

1155-20-281

Brian J Parshall* (bjp8w@virginia.edu). *On some unpublished work on Edward Cline.*

This talk opens with a discussion of collaborative work done by Ed Cline and Roger Carter in Charlottesville that resulted in a joint paper in 1976. There, they computed the lattice of submodules of Weyl modules for $G=SL(2, k)$, where k is algebraically closed of positive characteristic. Using this result, Cline published a determination, in 1979, of all $Ext_G^1(M, N)$ for arbitrary simple G modules M, N . Then, in an unpublished paper, based on work he did at the Institute for Advanced Study in 1979, Cline gave an alternate construction of the lattice of submodules and explained certain regularities that had been observed earlier. He used these results to give an easy inductive determination of the composition factors and the structure graph of a dual Weyl module. In my talk I will provide some detail of this work. (Received January 16, 2020)