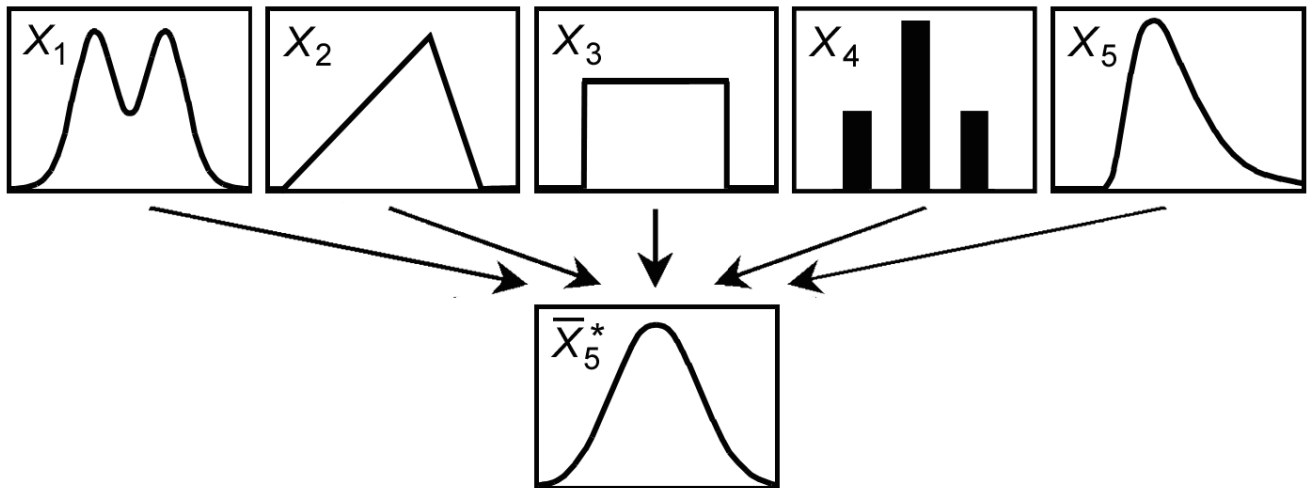


COLLOQUIUM

MATHEMATICS AND STATISTICS
QUEEN'S UNIVERSITY



CENTRAL LIMIT THEOREMS IN NUMBER THEORY

Abstract. The central limit theorem in statistics is probably one of the most remarkable theorems of the 20th century and its ubiquity only enhances its charm. In this talk, we look at central limit theorems arising in number theory, the earliest of which is the Erdős-Kac theorem. We will then discuss the notion of equidistribution and lead up to my own research that involves a central limit theorem for eigenvalues of Hecke operators acting on spaces of modular cusp forms. The talk will be accessible to graduate students.

Neha Prabhu (Queen's University)

Neha Prabhu obtained her Ph.D. in Mathematics from the Indian Institute of Science Education and Research Pune in 2017 with a thesis on "Fluctuations in the distribution of Hecke eigenvalues". Dr. Prabhu recently joined Queen's University, where she is a Coleman Postdoctoral Fellow. Her research interests lie in the field of Analytic Number Theory. Specifically, she works in modular forms, eigenvalues of Hecke operators, Elliptic curves, and problems of equidistribution in Number Theory.

234 JEFFERY HALL
2:30pm · OCTOBER 6 · 2017