1157-57-570 **Wade Bloomquist***, wbloomquist3@gatech.edu, and **Thang Le**. *Stated Skein Algebras at Roots of Unity.* Preliminary report.

The stated skein algebra of a surface is a refinement of the usual Kauffman bracket skein algebra of a surface which introduces diagrams containing stated arcs meeting the boundary of the surface. The power of this refinement follows from a splitting homomorphism between algebras induced by cutting a surface along an ideal arc. Additionally, there is an isomorphism between the stated skein algebra of the bigon and $\mathcal{O}_{q^2}(\mathrm{SL}(2))$. We discuss some algebraic properties of these algebras, explore the extension to stated skein modules of 3-manifolds, and keep an eye toward applications in low dimensional topology. (Received February 04, 2020)