AUTOMORPHISMS OF SURFACES OF GENERAL TYPE, INDUCING THE IDENTITY IN COHOMOLOGY

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Abstract

Let X be a complex polarized nonsingular variety of dimension n. H. Popp showed that, if the group AutX of automorphisms of X acts faithfully on $H^n(X,\mathbb{Z})$, then there is a fine moduli space for polarized manifolds having the same Hilbert polynomial as X together with a so-called level *l*-structure.

In this talk, we give a numerical classification for pairs (S, G) consisting of complex nonsingular projective surfaces S of general type and groups G of automorphisms of S inducing trivial actions on $H^2(S, \mathbb{Q})$.

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