

1051-13-204

Liana M Segal* (segal@umkc.edu) and **Ines Henriques**. *Free resolutions over small Gorenstein rings.*

We show that generic Gorenstein algebras R of socle degree 4 have a remarkable property: every finitely generated R -module has a syzygy which is Koszul, that is, the associated graded module (with respect to the maximal ideal) has a linear resolution. In particular, every finitely generated R -module has a rational Poincaré series. (Received August 25, 2009)