1067-17-1804 **Lindsey R Bosko*** (lrbosko@ncsu.edu), 4006 The Oaks Dr, Raleigh, NC 27606. *Nontrivial Schur Multipliers of Nilpotent Lie Algebras.*

Given a group, G, its Schur multiplier can be defined as the second element of a maximal defining pair, the second cohomolgy group $H^2(G, \mathbb{C}^*)$ with trivial action, or $\frac{F^2 \cap R}{[F,R]}$ where $1 \to R \to F \to G \to 1$ is a free presentation of G. It is known that a $p-$group with trivial Schur multiplier has restrictions placed on it. We consider the Schur multipliers of Lie algebras, whose definition is analogous to the Schur multiplier of a group. We show that if a finite dimensional nilpotent Lie algebra algebra has dimension greater than one, then its Schur multiplier is non-zero. This is joint work with Dr. Ernest L. Stitzinger. (Received September 22, 2010)