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## Towards a $KRV_2$ action in the derived category

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Let X be a smooth complex variety. In previous joint work with V. Dolgushev and T. Willwacher, we exhibited an explicit action of  $GRT_1$  on the Gerstenhaber algebra  $H^*(X, \mathcal{T}_{poly})$ . This action produces a large supply of nontrivial  $GRT_1$  representations. After reviewing this construction, I will discuss extending it to an action of  $KRV_2$  on the set of those isomorphisms  $H^*(X, \mathcal{T}_{poly}) \cong HH^*(X)$  which correct the HKR map between the harmonic and Hochschild structures of X. A key ingredient is the recent characterization of  $KRV_2$  by Z. Dancso, I. Halacheva, and M. Robertson as automorphisms of a wheeled PROP. This is joint work in progress with M. Robertson.

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