ICTS Probability Seminar

Title : Spectrum of random perturbations of finitely banded Toeplitz Matrices

Speaker : Anirban Basak, ICTS-TIFR, Bangalore

Date : Wednesday, August, 29, 2018

Time : 2:30 PM

Venue : Emmy Noether Seminar Room, ICTS Campus, Bangalore

Abstract : Consider a finitely banded Toeplitz matrix T_N and let E_N be an error matrix with a polynomially vanishing operator norm. In this talk, we will discuss the limiting spectral measure of T_N+E_N. We will see that under a very mild assumption on the entries of E_N the limit is a push forward of the uniform measure on the unit circle by the symbol of the Toeplitz matrix T_N. This is based on an ongoing joint work with Elliot Paquette and Ofer Zeitouni.