

1033-20-82

Christopher P Bendel (bendelc@uwstout.edu), Department of Mathematics, Statistics, and Computer Sciences, University of Wisconsin-Stout, Menomonie, WI 54751, **Daniel K Nakano** (nakano@math.uga.edu), Department of Mathematics, University of Georgia, Athens, GA 30602, and **Cornelius Pillen*** (pillen@jaguar1.usouthal.edu), Department of Mathematics and Statistics, University of South Alabama, Mobile, AL 36688. *Cohomology of finite groups of Lie type*. Preliminary report.

Let G be a reductive algebraic group over a field k of prime characteristic p which is split over the prime field \mathbb{F}_p . Let $\text{Fr} : G \rightarrow G$ denote the Frobenius map. Then the fixed points of the r th iterate of the Frobenius map, denoted $G(\mathbb{F}_{p^r})$, is a finite Chevalley group. The question of interest in this talk is to determine the least $i > 0$ such that the cohomology group $H^i(G(\mathbb{F}_{p^r}), k) \neq 0$. (Received September 04, 2007)