

## Teichmüller Theory Seminar

## Quantifying isospectral finiteness

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## Abstract

Associated to a closed hyperbolic surface is its length spectrum, the set of the lengths of all of its closed geodesics. Two surfaces are said to be isospectral if they share the same length spectrum.

The talk will be about the following questions and how they relate:

- How many questions do you need to ask a length spectrum to determine it?
- How many different surfaces can be isospectral to a surface of a given genus?

The approach to these questions will include finding adapted coordinate sets for moduli spaces and exploring McShane type identities.

Monday, 29 January 2018, 4pm Smith Hall 204