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

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)