Department of Mathematics
University of Notre Dame

TOPOLOGY SEMINAR

Guest Speaker: Nathaniel Stapleton

University of Kentucky

Date: Tuesday, April 9, 2024
Time: 2:30 PM
Location: 258 Hurley Bldg
Zoom Link: NA

Lecture Title:
On the image of the total power operation for Burnside rings

Abstract
During this school year, the Kentucky bourbon seminar has been thinking about Burnside rings. Recall that the total power operation is a multiplicative map from the Burnside ring of G to the Burnside ring of the wreath product of G with a symmetric group. The goal of this talk is to explain several equivalent descriptions of the smallest summand of the target of the total power operation generated by elements of the canonical basis and containing the image of the total power operation. I hope to describe some applications of these results including a generalization of Burnside's orbit counting lemma and an extension of the Frobenius-Wielandt map.

Nathaniel Stapleton - University of Kentucky