

PRESS RELEASE

Leelavati Prize for Public Outreach in Mathematics



Scientists have long recognised the need to make the public at large aware of their pursuit: its nature, its place in society, its role in human progress and as a profession. Thanks to many outstanding efforts, some by scientists themselves and others by journalists, there is amongst at least the intelligentsia much appreciation of what science is all about and its importance to society. But much of this is rooted in the tremendous contribution of applied science to practical matters, that has taken the drudgery out of many every day chores or in spectacular developments in fields such as space science, atomic energy or biotechnology. Even theoretical advances of a stupendous nature capture the public imagination only through their connection with practical applications (which often need intervention of great technical innovations before the connection is established). This is of course natural as the lay person relates easily to things of immediate concern to him or her. In such a context it is hardly surprising that most of the public outreach efforts for basic science have been in areas like Physics, Chemistry or Biology. Mathematics does not figure prominently in much of these efforts, partly because its higher reaches are often remote from practical matters, partly because when it is applied in an interesting way to another area of human endeavour, the latter steals the thunder and finally because it is much more difficult to convey to the lay public what mathematical research is about. Yet there have been some remarkable and successful public outreach efforts for mathematics.

The Executive Organising Committee (EOC) of the International Congress of Mathematicians is seized of the importance of mathematics reaching out to the public. It would like to recognise outstanding efforts made in that direction in a fitting manner. Towards this end it has instituted a one-time international prize of 1,000,000/- (Indian) Rupees (approximately 20,000/- US Dollars) for outstanding contribution to public outreach for mathematics by an individual.

The Prize is named Leelavati Prize. Leelavati is a twelfth century mathematical treatise by the Indian mathematician Bhaskara II (also known as Bhaskaracharya – Acharya is teacher in Sanskrit). The book is devoted to arithmetic and algebra. In the book the author poses a series of problems in (elementary) arithmetic posed as challenges to one Leelavati and follows them up with indications of solutions. The problems are in verse form (but not the solutions). This work was the main source for learning the then state-of-the art arithmetic and algebra in medieval India. The work was also translated into Persian and was influential in the middle east. There is also a Persian translation by Abul Fazal commissioned by the Mughal emperor Akbar (1556–1605).

According to one legend (which can be traced to early Persian translations of the work), Leelavati was the daughter of Bhaskaracharya and the book arose out of the author's efforts to distract and console her with mathematics (!) when a planned wedding for her had to be cancelled – the auspicious time fixed for the marriage was missed, thanks to Leelavati meddling playfully with a device for measuring time!

The name of the prize winner is to be announced and the prize given at the closing ceremony of the forthcoming International Congress of Mathematicians (ICM) in Hyderabad on August 27, 2010. The EOC is making efforts towards making the prize a regular feature at future International Congresses.

The ICM takes place once in four years and is the biggest and most prestigious meeting of mathematicians. It is at the inauguration of the ICM that the Fields Medals, the highest recognition for mathematical achievement and other prestigious prizes for mathematics are awarded.