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Markus Pflaum* (markus.pflaum@colorado.edu), Department of Mathematics, University of Colorado Box 395, Boulder, CO 80309. *Localization in Hochschild Homology and Applications.*

We revisit localization in Hochschild homology. Following an original idea by N. Teleman we show that in the case of certain algebras of functions on a singular space or the convolution algebra over a Lie groupoid localization leads to a quasi-isomorphism between the Hochschild chain complex and the complex of global sections of a complex of fine sheaves over the underlying space respectively orbit space. This sheaf complex is called the diagonal complex. In several situations the computation of its homology sheaf appears to be manageable thus leading to a solution of the original problem to determine the Hochschild homology of the function or convolution algebra. This is partially based on joint work with H.-Ch. Herbig and with H. Posthuma, and X. Tang. (Received September 10, 2019)