

1128-13-76

J Hoffmeier* (jhoff@nwmissouri.edu), **A Croll**, **R Dellaca**, **A Gupta**, **V Mukundan**, **D R Tracy**, **L M Sega**, **G Sosa** and **P Thompson**. *Detecting Koszulness from the algebra structure of Koszul homology.*

Let k be a field and R a standard graded k -algebra. We denote by H^R the homology algebra of the Koszul complex on a minimal system of generators of the irrelevant ideal of R . We discuss the relationship between the multiplicative structure of H^R and the property that R is a Koszul algebra. More generally, we work in the setting of local rings and show that certain conditions on the multiplicative structure of Koszul homology imply strong homological properties. (Received February 13, 2017)