

**Meeting:** 1003, Atlanta, Georgia, SS 8A, AMS Special Session on Modular Representation Theory of Finite and Algebraic Groups, I

1003-20-1223      **Joerg Feldvoss\*** (jfeldvoss@jaguar1.usouthal.edu), Department of Mathematics and Statistics, University of South Alabama, Mobile, AL 36688-0002. *Extensions of modules for  $\mathfrak{sl}_2$* . Preliminary report.

In this talk we will study extensions of Weyl modules for the split three-dimensional simple Lie algebra  $\mathfrak{sl}_2$  over a field of prime characteristic  $p > 0$ . In particular, we will compute the Ext-spaces with coefficients in simple  $\mathfrak{sl}_2$ -modules for every degree. Finally, we will also discuss extensions of modules for the finite group  $SL_2(\mathbb{F}_q)$  in the describing characteristic. (Received October 04, 2004)