

1127-13-74

Laura Ghezzi* (lghezzi@citytech.cuny.edu). *Invariants of Cohen-Macaulay rings associated to their canonical ideals.*

The purpose of this work (joint with Shiro Goto, Jooyoun Hong and Wolmer Vasconcelos) is to introduce new invariants of Cohen-Macaulay local rings. Our focus is the class of Cohen-Macaulay local rings that admit a canonical ideal. Attached to each such ring R with a canonical ideal C , there are integers—the type of R , the reduction number of C —that provide valuable metrics to express the deviation of R from being a Gorenstein ring. We enlarge this list with other integers—the roots of R and several canonical degrees. In this talk we will define and focus on the (basic) canonical degree. (Received January 22, 2017)