

Smooth quotients of Abelian varieties by finite groups

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Abstract. We give a complete classification of smooth quotients of Abelian varieties by finite groups that fix the origin. In the particular case where the action of the group G on the tangent space at the origin of the Abelian variety A is irreducible, we prove that A is isomorphic to the self-product of an elliptic curve and $A/G \cong \mathbb{P}^n$. In the general case, assuming $\dim(A^G) = 0$, we prove that A/G is isomorphic to a direct product of projective spaces.

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