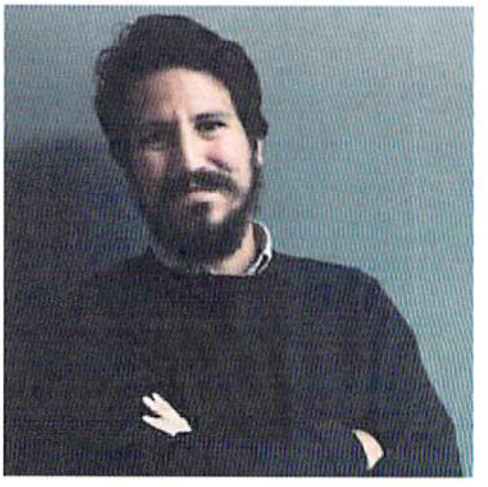
Department of Mathematics
University of Notre Dame

Bogdan Krstic - University of Virginia

TOPOLOGY SEMINAR

Guest Speaker: Bogdan Krstic
University of Virginia



Date: Tuesday, February 18, 2020
Time: 2:30 PM
Location: 258 Hurley Hall

Lecture Title:
Bispans in quasicategories and global Tambara functors

Abstract

Given a suitable (e.g. locally Cartesian closed) quasicategory $\mathcal{C}$, we construct an associated quasicategory whose 1-simplices are bispans in $\mathcal{C}$, and whose n-simplices encode n-fold composites of bispans. This enables us to rigorously construct a theory of global Tambara functors. These are algebraic structures indexed on finite groups with operations of additive and multiplicative induction along subgroup inclusions along with restrictions, and a twisted distributive law governing the relationship between the induction maps. These structures bear a close resemblance to Schwede's global power functors, which encode the power operations on highly-structured global commutative ring spectra, and exploring this relationship is the aim of future work.