

# Loops from the (semi-abelian) categorical point of view

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Up to now, the variety of loops (= quasigroups with identity) has been studied mainly from the point of view of universal algebra. It is well known that this variety is a Mal'cev variety. From the categorical point of view, more can be said: loops and loop homomorphisms form a semi-abelian category. It is therefore of interest to investigate in this category some of the notions, which have recently been developed in the semi-abelian framework, like commutators, central extensions, semi-direct products, (co)homology, homotopy, and so on, and to compare them with similar notions introduced for loops by people working in (universal) algebra.