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Teichmüller Theory Seminar

Lifting curves simply

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Abstract

It is a corollary of a celebrated theorem of Scott that every closed curve on a hyperbolic surface X has a simple lift in a finite cover. In order to discuss a quantitative version of this statement, let the *degree* of a curve be the minimal degree of such a cover. We show: If X has no punctures, then the maximum degree among curves of length at most L is coarsely equal to (with constants depending only on the topology of X) the quotient of L by the length of the systole of X. Time permitting, we will discuss related questions and work in progress about length functions of non-simple closed curves.

Thursday, 25 February 2016, 4pm

Smith Hall 204