

GRADUATE STUDENT SEMINAR

Guest Speaker: Gurutam Thockchom

University of Notre Dame

Date: Tuesday, April 5, 2022

Time: 12:30 PM

Location: 258 Hurley Hall

Zoom URL: notredame.zoom.us/j/93888654312



Lecture Title:

Operads and First-Order Theories

Abstract

Operads of algebraic topology and first-order theories of mathematical logic both give ways to describe the structure of objects. In this talk I define an operad and an algebra over an operad, and explore some correspondences between operads and theories in first-order logic. I will also go over some obstructions to a complete correspondence between these ideas, and the cost of resolving one of these obstructions. To conclude, I will discuss the role operads might play in a certain generalization of first-order logic.