

A CELEBRATION OF MATHEMATICS

2020 RAMANUJAN PRIZE
AWARD CEREMONY

ICTP
9 December 2020



The Abdus Salam
International Centre
for Theoretical Physics



Department of Science
and Technology of the
Government of India



International Mathematical
Union (IMU)

2020 RAMANUJAN PRIZE AWARD CEREMONY

Wednesday, 9 December, 2020

Venue: Zoom Webinar

15:00 - 18:00

Programme

15:00 - 15:30 Welcome address by ICTP Director Atish Dabholkar

Opening remarks by:

H. E. Dr. Neena Malhotra, Ambassador of India to Italy

H. E. Mr Vishal V. Sharma, Ambassador of India to UNESCO

H. E. Mr Santiago Irazabal Mourão, Ambassador of Brazil to UNESCO

Prof. Ashutosh Sharma, Secretary at Department of Science and
Technology (DST), Government of India

Prof. Carlos Kenig, President of the International Mathematical Union (IMU)

15:30 - 15:40 Presentation by Lothar Göttsche of the work of 2020 Ramanujan
Prize recipient Carolina Araujo

15:40 - 16:10 Presentation of the Award and Ramanujan Prize

Lecture by Carolina Araujo on "Algebraic varieties with positive
tangent bundles"

16:10 - 16:30 Break

16:30 - 17:30 Math Colloquium, "Algebraic geometry and beyond" by Caucher
Birkar (University of Cambridge, UK)

2020 RAMANUJAN PRIZE CITATION

This year's Ramanujan Prize is awarded to Prof. **Carolina Araujo**, the Institute for Pure and Applied Mathematics (IMPA) in Rio de Janeiro, Brazil.

The prize is in recognition of her outstanding work in algebraic geometry, in particular in birational geometry and the theory of extremal rays, of which she gave important applications, in particular obtaining a characterization of projective spaces and hyperquadrics; for her work in the study and classification of Fano varieties, and her study of algebraic foliations. Araujo has also played a key role in promoting women in mathematics and in the organization of important mathematical activities.

The 2020 Ramanujan Prize Selection Committee consisted of Alicia Dickenstein, Lothar Göttsche (Chair), Kapil Hari Paranjape, Philibert Nang and Van Vu.



SRINIVASA RAMANUJAN

Srinivasa Ramanujan was born in 1887 in Erode, Tamil Nadu, India. He grew up in poverty and hardship. Ramanujan was unable to pass his school examinations, and could only obtain a clerk's position in the city of Madras. However, he was a genius in pure mathematics and essentially self-taught from a single text book that was available to him. He continued to pursue his own mathematics, and sent letters to three mathematicians in England, containing some of his results. While two of the three returned the letters unopened, G.H. Hardy recognized Ramanujan's intrinsic mathematical ability and arranged for him to go to Cambridge. Hardy was thus responsible for making Ramanujan's work known to the world during the latter's own lifetime.

Ramanujan made spectacular contributions to elliptic functions, continued fractions, infinite series, and analytical theory of numbers. His health deteriorated rapidly while in England. He was sent home to recuperate in 1919, but died the next year at the age of 32.

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 Prize is funded jointly by the Department of Science and Technology of the Government of India in collaboration with ICTP and the International Mathematical Union. The selection committee is formed by members of all three institutions.

RAMANUJAN PRIZE SCULPTURE

The Ramanujan Prize sculpture is an exact miniature replica of the statue of Srinivasa Ramanujan that is kept in the ICTP Marie Curie Library. The bronze bust of Ramanujan was donated to ICTP by the SASTRA University in India, where the original bust is kept.