1073-13-217   **Christine Berkesch** and **Daniel Erman*** (`erman@umich.edu`), Department of Mathematics, East Hall, Ann Arbor, MI 48109, and **Manoj Kummini** and **Steven Sam**. *Tensor Complexes.*

The most fundamental complexes of free modules over a commutative ring are the Koszul complex, which is constructed from a vector (i.e., a 1-tensor), and the Eagon–Northcott complex, which is constructed from a matrix (i.e., a 2-tensor). I will discuss a multilinear generalization of these complexes, which we construct from an arbitrary higher tensor. Our construction provides detailed new examples of minimal free resolutions, as well as a unifying view on previously studied classes of examples, including the above examples, hyperdeterminantal complexes, and more. (Received August 01, 2011)