

Professor John Barrow, FRS, Department of Applied Mathematics and Theoretical Physics, University of Cambridge, is one of the leading popularisers of mathematics in the world, who has had a deeply profound influence on the popularisation of mathematics and science both directly (through his books and lectures) and also through his work in directing the Mathematics Millennium Project (MMP). Professor Barrow has also been both the Gresham Professor of Astronomy and Gresham Professor of Geometry at Gresham College, London and is a Fellow of the Royal Society.

John Barrow is perhaps best known for his work in cosmology and his popularisation of this subject. He has written a series of twenty profoundly influential popular books in the subject beginning in 1983 with *The left hand of creation*. As well as promoting mathematics through his work with MMP, Professor Barrow is also the author of many books on mathematics and cosmology. His recent publication - *One hundred essential things you didn't know you didn't know* - shows how mathematics explains our world, in a way that is accessible to anyone with only a basic mathematical knowledge. His most recent work, *The Book of Universes*, shows how mathematics has enabled us to understand so much of the Universe we see around us.

He has lectured widely including at 10 Downing Street, the Vatican and to the Queen. He is also very well known for his lectures (and research) on mathematics and sport, and especially relevant for the Olympic Year 2012 in which he receives his award, a mathematical study of the many Olympic sports. He is in high demand as a keynote speaker at any event popularising science or maths and has given major presentations all over the world. His work is so accessible that it has had a profound effect on the way that people think about science, maths and themselves. In particular his work on the anthropic principle has led to his award of the Templeton Prize for research and discoveries about spiritual realities. This demonstrates a much deeper level of popularisation than simply writing fun articles (although he is very good at doing this too) in that he has changed the way that people think about maths and science. A tireless champion of mathematical awareness for several decades, Professor Barrow has won both the Royal Society's Faraday Prize and the Kelvin Medal of the Institute of Physics.

He has also engaged with the arts and in 2002 his play *Infinites* premiered in Milan, directed by Luca Ronconi, and won the Premi Ubu Theatre Prize and the Italgas Prize. The Italian edition of his book *Cosmic Imagery*, about the role of pictures in the history of science and mathematics, won the 2011 Merck-Serono Prize for Science and Literature.

The MMP which he directs has had an extraordinary effect on the popularisation of mathematics through its internet publications (Plus, NRICH), its video conferencing work (Motivate), hands-on maths shows, and its support of lectures and events for schools. Plus and NRICH together have a huge readership and NRICH has thousands of resources for schools and young people including mathematical puzzles, news and articles. For example, in 2009/2010 the website had 4.3 Million visitors. Furthermore, 39 000 pupils were involved in the face to face activities of the MMP. None of this incredible activity would have been possible without John Barrow's inspired leadership and his fund raising activities.

The breadth, depth and impact of Professor Barrow's work on the popular appreciation of maths and science make him an extraordinarily worthy winner of the Zeeman Medal.