

**Meeting:** 1001, Evanston, Illinois, SS 13A, Special Session on Algebraic Topology: Interactions with Representation Theory and Algebraic Geometry

1001-57-310      **Özgün Ünlü\***, unluo@math.mcmaster.ca. *Free  $p$ -group actions on products of spheres.*

A well-known conjecture states that every rank two  $p$ -group acts freely and smoothly on a product of two spheres. In a joint work with Adem and Davis, we proved this for  $p \geq 5$ . In this talk, I will discuss the situation at the small primes  $p = 2$  and  $p = 3$ . (Received August 30, 2004)