1116-57-256 **J. Pakianathan*** (jonpak@math.rochester.edu), **M. Herman** and **E. Yalcin**. *An elementary construction of tessellated Riemann surfaces using finite groups.*

In this talk, I will discuss an elementary construction that came up in joint work of M. Herman, E. Yalcin and myself that takes as input a finite nonabelian group G, and outputs in a functorial way, a finite collection of compact, connected, orientable surfaces equipped with a regular or dual quasi regular closed cell structure/pattern/graph embedding. For example when applied to the symmetric group on 6 letters, it results in 4477 tessellated surfaces of 27 distinct genus and a variety of tessellation patterns in each genus.The group G also acts by conjugation on this construction inducing faithful actions of sub quotients of G on these surfaces that form an index at most two subgroup of the orientated automorphism group of the cell structure/graph embedding. Various examples of this process including those that achieve actions giving the strong symmetric genus of a surface will be discussed as time permits. (Received August 18, 2015)