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W. Edwin Clark and **Masahico Saito*** (saito@usf.edu). *Quandle identities and homology.*

Quandle homology was defined from rack homology as the quotient by a subcomplex corresponding to the idempotency, that reflects the invariance under the type I Reidemeister move. Similar subcomplexes have been considered for various identities of quandles and moves on diagrams. We observe common aspects; a quandle identity gives rise to a 2-cycle, the corresponding 2-cocycle extension inherits the identity, and the identity leads to a subcomplex. We apply this principle to some other specific identities. Quandles with these identities are constructed by Alexander quandles, and also listed from the table of quandles. (Received January 10, 2016)