

1096-AG-910 **Johanna Mangahas*** (mangahas@math.brown.edu). *The Nielsen-Thurston Classification of Mapping Classes.*

In this course we explore the anatomy of individual elements of mapping class groups. The mapping classes of a torus can be understood as area-preserving linear maps whose behavior depends decisively on whether the map fixes an irrational direction, a rational direction, or whether some iterate of the map is the identity. The Nielsen-Thurston classification generalizes this trichotomy to mapping classes of any surface: the corresponding types are pseudo-Anosov, reducible, or periodic, respectively. We'll focus especially on pseudo-Anosov mapping classes, and see how stretch factors and certain structures on the surface play the same role as eigenvalues and eigenvectors in the torus case (Received September 11, 2013)