

1155-20-294

Aaron Calderon* (aaron.calderon@yale.edu). *Mapping class groups, vector fields, and holomorphic differentials.*

The mapping class group of a surface is the set of its topological symmetries. When the surface is equipped with a vector field, one would like to understand which symmetries preserve (the isotopy class of) this vector field. Despite the fundamental nature of this question, these “framed mapping class groups” remain poorly understood. In this talk I will explain the discovery, joint with Nick Salter, of explicit, finite generating sets for certain framed mapping class groups. I will also discuss the implications of this result for the topology of moduli spaces of holomorphic 1-forms. (Received January 16, 2020)