

1086-13-2275      **Mark E Walker\*** (mwalker5@unl.edu), 203 Avery Hall, Lincoln, NE 68588. *The homotopy theory of matrix factorizations*. Preliminary report.

I will describe how a Quillen model category structure for matrix factorizations (due to Positselski) leads to a definition of Hochschild homology and the construction of Chern characters for matrix factorizations. This represents a generalization and an abstraction of such constructions worked out already in special cases by Polishchuk-Vaintrob, Carqueville-Murfet, and Dyckerhoff-Murfet. (Received September 25, 2012)