

Christopher Zeeman Medal 2018

Citation for Hannah Fry

The 2018 Zeeman Medal is awarded to HANNAH FRY of University College London for her contributions to the public understanding of the mathematical sciences.

Hannah Fry is a Senior Lecturer in the mathematics of cities at UCL and an honorary lecturer in the UCL Mathematics Department. She is actively involved in mathematical modelling of urban and social systems. Besides her mathematical research, she has a sustained and distinguished record of communicating mathematics to the public, with a huge portfolio of public engagement activities including books, videos, radio, TV, and public talks, which between them reach vast audiences.

Hannah Fry's dedication in promoting mathematics to the widest possible public has not only done untold good for the subject, but has provided a powerful role model for mathematicians, most especially female ones, making mathematics feel more relevant, more humorous and most of all more human. Her spectacular success in an otherwise notoriously difficult endeavour may be ascribed to a unique and enviable set of characteristics. First, she has an uncanny instinct for spotting mathematics that will readily engage the public, and then of constructing the perfect context and using it to convey profound mathematical ideas that might otherwise appear dry. Second, she is effortlessly able to transcend audience boundaries and make mathematics both accessible and "cool" to an enormous range of hard-to-convince onlookers. Finally, Hannah has a tremendous capacity for her sheer hard work: the breadth and range of activities that she undertakes, the number of separate media appearances to which she commits, and the widely disparate audiences and age groups that she is able to reach are all eloquent testament to her ability and commitment. Perhaps her most significant achievement is to have inspired a generation of girls in a way that has not been done before.

Given Hannah Fry's weighty portfolio of mathematical communication interactions, it might seem invidious to pick out one programme, but her podcast series *The Curious Cases of Rutherford and Fry* regularly broadcasts to over one million per episode on Radio 4 and has reached the top few places in the UK podcast charts. For a STEM-based programme to perform this well compared to so many comedy shows, celebrity interviews and other distractions is simply unheard of.

The Christopher Zeeman Medal was created and named in honour of Professor Sir Christopher Zeeman FRS (1925–2016), who, in 1978, became the first mathematician to deliver the Royal Institution's Christmas Lectures. The medal was specifically designed to recognise and acknowledge the contributions of mathematicians involved in engaging with the public in mathematics in the UK. Hannah Fry is a truly outstanding ambassador for mathematics and it is fitting that she is awarded this prize in acknowledgment of her remarkable impact.