1035-16-1664   **Brad Shelton*** (`shelton@math.uoregon.edu`), Department of Mathematics, University of Oregon, Eugene, OR 97403-1221, and **Thomas Cassidy** (`tcassicy@bucknell.edu`), Department of Mathematics, Bucknell University, PA. *Generalizing the notion of Koszul Algebras.*

We have recently introduced a generalization of Koszul Algebra. We refer to our class of algebras as K_2 algebras. Our generalization includes Berger's N-Koszul algebras, but our class of algebras includes many graded algebra that have relations of various different degrees. We show, for example, that Artin-Schelter regular algebras of dimension 4 with 3 generators, 2 cubic relations and 2 quadratic relations, belong to the K_2 class. We show that our class of algebras has many convenient properties. For example, it is closed under twists and twisted tensor products, regular central extensions and other operations. (Received September 20, 2007)

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