

1033-17-88

Jonathan Kujawa* (kujawa@math.ou.edu), Dept. of Mathematics, University of Oklahoma, Norman, OK 73019. *Representations of Lie superalgebras.*

We will discuss ongoing work with Brian Boe, Daniel Nakano, and Irfan Bagci on the representation theory of Lie superalgebras over the complex numbers. By using relative cohomology one can introduce support varieties to study the finite dimensional supermodules of these algebras. As we will see in the talk, the geometry of these varieties gives new perspectives on the combinatorics and representation theory of Lie superalgebras. (Received September 04, 2007)