

Higher Commutator Theory

Keith Kearnes (*University of Colorado*)

The commutator operation of group theory has been generalized in many different ways. These generalizations permit one to import ideas from group theory into other areas of mathematics, but the subject has developed beyond that to include original concepts. I will start by discussing the intuition behind, and the scope of, the theory of the commutator of two or more variables and end with applications and problems.

Keywords: abelian, algebra, commutator, congruence, supernilpotence