



## Teichmüller Theory Seminar

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Extremal length geometry on Teichmüller spaces

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### Abstract

Given an oriented closed surface  $S$  of genus  $g \geq 2$ , we can define its so-called Teichmüller space denoted by  $\mathcal{T}(S)$ . This space, which classifies in some sense conformal structures on  $S$ , is endowed with a canonical metric (the Teichmüller metric) which is related to an important conformal invariant, the *extremal length*. This invariant allows us to define a compactification of Teichmüller space, called the *Gardiner-Masur compactification*.

In this talk, we shall deal with the *horocyclic deformation*, a conformal analogue of the Fenchel-Nielsen deformation and we prove that in some cases these conformal deformations converge towards the Gardiner-Masur boundary. Furthermore, if time permits, we shall introduce the *reduced* Gardiner-Masur boundary and see its relation with the so-called *null-set lamination space*.

Wednesday, 22 March 2017, 2:45pm

Smith Hall 204