SCHOOL OF MATHEMATICS AND STATISTICS

UNIVERSITY OF HYDERABAD

Maryam Mirzakhani Memorial Lecture

ELLIPTIC CURVES AND EQUATIONS

Abstract

One of the highlights of the last decade of the last century was the solution of Fermat's Last Theorem by Andrew Wiles. This work was the culmination of advances made in Arithmetic over many centuries. This talk will indicate how the study of elliptic curves has led to framing a larger picture of understanding the solutions to equations with coefficients in the field of rational numbers.

Dr. Sujatha Ramdorai
Professor,
Canada Research Chair,
University of British Columbia, Canada.

Date : 1 March 2021
Time: 10:00 a.m. IST
Google meet :
meet.google.com/mfm-cnad-nqn

Dr. Ramdorai was previously a Professor at Tata Institute of Fundamental Research. She has worked in the areas of algebraic theory of quadratic forms, arithmetic geometry of elliptic curves, the study of motives and noncommutative Iwasawa theory. Her initial work was on algebraic theory of quadratic forms. She then went on to work on the arithmetic of algebraic varieties. She has substantial contributions to the non-commutative Iwasawa theory, a theory developed by Japanese mathematician Kenkichi Iwasawa that combines tools from algebra, number theory and representations of Galois groups.

Dr. Ramdorai's work on study of elliptic curves has applications in many areas, in recognition of this she was awarded the ICTP Ramanujan Prize by the International Centre for Theoretical Physics - the first Indian to win this prestigious award.

Dr. Ramdorai has also been a great advocate for women in science, inspiring many to pursue a career in mathematics and science. In addition, she has won several recognitions for her work. She was a member of the National Knowledge Commission and was the member of the Scientific Advisory Council to the Prime Minister.

All are welcome