

1054-16-95

Dan Zacharia* (zacharia@syr.edu), Department of Mathematics, Syracuse University, Syracuse, 13244. *Auslander-Reiten theory for modules of finite complexity over self-injective algebras.*

I will talk about recent work with Otto Kerner. Let R be a finite dimensional self-injective algebra over an algebraically closed field. Roughly speaking, the complexity of a module measures the growth of a minimal projective resolution of the module. Let M be an indecomposable non projective finitely generated R -module having finite complexity, and let \mathcal{C}_s be the stable component of the Auslander-Reiten quiver containing it. We describe the possible shapes of \mathcal{C}_s . (Received September 08, 2009)