

1027-20-101

Michael A Jackson* (majackso@king.edu), 1350 King College Road, Bristol, TN 37620. *Strong Symmetric Genus and Generalized Symmetric Groups of Type $G(n, 3)$* . Preliminary report.

In this talk we will discuss the strong symmetric genus and generalized symmetric groups. The generalized symmetric groups are defined to be $G(n, m) = \mathbb{Z}_m \wr \Sigma_n$ where $n, m \in \mathbb{Z}_+$. The strong symmetric genus of a finite group G is the smallest genus of a closed orientable topological surface on which G acts faithfully as a group of orientation preserving automorphisms. The present work extends work on the strong symmetric genus by Marston Conder, who studied the symmetric groups (which are $G(n, 1)$), and by the author, who studied the hyperoctahedral groups (which are $G(n, 2)$). In this talk we give results for the strong symmetric genus of the groups of type $G(n, 3)$ as well as outline the proof which may extend to other generalized symmetric groups. (Received February 20, 2007)