

DISSERTATION
DEFENSE

Low-degree points on some rank 0 modular curves

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Abstract: Let E be an elliptic curve defined over a number field K . We present some new progress on the classification of the finite groups which appear as the torsion subgroup of $E(K)$ as K ranges over quartic, quintic and sextic number fields. In particular, we concentrate on determining the quartic, quintic and sextic points on certain modular curves $X_1(N)$ for which the rank of $J_0(N)$ is zero.

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MATHEMATICS
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