# Department of Mathematics University of Notre Dame

## TOPOLOGY SEMINAR

**Guest Speaker: Araminta Amabel** 

**University of Texas - Austin** 

Date: Tuesday, March 28, 2023

**Time:** 2:30 PM

Location: 258 Hurley Hall

**Zoom Link:** NA

### Lecture Title:

## A factorization homology approach to line operators

#### Abstract

There are several mathematical models for field theories, including the functorial approach of Atiyah-Segal and the factorization algebra approach of Costello-Gwilliam. I'll discuss how to think about line operators in these contexts, and the different strengths of each method. Motivated by work of Freed-Moore-Teleman, I'll explain how to exploit both models to say something about certain gauge theories. This is based on joint work with Owen Gwilliam.