

Algebra/Topology Seminar

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INTERSECTIONS AND SUMS OF GORENSTEIN IDEALS

Thursday, March 12, 2015
1:15 p.m. in ES-143

ABSTRACT. A complete local ring of embedding codepth 3 has a minimal free resolution of length 3 over a regular local ring. Such resolutions carry a differential graded algebra structure, based on which one can classify local rings of embedding codepth 3. The Gorenstein rings of embedding codepth 3 belong to the class called $\mathbf{G}(r)$, which was conjectured not to contain any non Gorenstein rings. For any $r \geq 2$ we construct non Gorenstein rings in $\mathbf{G}(r)$, starting from Gorenstein rings of embedding codepth 3.