

## IMS Public Lecture

# Mathematics in the Public Eye - The Story of Perelman and the Poincaré Conjecture

*Speaker:* Sir John Ball  
University of Oxford, UK

*Date:* Wednesday, 22 July 2009

*Time:* 6:30pm – 7:30pm

FREE ADMISSION

*Venue:* Lecture Theatre 31  
Block S16, Level 3, Science Drive 1  
National University of Singapore, Singapore 117543

### About the Speaker



Sir John Ball is Sedleian Professor of Natural Philosophy at the Mathematical Institute, University of Oxford, Fellow of The Queen's College, and also honorary Professor at Heriot-Watt University. For his wide-ranging work in applied mathematics and contributions to the scientific community, he has won numerous prizes and honours. These include election as Fellow of the Royal Society of Edinburgh (1980), Fellow of the Royal Society (1989), an Associé Etranger of the Académie des Sciences (2000), foreign member of the Instituto Lombardo (2005), foreign member of the Norwegian Academy of Science and Letters (2007), honorary member of the Edinburgh Mathematical Society (2008) and member of the Academia Europaea (2008). Other awards include the 1981 Whittaker Prize of the Edinburgh Mathematical Society, honorary doctorates from the Ecole Polytechnique Fédérale de Lausanne, Heriot-Watt University, the University of Montpellier II, and the University of Sussex; the 1990 Keith Prize of the Royal Society of Edinburgh, the 1995 Naylor Prize in Applied Mathematics of the London Mathematical Society, the 1999 Theodore Von Karman Prize of the Society of Industrial and Applied Mathematics, the 2003 David Crighton Medal of

the Institute of Mathematics and its Applications and the London Mathematical Society, and the Royal Medal of the Royal Society of Edinburgh (2006). He was conferred the knighthood in 2006.

He has served on numerous UK and international boards and advisory committees, including Council Member of the Engineering and Physical Sciences Research Council from 1994–1999, President of the Edinburgh Mathematical Society from 1989–90, and of the London Mathematical Society from 1996–1998. He is currently a member of the Executive Committee and Past-President of International Mathematical Union (IMU), Chair of the IMU Committee on Electronic Information and Communication (CEIC), member of the Board of Governors and Scientific and Academic Advisory Committee, Weizmann Institute, Israel, Chair of the Scientific Steering Committee (and Member of Management Committee, National Advisory Board) of the Isaac Newton Institute, member of the EPSRC College and Trustee of MARM (Mentoring African Research in Mathematics project). It was during his term as president of the IMU that the unusual events that will be described in the talk took place.

### Abstract

In August 2006 the Russian mathematician Grigori Perelman refused to accept the Fields Medal awarded to him by the International Mathematical Union at the International Congress of Mathematicians in Madrid. He had been awarded the Medal, regarded as the equivalent of a Nobel Prize, because of his ground-breaking work on the Poincaré conjecture, one of the most famous open problems of mathematics. The lecture will describe the conjecture, the unusual events surrounding its proof, and how this unfolding story of mathematics and personalities attracted unprecedented worldwide media attention.