness towards lower grades also mirrored patterns in UK HEIs
- The variation in participation rates according to research topic is very high
- The key to increasing women's participation rates is at the programme selection and organisation stage



#### Gender Balance Action Plan -Targets and Actions (1)

- Increase participation rate to 18% by 2013 (an increase of 20%)
- Sign up to UKRC CEO Charter
- Work to achieve goal that at least 20% of appointed members of the Institute's Committees are women



• Programme reports will contain summary statistics including gender information



#### Gender Balance Action Plan – Targets and Actions (2)



- Offer guidance to organisers, providing details of women mathematicians working in related fields
- Seek funding for a fellowship and bursary scheme which, though open to all, is designed to be particularly attractive to women
- Seek to provide family-friendly accommodation
- Use the Institute's website to showcase achievements by women mathematical scientists working at the Institute



#### LMS Women in Mathematics Days

- The 2010 LMS Women in Maths Day was held at INI.
- Following the success of this event, the 2013 event will once more be hosted by INI.





## **Financial and Practical Support**

- Bursaries
- Family-friendly accommodation
- Schooling and/or childcare



• Letters of reference for visa issues



 Increased use of web technologies and video-conferencing for those unable to attend, or able to attend only for short periods of time

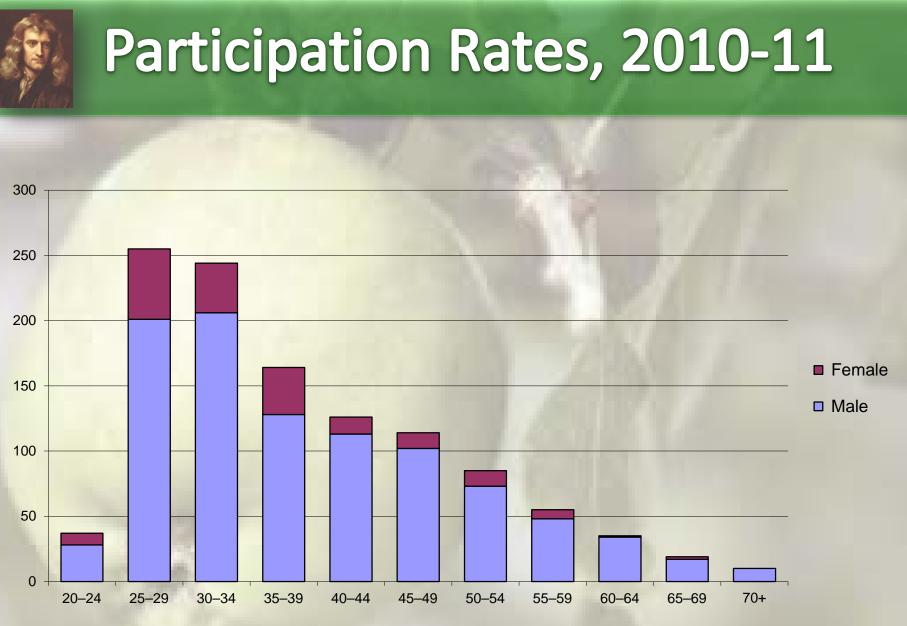


#### **Participation Rates of Women**

We monitor closely participation rates – but are mindful of the variance within these values.

- 2004-08 rate: 15%
- Action Plan target for 2013: 18%
- 2010-11 participation rate: 16%
- First half of 2011-12 rate: 21%
- However, BSM programme has a participation rate of 11%





UK Participants by Age and Gender, 2010-11

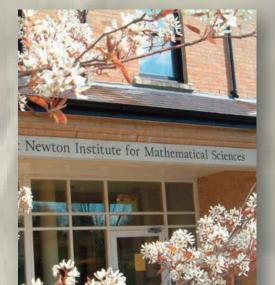
# Submitting Proposals





## **Submitting Proposals**

- The Institute invites proposals for research programmes in any branch of the mathematical sciences
- The Scientific Steering Committee meets twice each year to consider proposals for programmes (of 4-week, 4- or 6-months duration) to run 2 or 3 years later



- Details on submitting proposals are available at <u>www.newton.ac.uk/callprop.html</u>
- Contact the Director, John Toland, for advice or informal feedback: director@newton.ac.uk.



This schematic shows current and forthcoming programmes selected by the Scientific Steering Committee.

	JAN		UL S	EP		DEC	
12	Mathematics and Applications of Branes in String and M-Theory		Topological Dynamics in the Physical and Biological Sciences		'5	Programme Duration	
201	Semantics and Syntax: A Legacy of Alan Turing		Spectral Theory of Relativistic Operators		Multiscale Numerics for the Atmosphere and Ocean		6 months 4 months
13	The Mathematics of Liquid Crystals		Polynomial Optimisation	Mathematical Challenges in Quantum Information		-	2 months
201	Grothendieck-Teichmüller Groups, Deformation and Operads	Mathematical Modelling and Analysis of Complex Fluids and Active Media in Evolving Domains		Infectious Disease Dynamics	The Holographic Principle	Mathematics for the Fluid Earth	1 month



#### Looking to the Future....



European Girls' Mathematical Olympiad, Cambridge 2012