

TITLE: Finiteness theorems for families of elliptic curves.

ABSTRACT: Perhaps even before Newton drew his pictures of 72 types of real cubic curve, it was recognized that such a curve (when non-singular) has a group structure. This holds even over any ground field. When the group origin is fixed, one refers also to an elliptic curve. If the field is of arithmetic type, like the rationals or a number field or even just finitely generated, then the torsion points of the group are comparatively well-understood and in particular they are finite in number. This would be false over the reals, for example. Nevertheless we describe some new finiteness results, obtained with Umberto Zannier, about torsion points on one-parameter families of real or even complex elliptic curves.