Eleonore Faber, Martina Juhnke-Kubitzke, Haydee Lindo, Miller Claudia, Rebecca R.G. and Alexandra Seceleanu\* (aseceleanu@unl.edu). Canonical resolutions over Koszul algebras.

Koszul algebras are a class of (not necessarily commutative) algebras which show up naturally and abundantly in algebra and topology. An interesting feature of Koszul algebras is that they appear in pairs - every Koszul algebra has a dual algebra, which is also Koszul. One can use this duality to construct free resolutions.

We focus on constructing explicit resolutions for the powers of the maximal ideal of a Koszul algebra. This generalizes a result of Buchsbaum and Eisenbud, which applies to the case where the Koszul algebra under consideration is a polynomial ring.

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