

Geometry, Groups and Dynamics/GEAR Seminar  
(held at the Illinois hub of GEAR )

**1:00 pm, Thursday, October 8, 2015, 243 Altgeld Hall**

Robert Tang (Oklahoma Math)

Shadows of Teichmueller discs in the curve graph

Abstract: A Teichmueller disc parameterises the family of metrics obtained by performing  $SL(2, \mathbb{R})$ -deformations on a given flat surface. We consider several natural sets of curves associated with a Teichmueller disc from the point of view of the curve graph. We show that these sets agree up to uniform Hausdorff distance, and are all quasiconvex. Furthermore, we extend the notion of balance time along Teichmueller geodesics to Teichmueller discs, and show that it satisfies analogous projection properties to the curve graph. This talk will focus on the tools used to prove the above results. This is a joint work with Richard Webb.

[Video](#)