

Algebraic Geometry Seminar

Covering gonality of hypersurfaces in positive characteristic

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Abstract: The covering gonality of an irreducible projective variety over the complex numbers is the minimum gonality of a curve through a general point on the variety. This definition has two reasonable generalizations to positive characteristic, the covering gonality and the separable covering gonality. Of the two, separable covering gonality is much easier to bound, and I'll give an easy lower bound for smooth hypersurfaces essentially due to Bastianelli-de Poi-Ein-Lazarsfeld-Ullery. I'll then give an analogous bound for the covering gonality of very general hypersurfaces, using a Chow-theoretic argument that extends work of Riedl-Woolf.

Monday, September 23 at 4:00 PM in 427 SEO