1176-13-93 Luigi Ferraro^{*} (lferraro[®]tu.edu) and Alexis Hardesty. A DG Algebra resolution of trimmings of pfaffian ideals.

Let R be a regular local ring of dimension 3 with unique maximal ideal \mathfrak{m} . Let I be a Gorenstein ideal of R of grade 3. Buchsbaum and Eisenbud proved that there is a skew-symmetric matrix of odd size such that I is generated by the sub-maximal pfaffians of this matrix. Let J be the ideal obtained by multiplying some of the pfaffian generators of Iby \mathfrak{m} ; we say that J is a trimming of I. In this talk we construct an explicit free resolution of R/J with a DG algebra structure. Our work builds upon a recent paper of Vandebogert. We use our DG algebra resolution to prove that recent conjectures of Christensen, Veliche and Weyman on trimmings of ideals of class \mathbf{G} hold true in this context. (Received January 15, 2022)