TOPOLOGY SEMINAR

Guest Speaker: Daniel Minahan

Georgia Institute of Technology

Date: Tuesday, November 7, 2023
Time: 2:30 PM
Location: 258 Hurley Bldg
Zoom Link: NA

Lecture Title:

Finiteness in the homology of the Torelli group

Abstract
The Torelli group of a closed, oriented surface is the kernel of the action of the mapping class group on the first homology of the surface. Birman asked if the Torelli group is finitely presented for all surfaces of sufficiently large genus. We will a discuss our recent theorem, which says that the second rational homology of the Torelli group is finite dimensional for all closed, oriented surfaces of sufficiently large genus. This result rules out the simplest obstruction to the finite presentability of the Torelli group. Time permitting, we will also discuss current work in progress that describes the rational homology of the Torelli group in a stable range.

Daniel Minahan - Georgia Institute of Technology