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Andrew J. Talian* (atalian@cord.edu). *Lie superalgebra modules of constant Jordan type.*

Modules of constant Jordan type were first defined and studied over finite group schemes by Carlson, Friedlander, and Pevtsova. In a series of works, these authors and several others demonstrate many useful and interesting properties of these modules as well as their use in constructing new vector bundles over \mathbb{P}^n of low rank.

In this talk, an adaption of these techniques is applied to finite dimensional modules over a Lie superalgebra $\mathfrak{g} = \mathfrak{g}_0 \oplus \mathfrak{g}_1$. We will introduce the corresponding definition in this context, note some properties of these modules, and show their closure under many standard operations. We will also discuss how the Jordan type detects projectivity and the property of being endotrivial, as well as examining stronger results in the specific case of modules over the type \mathfrak{f} detecting subalgebra and the construction of vector bundles, if time permits. (Received January 15, 2016)