Meeting: 1004, Bowling Green, Kentucky, SS 6A, Special Session on Representation Theory

1004-20-108 **Pramod N Achar*** (pramod@math.lsu.edu), 266 Lockett Hall, Department of Mathematics, Louisiana State University, Baton Rouge, LA 70803-4918, and **Anne-Marie Aubert**. On rank-two complex reflection groups.

Recent work by a number of mathematicians has shown that complex reflection groups behave in many ways like Weyl groups of semisimple algebraic groups. In this talk, we describe a class of groups with the property that the finite ones among them are precisely the complex reflection groups of rank two—a situation reminiscent of that for Coxeter groups— and we discuss implications for the study of cyclotomic Hecke algebras, root systems for complex reflection groups, and other representation-theoretic ideas. (Received January 20, 2005)