Jennifer Kenkel* (kenkel@math.utah.edu). Local Cohomology of Thickenings. Preliminary report.

Let R be a standard graded polynomial ring that is finitely generated over a field, and let I be a homogenous prime ideal of R. Bhatt, Blickle, Lyubeznik, Singh, and Zhang examined the local cohomology of R/I^t , as t goes to infinity, which led to the development of an asymptotic invariant by Dao and Montaño. I will discuss their results and give concrete examples of the calculation of this new invariant in the case of determinantal rings. (Received September 18, 2018)