

1129-20-449

**Catherine E Pfaff\***, UCSB Math Department, South Hall, Room 6607, Santa Barbara, CA 93106. *Outer Space Dictating Normalizers and Centralizers.*

A significant lure in studying outer automorphism groups of free groups is the natural action on a space, Culler-Vogtmann Outer Space, which both strongly resembles and intricately differs from some of the most well-known and studied spaces, such as Teichmuller space and hyperbolic spaces. We give an example of harnessing this resemblance to identify particular subgroups of the outer automorphism group, namely the normalizers and centralizers of “lone axis fully irreducible outer automorphisms.” This is joint work with Lee Mosher and Yael Algom-Kfir. (Received March 21, 2017)