

Algebra Seminar

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Thursday, July 23, 2015
1100-12:00 noon, HH-2010

Outer restricted derivations of nilpotent restricted
Lie algebras

We characterize finite-dimensional nilpotent restricted Lie algebras having an outer restricted derivation whose square is zero. This is the restricted analogue of a result of Togo on the existence of nilpotent outer derivations of ordinary nilpotent Lie algebras in arbitrary characteristic and the Lie-theoretic analogue of a classical group-theoretic result of Gaschutz on the existence of p -power automorphisms of p -groups. This is a joint work with J. Feldvoss and Th. Weigel.