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

1003-20-945 Thomas Rune Hoffman* (thoffman@coastal.edu). The Basic Algebra of HS in Characteristic 2.

Let $G$ be a finite simple group and $F$ a field of characteristic dividing the order of $G$. The basic algebra of $FG$ is the smallest algebra Morita equivalent to $FG$. I will present an algorithm for constructing the basic algebra of $FG$ as a quotient of the path algebra of the Ext-quiver of $FG$. In particular, I will present the Ext-quiver of the Higman-Sims sporadic group in characteristic 2 and discuss the relations for the basic algebra. (Received October 01, 2004)