

*Department of Mathematics,
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Math 292 - Topology Seminar

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Twisted homology operations

Abstract:

In the 70s, Fred Cohen and Peter May gave a description of the mod p homology of a free E_n -algebra in terms of certain homology operations, known as Dyer–Lashof operations, and the Browder bracket. These operations capture the failure of the E_n multiplication to be strictly commutative, and they prove useful for computations. After reviewing the main ideas from May and Cohen’s work, I will discuss a framework to generalize these operations to homology with certain twisted coefficient systems and give a complete classification of twisted operations for E_∞ -algebras. I will also explain computational results that show the existence of new operations for E_2 -algebras.

Host: Zhouli Xu

Tuesday, December 1, 2020

11:30 AM

Zoom information: Meeting ID: 933 6734

4286 Password: topology
