1133-17-169 **Houssein El Turkey*** (helturkey@newhaven.edu), 300 Boston Post road, West Haven, CT 06516. *Complexity of simple modules over the Lie superalgebra* $\mathfrak{osp}(k|2)$.

The complexity of a module is the rate of growth of the minimal projective resolution of the module while the z-complexity is the rate of growth of the number of indecomposable summands at each step in the resolution. Let $\mathfrak{g} = \mathfrak{osp}(k|2)$ $(k > 2)$ be the type II orthosymplectic Lie superalgebra of types B or D. In this talk, we present the complexity and the z-complexity of the simple finite-dimensional $\mathfrak{g}$-supermodules. We then give these complexities certain geometric interpretations using support and associated varieties. (Received July 24, 2017)