

1096-05-446

Lowell Abrams* (labrums@gwu.edu). *Fixed-point rotation families of cellular automorphisms.*

A fixed-point rotation family is a one-parameter family of cellular automorphisms of cellularly embedded graphs which satisfy the following conditions: Each automorphism is pseudofree but not free; the respective orders of the automorphisms are given by a linear function of genus; all quotient surfaces are the same; all genus greater than 1 are represented. In recent work, Abrams and Slilaty defined a notion of reducibility for cellular automorphisms of embedded graphs; we use this framework to classify all irreducible fixed-point rotation families. (Received September 03, 2013)