ARTURO PIANZOLA, University of Alberta, Edmonton
Derivations of certain algebras given by étale descent

The structure of the algebra of derivations of a multiloop algebra has recently been determined by S. Azam. Azam's proof, which is motivated by earlier work of G. Benkart and R. V. Moody, is rather involved and depends on a delicate induction reasoning. In this talk we will present a direct reasoning that yields an explicit description of the algebra of derivations for a large class of algebras defined by étale descent (of which multiloop algebras are a very special case). This description of the algebra of derivations of multiloop algebras has recently been used by E. Neher to give a very nice construction of universal central extensions of Lie tori.