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**Kenneth L. Price\*** ([pricek@uwosh.edu](mailto:pricek@uwosh.edu)), UW Oshkosh, 800 Algoma Boulevard, Oshkosh, WI 54901. *A Domain Test for Lie Color Algebras.*

Lie color algebras are generalizations of Lie superalgebras and graded Lie algebras. We begin with background on Lie color algebras and show the universal enveloping algebra of a Lie color algebra can be very different from that of an ordinary Lie superalgebra. We describe a test which uses Gröbner basis methods to determine when the universal enveloping algebra is a domain. This is applied in an example to show the universal enveloping algebra may be a domain even if it contains torsion elements and the base field is algebraically closed. This cannot happen for graded Lie algebras or Lie superalgebras. (Received September 12, 2008)