**Speaker:** Francesc Castella (UC Santa Barbara)

**Title:** On Mazur's main conjecture at Eisenstein primes

**Abstract:** Let $E$ be a rational elliptic curve, and p an odd prime of good ordinary reduction for $E$. In 1972, Mazur formulated an analogue of Iwasawa's main conjecture for the $p$-primary Selmer group of $E$ over the cyclotomic $\mathbb{Z}_p$-extension of $\mathbb{Q}$. In this talk I'll report on recent progress towards Mazur's main conjecture (joint with Giada Grossi and Chris Skinner, building on an earlier joint work also with Jaehoon Lee) in the case where $E$ admits a rational $p$-isogeny.