

1145-57-799

Charles Camacho Anthony Charles* (camachoc@math.oregonstate.edu). *Counting the Number of Quasiplatonic Topological Actions of the Cyclic Group on Surfaces.*

A quasiplatonic topological action of a finite group G on a surface X of genus at least two is an embedding of G into $\text{Homeo}^+(X)$ whose orbit space X/G has genus zero and whose action ramifies over three points. Define $QC(n)$ to be the number of quasiplatonic topological actions of the cyclic group C_n on surfaces. We use formulas of Benim and Wootton to give an explicit formula for $QC(n)$. In addition, we relate the number of quasiplatonic topological actions of C_n to the number of regular dessins d'enfants (highly symmetric embedded bipartite graphs) having C_n as their group of automorphisms. (Received September 15, 2018)