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Daniel Bragg* (braggdan@berkeley.edu). *Derived invariants of varieties in positive characteristic.*

A fundamental derived invariant associated to a smooth projective variety is its Hochschild homology. In positive characteristic, topological Hochschild homology gives another canonical derived invariant. We will explain how to compute with this object in practice by relating it to crystalline and de Rham-Witt cohomology. As a consequence, we obtain some new restrictions on the Hodge numbers of derived equivalent varieties in positive characteristic. We will also present an example of two derived equivalent 3-folds in characteristic 3 with different Hodge numbers. This is joint work with Benjamin Antieau and Nick Addington. (Received September 14, 2020)