

1135-13-533

Adam Boocher* (boocher@math.utah.edu). *Bounds on Betti Numbers of Graded Rings.*

If I is a homogeneous ideal in a polynomial ring S there are many interesting invariants we can associate to the quotient $R = S/I$. One is the collection of Betti numbers $\beta_i(R)$ which are a measure of the complexity and symmetry of the defining polynomials in I . In this talk I'll discuss some classical conjectures concerning upper and lower bounds for the Betti numbers and some recent progress for Koszul rings and for rings defined by monomials. (Received September 07, 2017)