962-57-186 **Michael S. McLendon*** (michael-mclendon@uiowa.edu), Michael McLendon, Dept. of Mathematics, 14 MacLean Hall, Iowa City, IA 52242. *Hochschild homology of skein algebras.* Preliminary report.

Let F be a surface and let I be the interval $[0,1]$. The Kauffman bracket skein module of $F \times I$, denoted $K_t(F \times I)$, admits a natural multiplication which makes it an algebra. The zeroth Hochschild homology of $K_t(T^2 \times I)$ is a vector space of five dimensions. A basis consists of one element from each of the four $\mathbb{Z}_2$ homology classes of T^2 plus one more element for the empty skein. We study the Hochschild homology of $K_t(F \times I)$ where F is a torus or a punctured torus. (Received August 25, 2000)