## **Department of Mathematics** University of Notre Dame

# GRADUATE STUDENT TOPOLOGY SEMINAR

### **Guest Speaker: Annie Holden University of Notre Dame**

Date: Friday, September 29, 2023 Time: 11:30 AM Location: 258 Hurley Bldg Zoom URL: NA



### *Lecture Title:* The Johnson Homomorphism

#### Abstract

We explore the Torelli group  $\mathcal{I}(S_g^1)$  of a genus g surface with one boundary component. We motivate and construct the Johnson homomorphism  $\tau : \mathcal{I}(S_g^1) \to \wedge^3 H_1(S_g^1; \mathbb{Z})$ .