Meeting: 998, Houston, Texas, SS 2A, Special Session on Representations of Algebras

998-16-327 **Roberto Martínez-Villa** (mvilla@matmor.unam.mx), Roberto Martínez Villa, Instituto de Matemáticas, UNAM Unidad Morelia, Apartado Postal 61-3, 58089 Morelia, Michoacán, Mexico, and **Gustavo Montaño-Bermúdez*** (gmb@uaemex.mx), Gustavo Montaño Bermúdez, Facultad de Ciencias, UAEMex, Instituto Literario No. 100 Ote., Col. Centro, 50000 Toluca, México, Mexico. *Node deletion and stably equivalent Koszul algebras.* Preliminary report.

The operations of node deletion and insertion in a finite dimensional quiver algebra are the easiest way to produce stably equivalent algebras, and such constructions were introduced as an abstraction of the operations used in earlier works.

Koszul algebras have many interesting properties and applications and they have been studied by several authors, however, it does not exist a classification of such algebras, in general it is not easy to decide whether or not a given quadratic algebra is Koszul, then it is of interest to construct new Koszul algebras from given ones.

The aim of this talk is to prove that node deletion and insertion generalizes to graded quiver algebras producing, as in the finite dimensional case, stably equivalent algebras and in this situation either both or neither of the two algebras are Koszul. (Received March 01, 2004)