

The Fano variety of lines of a cuspidal cyclic cubic fourfold

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Abstract. We prove that the Fano variety of lines of a cuspidal cyclic cubic fourfold is a symplectic variety with transversal A_2 -singularities, and we study the properties of the nonsymplectic order-three automorphism induced by the covering automorphism on the irreducible holomorphic symplectic manifold obtained by blowing up the singular locus.

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