

SPEAKER: Liyang Yang (CalTech)

TITLE: On modulus distribution of local Hecke traces

ABSTRACT: Let π be a cuspidal representation of $GL(n)$ over a number field, where $n \leq 4$. In this talk, we show there are infinitely many places v such that the local Hecke trace $a_\pi(v)$ lies in the unit disk, i.e., $|a_\pi(v)| < 1$. Then a natural problem is to find the least possible prime v such that π_v is unramified and $|a_\pi(v)| < 1$. We give an upper bound for such a prime in terms of the analytic conductor of π . This is a Linnik-type problem on modulus of local Hecke trace.