

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

998-16-192      **Efrén Pérez Terrazas\*** (efren\_math@yahoo.com.mx), Coordinación General de Estudios, de Posgrado e Investigación, edificio D, Segundo Piso, Unidad Campo Redondo, 25280 Saltillo, Coahuila, Mexico. *Lift categories and objects with space of selfextensions of dimension one*. Preliminary report.

The bimodules over categories with structure of coalgebra (bocs) have been used to prove the Drozd's Tame and Wild Theorem. The idea behind the use of bocses is the existence of reduction functors, which allows to go from a representation of a bocs to a representation with smaller norm in another bocs. In order to generalize the reduction functors Crawley-Boevey introduced the lift categories. The exact structure for lift categories introduced by Bautista and Zuazua provides the tool of extensions, and reduction functors induce morphisms of bimodules between the extensions. This morphisms have nice properties.

A lift category and a tensor product of algebras induce a new lift category, and this is used to prove the existence of parametrizations for objects with space of selfextensions of  $k$ -dimension one, where  $k$  is algebraically closed, without any assumption on the representation type. (Received February 25, 2004)