

1146-51-277

Aaron Calderon* (aaron.calderon@yale.edu). *Mapping class groups and deformations of flat surfaces.*

Flat cone metrics on surfaces (often in the guise of translation surfaces or holomorphic differentials) are a fundamental object of study in Teichmüller theory, billiard dynamics, and complex geometry. Fixing the number and angle of the cone points defines a natural subvariety of the moduli space of flat surfaces called a stratum, the global topology of which is quite enigmatic. In this talk, I will explain which mapping classes are realized by deformations contained in these strata, and how this result can be applied to classify the connected components of Teichmüller spaces of flat cone metrics. (Received January 24, 2019)