



istanbul matematiksel bilimler merkezi
istanbul center for mathematical sciences

ANNIHILATION OF COHOMOLOGY OVER CURVE SINGULARITIES

Özgür Esentepe

University of Connecticut

Abstract

Hilbert's syzygy theorem implies that the second syzygy of every module over a polynomial ring S in two variables is projective. In fancy language, this means that $Ext_S^3(M, N)$ vanishes for every pair of modules M, N . This is no longer true when we consider a quotient R of S by an ideal generated by a single polynomial f . In fact, for every $i \geq 0$ there is at least one pair M, N such that $Ext_R^i(M, N) \neq 0$. We investigate the ideal consisting of ring elements which uniformly annihilate all $Ext_R^i(M, N)$ for sufficiently large i . I am dedicating this talk to students and academics of Boğaziçi University who are protesting against a rector appointed by the 12th president of Turkey and I will try my best to keep it accessible to a broad audience.

Date : Wednesday, February 10, 2021

Time: 10.00 EST 18.00 TSİ

Details : <http://sntp.ca/ucgen/>