

1052-20-77

Michael A. Jackson* (majackson@gcc.edu), Number 3130, 100 Campus Drive, Grove City, PA 16127. *Which $(2, 3, r)$ triangle groups give rise to the strong symmetric genus of some finite group?* Preliminary report.

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 symmetries. For many groups, the action is constructed by realizing G as the non-degenerate quotient of a (p, q, r) triangle group. In this talk, we will discuss which values of $r \geq 7$ have a group G where the strong symmetric genus of G is a result of G being a non-degenerate quotient of a $(2, 3, r)$ triangle group. (Received August 20, 2009)