

1056-11-1092

Álvaro Lozano-Robledo* (alozano@math.uconn.edu), Department of Mathematics, 196 Auditorium Road, University of Connecticut, U-3009, Storrs, CT 06269, and **Benjamin Lundell** (blundell@math.cornell.edu). *Bounds for the torsion subgroup of elliptic curves over fields with bounded ramification.*

Let E be a semi-stable elliptic curve defined over \mathbb{Q} , and fix $N \geq 2$. Let K/\mathbb{Q} be an algebraic Galois extension of \mathbb{Q} whose ramification indices are all at most N . We show that there exists a computable bound $B(N)$, which depends only on N and not on the choice of E/\mathbb{Q} or K , such that the size of the torsion subgroup of $E(K)$ is always at most $B(N)$. The bound will be given explicitly during the talk, and some examples will be provided. This is joint work with Benjamin Lundell. (Received September 20, 2009)