

Rob Eastaway – Christopher Zeeman Medal Winner 2016

Rob is without doubt one of the leading promoters of mathematics in the UK. Rob's outreach over many years has engaged and continues to engage and inspire great numbers of diverse audiences, in particular, primary and secondary school children, and their parents. Rob is also a highly effective role model for others who wish to develop a career in the promotion of mathematics to the general public.

Rob's career of promoting mathematics began during his late teenage years with his first puzzles being published in the *New Scientist* and *The Sunday Times*. As an undergraduate at Christ's College, Cambridge (MA in Engineering Science, in Part 2 of which Rob specialised in Operational Research), Rob edited *Enigmas*, a collection of puzzles from the *New Scientist* column.

From 1984–1990 Rob worked as a management consultant at Logica and subsequently Deloitte, using mathematical modelling to advise decision makers in public sector bodies and other organisations. While at Deloitte, Rob developed (with Ted Dexter and Gordon Vince) the 'Deloitte Ratings', a mathematical system for ranking international cricketers, subsequently adopted by the ICC and still used as cricket's official world rankings. During this time, Rob also had his first experience of giving maths presentations to the general public.

Rob has written and/or co-written a number of books for a range of audiences, including school children and their parents. It was the success of his first book *What is a Googly?*, an explanation of cricket for non-cricketers, which created the opportunity for Rob to write maths books. Notably, a copy of this book was presented by Prime Minister John Major to President George Bush (Snr) at Camp David in 1992.

Further books engendered invitations to give talks at schools. *Why do buses come in threes?*, written with Jeremy Wyndham, became a best-seller, topping the Science Museum bookshop chart for five years, and, as a direct result, teachers around the UK requested talks by Rob at their schools. Rob also made his first national radio appearances in 1998.

Outreach activity grew to include Royal Institution talks and Year 9 Maths Masterclass sessions. Rob became involved in the Maths Year 2000 initiative, which led to him visiting schools to give maths-and-magic talks for primary pupils and 'everyday maths' talks to secondary school children.

These talks led to the development of his seminal contribution in promoting mathematics to school students: the first Maths Inspiration shows for Year 11/12 students took place in 2004 at the Royal Exchange Theatre, Manchester, for audiences of 300 per show. These shows grew to provide very high quality lectures to large audiences (often close to 1,000) of 15–17 year olds in theatres across the country. Rob has made this into an immense success story for maths promotion which has had a huge impact on the perceptions and interests of tens of thousands of young people considering studying maths at university.

As well as delivering first rate talks himself, Rob has built up an extraordinarily effective team of maths presenters, and in many cases has given them a major boost in their own careers in bringing maths to the public, thus multiplying his effectiveness many times over. It is no coincidence that just about all of the UK's maths presenters who have come to prominence in the last 15 years have been supported by Maths Inspiration. Rob insists on nothing but the highest quality in the presentations. The time and effort he puts into working with each presenter to make sure that their talks will have a

powerful impact on his audiences is highly evident. By 2016, the number of school pupils who have attended Maths Inspiration shows has exceeded 130,000.

As part of his engagement with schools, Rob has run many workshops for primary and secondary teachers on the creative side of maths. He was also President of the Mathematical Association from 2007–8, which brought him much closer to the teaching community.

Not content with aiming inspiration solely at school children, Rob has worked to engage their parents with maths. *Maths for Mums & Dads*, written by Rob and Mike Askew has sold over 100,000 copies and led to a huge number of family and parent events, including Rob speaking at the Hay Literary Festival in 2014 to an audience of 1,000 children. *Maths on the Go* (2016), also by Rob and Mike Askew, has led to collaboration with National Numeracy on workshops to engage with parents.

In 2016, the National Theatre agreed to let Maths Inspiration shows perform on the mathematical set of *The Curious Incident of the Dog in the Night-Time*, a smash-hit West End stage adaptation of the novel by Mark Haddon.

Therefore, it is fitting that the award of the Christopher Zeeman Medal which was created to recognise and acknowledge the contributions of mathematicians involved in promoting mathematics to the public and engaging with the public in mathematics in the UK, is made to Rob Eastaway in 2016. The medal was 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, and his 'Mathematics into Pictures' series is now cited as an important influence to many young mathematicians.