

1110-57-136

Susan M Abernathy* (susan.abernathy@angelo.edu) and **Patrick M Gilmer**. *Even and odd Kauffman bracket ideals for genus-1 tangles*. Preliminary report.

A genus-1 tangle is a 1-manifold with two boundary components properly embedded in the solid torus. We discuss genus-1 tangle embedding and define an even and odd version of the Kauffman bracket ideal for genus-1 tangles. Using skein theory techniques, we outline a method for computing a finite list of generators for these ideals. This includes adapting a basis of Habiro's for the even Kauffman bracket skein module of the solid torus to define bases for the even and odd skein modules of the solid torus relative to two points. We compute the even and odd ideals for some specific examples, including an example which is obstructed from embedding in the unknot by the even and odd Kauffman bracket ideals together but not by the ordinary Kauffman bracket ideal. (Received February 17, 2015)