

TOPOLOGY SEMINAR

Guest Speaker: Tara Brendle

University of Glasgow

Date: Tuesday, February 14, 2023

Time: 2:30 PM

Location: 207 DeBartolo Hall

Zoom Link: NA



Lecture Title:

Semi-direct product structures in mapping class groups of 3-manifolds

Abstract

There is a natural map from the mapping class group of any manifold to the (outer) automorphism group of its fundamental group. In general, this map is neither injective nor surjective. In this talk, we will show that an associated short exact sequence splits, which gives rise to a semi-direct product structure on the mapping class group when the 3-manifold contains copies of $S^2 \times S^1$. (This is joint work with Nathan Broaddus and Andrew Putman.)