



SRINIVASA RAMANUJAN AND NIELS HENRIK ABEL

Abel and Ramanujan were born 85 years apart in time and a world apart in space: Abel in 1802 in Finnøy (near Stavanger), Norway, and Ramanujan in 1887 in Erode, Tamil Nadu, India. Both died young—Abel at 27 and Ramanujan at 32. They both grew up in poverty and hardship; Norway was not in great shape at that time. The lives of these two mathematicians are at once romantic, tragic, and heroic. Of the two, perhaps Ramanujan may have been the more fortunate. He found a sympathetic mentor in G.H. Hardy, a mathematician of towering stature at Cambridge, who was responsible for making Ramanujan's work known to the world during the latter's own lifetime. Abel had the misfortune that his best work was mislaid at the Paris Academy, and was recognized only posthumously.

Abel was a pioneer in the development of several branches of modern mathematics, especially group theory and elliptic functions. He showed, while still 19 years old, that there exist no general algebraic solutions for the roots of polynomials with degree equal to or greater than 5, thus resolving a problem that had intrigued mathematicians for centuries. Ramanujan was a genius in pure mathematics and made spectacular contributions to elliptic functions, continued fractions, infinite series, and analytical theory of numbers. He was essentially self-taught from a single text book that was available to him. They both possessed extraordinary mathematical power and inspiration.

A year before the bi-centenary of Abel, the Norwegian Government established an Abel Fund, part of which was to be used by the Norwegian Academy of Science and Letters to award an annual Abel Prize for mathematics. This prize has a financial value comparable to the Nobel Prize. And, unlike the well-known Fields Medal which is awarded to young mathematicians below 40, the Abel Prize recognizes lifetime contributions to mathematics.



2012 RAMANUJAN PRIZE CEREMONY

6 September 2012

RAMANUJAN PRIZE

In 2005 the Abdus Salam International Centre for Theoretical Physics (ICTP) established the Srinivasa Ramanujan Prize for Young Mathematicians from Developing Countries, named after the mathematics genius from India. This Prize is awarded annually to a mathematician under 45. Since the mandate of ICTP is to strengthen science in developing countries, the Ramanujan Prize has been created for mathematicians from developing countries. Since Ramanujan is the quintessential symbol of the best in mathematics from the developing world, naming the Prize after him seemed entirely appropriate.

The Ramanujan Prize is funded by the Norwegian Academy of Science and Letters through the Abel Board, with the cooperation of the International Mathematical Union. The Abel Board is named in honor of the great Norwegian mathematician, Niels Henrik Abel. It is enchanting that the names of these two extraordinary mathematicians should be linked through this Prize.

2012 RAMANUJAN PRIZE CITATION

This year's Ramanujan Prize is awarded to Professor **Fernando Codá Marques** (32), Instituto Nacional de Matemática Pura e Aplicada, Rio de Janeiro, Brazil.

The Prize is in recognition of his several outstanding contributions to Differential Geometry. Together with his coauthors, Fernando Codá Marques has solved long standing open problems, and obtained important results, including results on the Yamabe problem, the complete solution of Schoen's conjecture, counterexamples to the rigidity conjecture of Min-Oo, connectivity of the space of positive curvature metrics on an orientable 3-manifold, and most recently, a proof of the Willmore conjecture.

The Selection Committee consisted of Ngô Bao Châu, Helge Holden, Maria José Pacifico, Vasudevan Srinivas and Lothar Göttsche (Chair). The Prize is supported financially by the Norwegian Academy of Science and Letters through the Abel Board, with the cooperation of the International Mathematical Union.

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Main Lecture Hall, Leonardo Building

Programme

- 11.00 Welcome address by Fernando Quevedo, ICTP
- Message from Ingrid Daubechies, IMU (video)
- Remarks by Claudio Arezzo, ICTP
- Presentation of the Award by Helge Holden, Abel Board
- 11.25 Ramanujan Prize Lecture by Fernando Codá Marques