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Cris Negron* (negron@uw.edu). *An Alternate Approach to the Lie Bracket on Hochschild Cohomology.*

Gerstenhaber's Lie bracket on Hochschild cohomology is a structure which is used to access the (formal) deformation theory of an algebra. One difficulty that arises in dealing with the Gerstenhaber bracket is that, at the cochain level, it is only defined on the standard Hochschild cochain complex. I will discuss how, for any "Koszul type" algebra A , one can define a family of brackets on the cochain complex associated to the Koszul resolution of A which all induce the Gerstenhaber bracket on cohomology. The class of algebras under consideration includes standard Koszul algebras as well as universal enveloping algebras and Down-Up algebras. This is joint work with Sarah Witherspoon. (Received September 04, 2014)