

1110-57-124

Seung Yeop Yang* (syyang@gwu.edu) and **Jozef H. Przytycki**. *Annihilation of the torsion subgroup of rack homology of R_{2k} and some other finite quandles.*

It is a classical result in reduced homology of finite groups that the order of a group annihilates its homology. Niebrzydowski and Przytycki conjectured that for a finite quasigroup quandle the torsion of its rack homology is annihilated by the order of the quandle. Additionally, they conjectured that for nonconnected dihedral quandles R_{2k} , k annihilates the torsion subgroup of rack homology if k is odd. In this talk, we prove the both conjectures. The method can be taught as the analogue of presimplicial homotopy in precubic theory (See the talk by J. H. Przytycki). (Received February 16, 2015)