

Title: Complex multiplication and parity in Iwasawa theory.

Abstract: Let E be a p -ordinary elliptic curve over \mathbf{Q} with CM by a quadratic imaginary field K . Over the anticyclotomic \mathbf{Z}_p -extension of K , the p -Selmer group of E decomposes as a sum of two conjugate modules over the Iwasawa algebra; in fact, as we show, each of these modules is (pseudo-isomorphic to) a square module. This phenomenon also occurs in more general situations (e.g., in the context of CM abelian varieties).