

Lie superalgebras: Geometry and Cohomology

Daniel K. Nakano

University of Georgia

Athens, GA, USA

`nakano@math.uga.edu`

Abstract — Let g be a simple classical Lie superalgebra. In this talk, we will construct subalgebras which “detect” the relative cohomology of g with respect to g_0 . This will allow us to define rank varieties and develop a theory of support varieties for modules over the Lie superalgebra. Later it will be shown how this allows us to extend the combinatorial description of “atypicality” of simple $gl(m, n)$ -modules to all g -modules in a functorial way.
