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Isogenies of abelian varieties. (English) Zbl 0832.14034
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This paper deals with the following problems: Given two polarized abelian varieties X and Y over a field F which are isogenous over \overline{F} , are they isogenous over F ? And if they are not, how much of the n -torsion must be adjoined to F in order that they are? It is known that it suffices to adjoin all of the n -torsion for an integer n which is prime to $\text{char}(F)$ and ≥ 3 . The paper gives conditions on subgroups of the torsion which ensure that after adjoining this torsion to the field there exists an isogeny over this field.

Reviewer: G.van der Geer (Amsterdam)

MSC:

14K02 Isogeny

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