



Teichmüller Theory Seminar

Mapping class group actions on character varieties

Sara Maloni (Brown University)

Abstract

In this talk we define a domain of discontinuity for the mapping class group action on the character variety $\mathcal{X} = \text{Hom}(F_3, SL(2, \mathbb{C})) / SL(2, \mathbb{C})$ of the free group F_3 of rank 3, considered as the fundamental group of the four-holed sphere S . We will describe the combinatorial view point we adopt using trace functions on simple closed curves, and we sketch the main ideas of the proof. Time permitting, we will also discuss the real case, the more recent work with F. Palesi where we see F_3 as the fundamental group of the three-holed projective plane N , and the various open questions on the topic. (This is joint work with F. Palesi and S. P. Tan.)

Thursday, 21 January 2016, 4pm

Smith Hall 204