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Todd A Morra* (tmorra@clemsun.edu). *Minimal Differential Graded Algebra Resolutions Related to Certain Stanley-Reisner Rings*. Preliminary report.

Stanley-Reisner rings possess rich algebraic information about the rings encoded as combinatorial information in simplicial complexes. We define certain Stanley-Reisner rings which are Cohen-Macaulay, admit canonical modules, and have an easily computed Cohen-Macaulay type. Based on work by D'alí, Fløystad, and Nematbakhsh, these Stanley-Reisner rings also give rise to an explicit, multi-graded finite free resolution. In this talk we showcase an explicit differential graded algebra structure for these resolutions. (Received January 17, 2022)