

TOPOLOGY SEMINAR

Guest Speaker: Owen Gwilliam
University of Massachusetts

Date: Tuesday, November 3, 2020

Time: 2:30 PM

Location: Zoom

Zoom Link: <https://notredame.zoom.us/j/97262637721>

Lecture Title:

Centers of higher enveloping algebras and bulk-boundary systems

Abstract

The universal enveloping algebra of a Lie algebra is one in a family of higher enveloping algebras: each dg Lie algebra \mathfrak{g} has an enveloping E_n algebra $U_n(\mathfrak{g})$. This construction admits a nice presentation via factorization algebras, by work of Knudsen, and we will discuss a factorization model for the center of $U_n(\mathfrak{g})$. This setting makes computing factorization homology tractable. We will discuss various consequences of this convenient model, in representation theory, topology, and physics. (This is joint work with Greg Ginot, Brian Williams, and Mahmoud Zeinalian.)