Stanford Algebraic Geometry
— Seminar —

TAMELY RAMIFIED COVERS OF THE PROJECTIVE LINE

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Abstract

We give new results on existence and non-existence of tamely ramified covers of the projective line. The main tool is the theory of limit linear series, which is better-behaved under degenerations than the theory of admissible covers, in positive characteristic. Another key ingredient for the non-existence results is a finiteness result whose proof involves results of Mochizuki in the theory of connections with vanishing p-curvature on vector bundles of rank 2. Unlike existing approaches making heavy use of transcendental methods, our approach is nearly entirely algebraic.

Friday, November 5
3:15 p.m.
Room 383-N

http://math.stanford.edu/~vakil/s0405/