

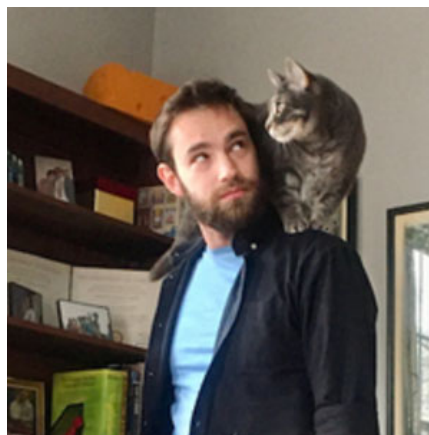
TOPOLOGY SEMINAR

Guest Speaker: Nick Salter
University of Notre Dame

Date: Tuesday, August 24, 2021

Time: 2:30 PM

Location: 258 Hurley Hall



Lecture Title:

Simple closed curves in stable covers of surfaces

Abstract:

Fix a finite regular covering $f : X \rightarrow Y$ of surfaces with covering group G . Which elements of $H_1(X; \mathbb{Z})$ can be represented by curves γ such that $f(\gamma)$ is a simple closed curve on Y ? This simple-seeming question has turned out to be enormously subtle, and is connected e.g. to deep unresolved questions about the topology of the moduli space of algebraic curves. In this talk I will present a complete answer in the *stable* setting, where one is allowed to freely enlarge the covering by some G -equivariant embedding $X \subset X^+$. This is joint work with Corey Bregman.