

1009-13-190

Christel Rotthaus and **Liana M Sega*** (segal@umkc.edu). *A class of coherent regular local rings*. Preliminary report.

We consider a class of local rings studied in a series of papers by Heinzer, Rotthaus and S. Wiegand. Described as certain birational extensions of a polynomial ring over a field, these rings are often non-Noetherian. We show that the rings of this class are coherent. Moreover, they are regular, in the sense that every finitely generated submodule of a finite free module has finite projective dimension. We point out a peculiar homological aspect: If a ring B in this class is not Noetherian, then a minimal free resolution of the residue field of B is a Koszul complex on $\dim(B) - 1$ elements. (Received August 16, 2005)