

Colloquium

University of Notre Dame
Department of Mathematics

Søren Galatius - University of Copenhagen/Columbia University

Speaker: Søren Galatius

University of Copenhagen/Columbia
University

Will give a lecture entitled

Pontryagin classes of euclidean bundles

Date: Friday, November 17, 2023

Time: 4:00 PM

Location: 127 Hayes-Healy Bldg



Departmental Tea: Tea in Room 257 (lounge in Hurley Hall) at 3:30 p.m.

Zoom URL: NA

Abstract:

Pontryagin classes are invariants of a real vector bundle, usually defined as Chern classes of the complexified bundle, and appearing prominently in Hirzebruch's formula for the signature of a $4n$ -dimensional manifold. The Pontryagin classes can be defined more generally for euclidean bundles, that is, fiber bundles with fiber R^n and structure group the entire homeomorphism group of R^n . I will recall a bit of the classical theory and discuss some newer developments, including joint work with Randal-Williams (arXiv:2208.11507) on algebraic independence.