

1114-57-135

Masahico Saito* (saito@usf.edu). *Rack relations and homology.*

Quandle homology was defined from rack homology as the quotient by a subcomplex corresponding to the idempotency, and Reidemeister type I move. Similar subcomplexes have been considered for various relations of racks and moves on diagrams, such as symmetric quandles and the rack rank. We observe common aspects of these subcomplexes; rack relations yield 2-cycles, leading to generating terms of subcomplexes, and the corresponding 2-cocycle extensions inherit the relations. We examine these aspects for Burnside relations. (Received August 20, 2015)