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Seung Yeop Yang* (seungyeop.yang@knu.ac.kr). *An introduction to the normalized set-theoretic Yang-Baxter homology theory.*

A homology theory for the set-theoretic Yang-Baxter equation is introduced by Carter, Elhamdadi, and Saito in 2002. We define the normalized homology theory of certain set-theoretic solutions to the Yang-Baxter equation, such as Rump quasigroups, biquandles, etc., which is a modified form of their set-theoretic Yang-Baxter homology. We, moreover, introduce homological and homotopical knot invariants obtained from the normalized homology theory. (Received September 16, 2019)