DALHOUSIE MATHEMATICS COLLOQUIUM

Thursday April 12, 2:30 pm, Chase 319 Speaker: M. Ram Murty (Queen's University)

The Central Limit Theorem in Algebra and Number Theory

The central limit theorem is certainly one of the pinnacles of 20th century mathematics that has transformed human civilization extending its influence outside mathematics and now touching every other scientific discipline and beyond. I will give a short historical survey and then highlight how the central limit theorem has inspired the development of probabilistic number theory and probabilistic group theory. At the end, I will report on some work with Kumar Murty and recent joint work with Arpita Kar and Neha Prabhu regarding arithmetical aspects of Fourier coefficients of modular forms.