

GRADUATE STUDENT SEMINAR

Guest Speaker: Nikolai Konovalov

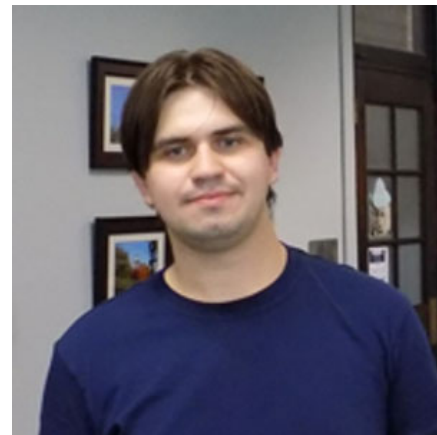
University of Notre Dame

Date: Monday, November 15, 2021

Time: 4:00 PM

Location: 258 Hurley Hall

Zoom URL: notredame.zoom.us/j/95815357423



Lecture Title:

Polynomial functors and Steenrod algebra

Abstract

The Steenrod algebra is a useful and classical tool in algebraic topology which appears naturally as the algebra of cohomology operations. However, there is a completely topology-free way to construct it. Namely, one could consider the category of polynomial functors from the category of vector spaces over \mathbb{F}_p to itself. Then this category embeds fully faithfully into the category of modules over the Steenrod algebra. In my talk, I am going to explain this result and also discuss the image of the embedding.