

Stanford Algebraic Geometry — Seminar —

ELLIPTIC K3 SURFACES WITH p^n -TORSION SECTIONS

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Abstract

We classify K3 surfaces in positive characteristic p , which come with an elliptic fibration and a section of order p^n . Since such elliptic fibrations pull back from the universal elliptic curve over the Igusa curve, which is the characteristic p analog of the modular curves, we get explicit equations. In particular, we can check arithmetic conjectures and find beautiful connections between arithmetic and geometry.

Friday, October 30

4:00 p.m.

Room 383-N