Number theory Seminar

Speaker: Kartik Prasanna, UCLA

Time and place: Monday, Nov. 14, MS 5137

Title: **Elliptic curves, quadratic twists and $p$-(in)divisibility of $L$-values**

Abstract:

Let $E$ be an elliptic curve over the rationals and $p$ a fixed prime. A (very hard) question of Kolyvagin asks if there exists a quadratic discriminant $d$ such that the Tate-Shafarevich group of the quadratic twist $E_d$ has order prime to $p$. I will explain some recent results related to this question that are obtained by studying the $p$-adic properties of the Shimura correspondence.