Title: On the cyclicity of abelian varieties

Abstract: Consider A an abelian variety of dimension r, defined over a number field F. For $\wp$ a finite prime of F, we denote by $\mathbb{F}_\wp$ the residue field at $\wp$. If A has good reduction at $\wp$, let $\bar{A}$ be the reduction of A at $\wp$. In this talk, under GRH, for a large family of abelian varieties A, we prove an asymptotic formula for the number of primes $\wp$ of F, with $N_{F/\mathbb{Q}}\wp \leq x$, for which $\bar{A}(\mathbb{F}_\wp)$ has at most $2r - 1$ cyclic components.

Title: Base change and special values of L-funtions

Abstract: In this talk we generalize some results, obtained by Shimura, Yoshida and the author, on critical values of L-functions of l-adic representations attached to Hilbert modular forms twisted by finite order characters, to the critical values of L-functions of arbitrary base change to totally real number fields of l-adic representations attached to Hilbert modular forms twisted by some finite-dimensional representations.