

Discrete Mathematics Seminar

Time: Friday, 19 November 2010, 12:30–1:30 PM
Location: 238 Derrick Hall
Title: Characters, Induction, and p -Groups
Speaker: Dr. Timothy Bonner, Mathematics Department

Abstract:

Character theory has long played an important role in the theory of finite groups. Burnside originally used the theory of characters to prove that every finite group, G , of order $|G| = p^a q^b$, is solvable (where p and q are primes). We will give a brief introduction to character theory and discuss more recent results concerning the character theory of finite p -groups. Specifically, we will discuss the case in which each irreducible character may be induced from a single normal series, and the relation of this case to the derived length of a finite p -group. This work builds on earlier results of Thomas Keller, Dustin Ragan, and Geoffrey Tims.