

Degree of Rational Maps versus Syzyzy

Hamid Hassanzadeh¹

¹ UFRJ

We prove a far-reaching upper bound for the degree of a generically finite rational map between projective varieties over a base field of arbitrary characteristics. The bound is expressed as a product of certain degrees that appear naturally by considering the Rees algebra (blowup) of the base ideal defining the map. Several special cases are obtained as consequences, some of which cover and extend previous results in the literature.

This talk is based on joint work with Marc Chardin (Sorbonne) and A. Simis(UFPE)