

ABSTRACT

Let $E/\mathbb{Q}$ be an elliptic curve. Let p and q be two distinct primes. We study the p -adic Iwasawa theory of E over the cyclotomic $\mathbb{Z}_q$ -extension $\mathbb{Q}_{\text{cyc}}/\mathbb{Q}$. In particular, we discuss a conjecture, which predicts the stabilization of the p -primary Selmer groups of E over $\mathbb{Q}_{\text{cyc}}$, and the p -adic valuation of the algebraic L -values of E twisted by finite characters of the Galois group of $\mathbb{Q}_{\text{cyc}}/\mathbb{Q}$. This is joint work with Antonio Lei.