Selene SÁNCHEZ-FLORES. Universitaet Stuttgart

Title: The Lie structure on the Hochschild cohomology of monomial algebras.

The first Hochschild cohomology group is the space of outer derivations. The commutator bracket endows it with a Lie algebra structure. In 1963, Gerstenhaber defined a bracket that endows the Hochschild cohomology with a graded Lie algebra structure. Moreover, the Gerstenhaber bracket restricted to the first Hochschild cohomology is the commutator. In this talk, I will give you the definition of the Gerstenhaber bracket and give examples of the graded Lie algebra structure on the Hochschild cohomology for the case of monomial algebras.