

1158-57-126 **Sujoy Mukherjee*** (mukherjee.166@osu.edu). *On the homology of quasibands*. Preliminary report.

In general, rack and one-term homology are very useful tools for studying self-distributive algebraic structures like shelves, racks, and quandles. However, it turns out that when self-distributive algebraic structures are associative, their rack and one-term homology groups are not very interesting.

Associative shelves are examples of quasibands. In this talk, after introducing the homology of quasibands, I will show that it is more useful than rack or one-term homology for certain sub-families of associative shelves. Finally, I will describe my attempts to connect this homology theory to knot theory via Jones monoids. (Received February 26, 2020)