

1077-57-2806

**Jeffrey Boerner\*** ([boernej@westminster.edu](mailto:boernej@westminster.edu)). *The  $sl(3)$  skein module.*

Skein modules of surfaces that are related to Khovanov homology have been explored in some detail by Asaeda, Frohman, and Kaiser. These skein modules are established by the relationship between the Frobenius algebra associated to Khovanov homology and TQFTs. Khovanov describes another link homology,  $sl(3)$  link homology, in terms of surfaces but there is not an underlying Frobenius algebra. Despite the absence of a Frobenius algebra, we are able to define the  $sl(3)$  skein module and explore the  $sl(3)$  skein module of certain 3-manifolds. (Received September 22, 2011)