Francis Bonahon* (fbonahon@math.usc.edu). Representations of the Kauffman bracket skein algebra of a surface. Preliminary report.

The Kauffman bracket skein algebra of a surface is closely related to the Jones polynomial invariant of knots. It is generated by pictures of knots on the surface, modulo 3-dimensional isotopy and the Kauffman skein relations. We will discuss various results on the existence and uniqueness of irreducible representations of this algebra, with emphasis on the case when the underlying parameter $q$ is a root of unity. (Received September 10, 2015)