



Frontiers of Mathematics Lecture

The Central Limit Theorem in Algebra and Number Theory



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Date : July 17, 2019 (Wednesday)
Time : 5:30 - 6:30 pm
(Tea Reception starts at 5:00 pm)
Venue : Lecture Theatre A, G/F,
Chow Yei Ching Building
The University of Hong Kong

Abstract

The central limit theorem is considered perhaps the most influential theorem of mathematics in the 20th century. It has had significant applications both within mathematics and beyond, energizing literally every other field outside such as medicine, economics and even political theory. After a short history of the evolution of the central limit theorem, we will describe its impact in algebra and number theory and discuss some new applications in the theory of modular forms. The talk will be accessible to a general audience.

Biography

M. Ram Murty obtained his PhD from MIT (1980) and then held post-doctoral fellowships at IAS (Princeton) and TIFR (Mumbai). He was professor at McGill University (1982-1996), and now is Queen's Research Chair and Distinguished University Professor at Queen's University.

He was awarded the Coxeter-James Prize (1988), Balaguer Prize (1996), Jeffery-Williams Prize (2003), Queen's Research Prize (2003) and elected Fellow of the Royal Society of Canada (1990), Fields Institute (2003), Indian National Science Academy (2008), American Mathematical Society (2012) and Canadian Mathematical Society (2018). He received the E.W.R. Steacie Fellowship (1991), Killam Research Fellowship (1998) and the Simons Fellowship (2013). In 2018, he was awarded the excellence in graduate supervision at Queen's University.

He has written more than 240 research papers, a dozen books, and supervised more than 20 doctoral students and 36 post-doctoral fellows. He is also cross-appointed to the Department of Philosophy where he gives regular courses on mathematical logic and Indian philosophy.