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77840. *Gerstenhaber bracket on Hochschild cohomology of Koszul algebras using homotopy liftings.*

We present the Gerstenhaber algebra structure on Hochschild cohomology of Koszul algebras defined by quivers and relations using the idea of homotopy liftings. We present explicit examples of homotopy lifting maps for degree 1 and 2 cocycles. For Koszul algebras defined by quivers and relations, there is a natural way of constructing their minimal (graded) projective resolution over the enveloping algebra. This resolution was shown to have a comultiplicative structure. Our presentation involves the use of the resolution and the comultiplicative structure on it. (Received September 05, 2020)