1126-13-276

Josh Stangle* (jjstangl@syr.edu), 215 Carnegie Builting, Syracuse, NY 13210. Auslander's Theorem and Path Algebras over Gorenstein rings.

Auslander's Theorem (1984) is a pinnacle result in the study of the Cohen-Macaulay (CM) type of commutative local rings. It states that if a ring has finite CM type, then it must be an isolated singularity, i.e., the localisation at each non-maximal prime ideal is a regular local ring. In this talk we introduce a certain type of non-commutative ring that satisfies some nice homological properties. We are able to use these properties and the fact that path algebras over Gorenstein rings are examples of this to prove a generalization of Auslander's theorem in the case where R is a Gorenstein ring. (Received January 16, 2017)