

1054-16-186

Tom Howard* (thoward@math.ucsb.edu). *Complexity of finitely generated modules.*

Let A be a finitely generated module over a finite dimensional algebra Λ , and fix a minimal projective resolution. In case Λ is a group algebra, the asymptotic growth of the projective resolution is polynomial, but outside of the group algebra case different growths are possible. We investigate invariance of this asymptotic growth under stable, derived, and stable derived equivalences. Monomial algebras are used to showcase these concepts. (Received September 14, 2009)