

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

12:00 pm, Tuesday, September 29, 2015, 345 Altgeld Hall

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Finding paths in graphs of triangulations

Abstract: There are many different ways of triangulating a surface using n arcs. As some triangulations are more similar than others, we get a natural topology on the space of triangulations which can be seen as an infinite graph; where two triangulations are connected if and only if they share $(n-1)$ edges. This graph provides a combinatorial model for the surfaces mapping class group as it acts geometrically. We will look at some techniques for efficiently finding paths through this graph, allowing us to efficiently represent and compute with mapping classes.

[Video](#)