1023-20-667 **Christopher P Bendel**, **Daniel K Nakano** and **Cornelius Pillen***
(pillen@jaguar1.usouthal.edu), Department of Mathematics and Statistics, University of South Alabama, Mobile, AL 36608. *Cohomology and Extensions for Finite Groups of Lie Type and Small Primes.*

Let G be a connected simply connected almost simple algebraic group defined and split over the field $\mathbb{F}_p$ with p elements. Let $G(\mathbb{F}_q)$ be the finite Chevalley group consisting of $\mathbb{F}_q$-rational points of G where $q = p^r$ for a positive integer r. In earlier work the authors related the extensions between two simple modules for $G(\mathbb{F}_q)$ and its twisted analogues to extensions for G and its Frobenius kernels. Several of these results require the characteristic p of the underlying field to be sufficiently large ($p \geq 3(h-1)$, with h being the Coxeter number of the root system). In this talk we generalize these results to all primes p assuming instead lower bounds on the prime powers p^r (approximately of the order of h^2). (Received September 20, 2006)