

1135-17-874 **Nehemiah Kuhns*** (nehemiahkuhns@my.unt.edu). *Uniserial representations of $\text{Vec}(R)$ with a single Casimir eigenvalue.*

The cohomology classes of $\text{Vec}(R)$ taking values in homomorphism spaces between tensor density modules were computed by Feigin and Fuchs. The cup products of these classes are also known. In this talk, we solve the cup equation to classify the uniserial (completely indecomposable) extensions of arbitrary length of representations of $\text{Vec}(R)$ having a single Casimir eigenvalue and weights bounded below. (Received September 15, 2017)