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TITLE: An old result of Manin for elliptic curves and an analogue in dimension three

ABSTRACT: About fifty years ago, Manin showed that for any non-CM elliptic curve  $E$  over a number field  $k$ , and for any prime  $p$ , the  $p$ -power torsion in  $E(k)$  is uniformly bounded independent of  $E$ . In this lecture we will discuss an analogue, obtained jointly with Mladen Dimitrov, for abelian threefolds  $A$  with multiplication by the ring of integers of an imaginary quadratic field. We will make use of the fact that the moduli of such threefolds is represented by Picard modular surfaces relative to a congruence subgroup of  $SU(2, 1)$ . We will also mention the relationship to a conjecture of Lang.