School of Physical Sciences
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In the Neighbourhood of the Sato-Tate Conjecture

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Date: March 21, 2017 (Tuesday)
Time: 16:00 hrs (4:00 pm)
Venue: MSc Class Room 241,
First Floor, SPS, JNU

In this talk, we will see the distribution of gaps between eigenangles of Hecke operators acting on the space of cusp forms of weight k and level N, spaces of Hilbert modular forms of weight $\mathbf{k} = (k_1, k_2, \ldots, k_r)$ and space of primitive Maass forms of weight 0. Moreover, we will see the following: Let f_1 and f_2 be two normalized Hecke eigenforms of weight k_1 and k_2 such that one of them is not of CM type. If the set of primes $\mathcal{P}$, such that the p-th coefficients of f_1 and f_2 match, has positive upper density, then f_1 is a Dirichlet character twist of f_2.

The last part is a joint work with M. Ram Murty.