
AVI KULKARNI, Simon Fraser University

An arithmetic invariant theory of curves from E_8

Let k be a field of characteristic 0, let C/k be a uniquely trigonal genus 4 curve, and let $P \in C(k)$ be a simply ramified point of the uniquely trigonal morphism. We construct an assignment of an orbit of an algebraic group of type E_8 acting on a specific variety to each element of $J_C(k)/2$. The algebraic group and variety are independent of the choice of (C, P) .