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**Tolulope Oke\***, Department of Mathematics, Texas A&M University, College station, TX, and  
**Pablo S Ocal** and **Sarah Witherspoon**. *Homotopy liftings and Hochschild cohomology of some  
twisted tensor products.*

The Hochschild cohomology of a tensor product of algebras is isomorphic to a graded tensor product of Hochschild cohomology algebras, as a Gerstenhaber algebra. A similar result holds when the tensor product is twisted by a bicharacter. We present new proofs of these isomorphisms, using Volkov's homotopy liftings that were introduced for handling Gerstenhaber brackets expressed on arbitrary bimodule resolutions. These results illustrate the utility of homotopy liftings for theoretical purposes. (Received September 09, 2020)