

1142-18-38

Jonathan Smith*, 411 Morrill Road, Dept. of Math., ISU, Ames, IA 50011-2104. *Cohomology for Maltsev varieties.*

We present a cohomology theory for Maltsev varieties that embraces classical algebras such as groups, Lie algebras, and nonunital (not necessarily associative) rings, as well as more exotic structures such as loops and quasigroups. The theory is based on Duskin's triple or monadic cohomology, but exploits special properties of Maltsev varieties, including the well-behaved theory of centrality, the commuting of congruences, and an abstract version of the Kan filler condition. It provides a classification of both singular and nonsingular extensions, as well as obstructions to extensions. (Received August 19, 2018)