## 1100-57-173

Charles D Frohman<sup>\*</sup> (charles-frohman@uiowa.edu), Department of Mathematics, The University of Iowa, Iowa City, IA 52242, and Joanna Kania-Bartoszynska. *The Kauffman bracket skein algebra at a root of unity as a Frobenius algebra*. Preliminary report.

The Kauffman bracket skein algebra of a compact oriented surface with boundary, where  $A = e^{\pi i/N}$ , and N is odd, is a ring extension of coordinate ring the  $Sl_2C$ -character variety of the fundamental group of the surface. We explore the existence of a linear functional from the skein algebra to the coordinate ring, so that when we extend to the functional field makes the extended skein algebra into a Frobenius algebra. (Received February 07, 2014)