

1154-57-1431 **Mohamed Elhamdadi, Masahico Saito*** (saito@usf.edu) and **Emanuele Zappala**. *Skein for Yang-Baxter homology*. Preliminary report.

Homology theories for the Yang-Baxter equation (YBE) have been developed and studied, with applications to knot invariants and deformation theories. We introduce a skein computation for the YB homology for the R-matrix corresponding to the Jones polynomial. A homology for such a matrix was defined by Przytycki and Wang by normalizing the R-matrix appropriately. We modify the skein relation accordingly for this normalization. Diagrammatic computations of low dimensional homology groups are given, and an annihilation result that measures torsions is presented. (Received September 15, 2019)