

Singular torsion on elliptic curves

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Abstract. This is joint work with David Grant of the University of Colorado at Boulder. In this talk, we define singular torsion points on elliptic curves E and report on some of their properties, especially for elliptic curves over number fields. When E is defined over a field of characteristic zero, the finiteness of the set of singular torsion points can be proved by applying results of Hindry or Ribet. When E is defined over a number field, we explain how one can explicitly find an integer N such that the set of singular torsion points is contained in the set of points of order dividing N .

