

TOPOLOGY SEMINAR

Guest Speaker: Eugene Rabinovich
University of Notre Dame



Date: Tuesday, September 14, 2021

Time: 2:30 PM

Location: 258 Hurley Hall

Zoom Link: notredame.zoom.us/j/97262637721

Lecture Title:

Factorization Algebras for Bulk-Boundary Systems

Abstract

Factorization algebras are cosheaf-like objects which mix algebra and geometry. Costello and Gwilliam have constructed, for any quantum field theory on a manifold (without) boundary, a factorization algebra of observables for the field theory. In my dissertation, I extended the result of Costello and Gwilliam to a class of field theories on manifolds with boundary. In this talk, I will survey the results of my dissertation, beginning with a brief introduction to factorization algebras. Then, I will focus on two examples of bulk-boundary systems: topological mechanics and BF theory, both on the non-negative real line.