

1131-17-170

Ben D Johnson* (bjohnson@math.umass.edu), Department of Mathematics and Statistics, University of Massachusetts, 710 N. Pleasant Street, Amherst, MA 01003, and **Eric N Sommers** (esommers@math.umass.edu), Department of Mathematics and Statistics, University of Massachusetts, 710 N. Pleasant Street, Amherst, MA 01003. *Equations for some nilpotent varieties.*

Given a simple complex Lie algebra, we want to understand the ideals defining its nilpotent varieties, which are the closures of its nilpotent orbits. It is a classic result of Kostant that the principal nilpotent variety is the nilpotent cone, whose defining ideal is generated by a complete set of fundamental invariants. A minimal generating set for the ideal of the subregular nilpotent variety was found by Broer by studying line bundles on the cotangent bundle of the flag variety. In this talk, which is joint work with Eric Sommers, we extend this result to find a minimal generating set for the ideal corresponding to any Richardson orbit induced from a parabolic subalgebra that is generated by orthogonal short simple roots. (Received July 13, 2017)