



Media release

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For immediate release

Female mathematicians – still a paradox?

Mathematicians love a paradox. The subject is riddled with these statements which are apparently true yet seem to contradict themselves. This week, as the London Mathematical Society looks to the future of women in mathematics, it also celebrates a young mathematician who found herself at the centre of a paradox almost 120 years ago.

In 1890, Philippa Fawcett gained the highest score in the examinations for the Mathematical Tripos at Cambridge. And yet she was not given the title Senior Wrangler, which was conferred upon the student who gained the top first. This was because she was a woman and so Fawcett had to be described as 'above the Senior Wrangler'.

On 25 April, at its 2008 Women in Mathematics day, the London Mathematical Society is launching the collection of books dedicated to Fawcett's memory. The Philippa Fawcett collection contains almost 200 books which were written by or about female mathematicians working before 1940. Some are academic texts, others are school text books, discourses on science and biographies. All will be made available by the Society for scholars and others who wish to access them.

The books were donated to the Society by Dr AEL Davis, a historian of mathematics who has been a lecturer at the Open University. She said, "I have wanted for some time to ensure an appreciative and enduring home for the collection which is a testament to the dedication and talent of these women who were not permitted to get proper training simply because of their sex. They often worked in isolation, without the support of a mathematical community. Their contribution has been vital to opening opportunities in mathematics to women today, although there is still a great deal to be done."

Today, women are quite well represented in the mathematical sciences at undergraduate level, making up close to 40 per cent of the student body in UK universities. But their role in academia dwindles quickly, with just 15 of the 520 professors of mathematics¹ in the UK being female (2.8 per cent).

LMS Vice President, Professor Alice Rogers, said, "We are delighted that Dr Davis has donated this important collection to the Society. The Society is committed to ensuring equality of opportunity for everyone in the mathematical sciences. These books – and the life stories of their authors – are an inspiration to us all."

Fawcett herself stayed in academic mathematics for just 12 years. After her Tripos, she carried on with her research as a Fellow of Newnham College (a women-only college which Philippa's suffragist mother Millicent Fawcett had been involved in founding) but was prevented from becoming a University Lecturer at Cambridge. She was also elected a Fellow of University College, London. She then went to South Africa to help train mathematics teachers. The majority of her career was then spent working in administration at the London County Council, where she was responsible for developing teacher training colleges and achieved some success in fighting for equality of pay. Fawcett died in 1948, the year the University of Cambridge allowed women to become full members of the university.

¹ Data source: HESA (1997 - 2007) Resources of Higher Education Institutions, Cheltenham, HESA from the UK Resource Centre for Women in Science, Engineering and Technology. All figures quoted are for 2005-6.

Notes for Editors

1. The **London Mathematical Society (LMS)** is the UK's learned society for mathematics. Founded in 1865 for the promotion and extension of mathematical knowledge, the Society is concerned with all branches of mathematics and its applications. It is an independent and self-financing charity, with a membership of over 2600 drawn from all parts of the UK and overseas. Its principal activities are the organisation of meetings and conferences, the publication of periodicals and books, the provision of financial support for mathematical activities, and the contribution to public debates on issues related to mathematics research and education. It works collaboratively with other mathematical bodies worldwide. It is the UK adhering body to the International Mathematical Union and is a member of the Council for the Mathematical Sciences, which also comprises the Institute of Mathematics and its Applications and the Royal Statistical Society.
2. In 1961, the Society elected its first female president, Mary Cartwright. Dame Mary was a mathematician at Cambridge and was the first female mathematician to be elected to the Royal Society. Her book, *Integral Functions* is part of the Philippa Fawcett collection.
3. For further information, please contact:

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