Seminar talk:

Sujatha Ramdorai
Title: Rational points of elliptic curves in Z_p extensions of number fields.

Abstract: Let K be an imaginary quadratic number field and let E/K be
an elliptic curve with good ordinary reduction at the primes of K
above p. A conjecture of Mazur states that the Mordell-Weil rank of E
stays bounded along any Z_p extension of K, unless the extension is
anticyclotomic and the root number of the Hasse-Weil L-function is -1.
In this talk, we derive sufficient criteria for the validity of
Mazur's conjecture and prove an upper bound for the number of Z_p
extensions where the Mordell-Weil rank is unbounded. This is joint
work with S\"oren Kleine and Ahmed Ali Matar.

Schedule: Thursday March 5, 2:30 pm to 3:30 p.m.