

Harvard-M.I.T. Algebraic Geometry Seminar

BOUNDING THE TJURINA NUMBER OF A CURVE

STEVEN L. KLEIMAN
MIT

Abstract:

Consider a plane curve of given degree. How singular can it be? In 1997, du Plessis and Wall found gaps in the list of possible Tjurina numbers. In fact, the possibilities lie in precise intervals indexed by another number, the least degree of a tangent polynomial vector field.

This talk will report on a generalization to curves in n -space, proved with Esteves, following a different approach. The Tjurina number must be replaced by the lambda-invariant of Buchweitz and Greuel, but the two invariants agree on plane curves and other local complete intersections.

Tuesday, May 13th
3:00 p.m.
MIT Room 4-370

<http://www-math.mit.edu/~jstarr/03sem/>.