

TOPOLOGY SEMINAR

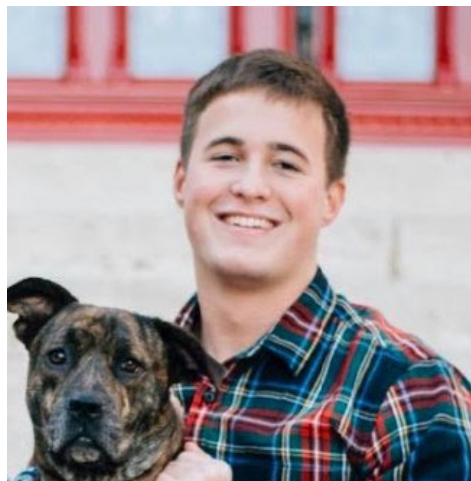
Guest Speaker: Jack Carlisle
University of Notre Dame

Date: Tuesday, September 6, 2022

Time: 2:15 PM

Location: 117 Hayes-Healy Hall

Zoom Link: NA



Lecture Title:
Cobordism of G-manifolds

Abstract

Talk 1: 117 Hayes-Healy, 2:15-3:15

Talk 2: 258 Hurley, 4:00-5:00

Abstract: We say two G -manifolds are cobordant if their disjoint union forms the boundary of some G -manifold of one dimension higher. Cobordism classes of G -manifolds form a ring, which arises as the coefficient ring of a genuine G -spectrum. In this talk, we will see how methods from equivariant stable homotopy theory allow one to calculate explicit presentations of the unoriented and complex C_2 -equivariant cobordism rings, where C_2 is the group of order 2. Time permitting, we will discuss the notion of geometrically oriented G -spectra, of which the G -spectrum representing geometric cobordism is the universal example.