Algebra/Topology Seminar

Adela Zhang
MIT

Mod p Homology of Configuration Spaces Via Spectral Lie Algebras

Thursday, April 13, 2023
3:00 p.m. in BB-B008

Abstract. Labeled configuration spaces of a manifold with labels in a pointed space were introduced by McDuff and Segal as a generalization of unordered configuration spaces. More recently, Knudsen identified labeled configuration spaces with the topological Quillen objects of certain spectral Lie algebras and used a bar spectral sequence to provide a general formula for their Betti numbers. The bar spectral sequence for their mod p homology is much less tractable due to the existence of power operations. I will explain how to compute the E^2-page and extract information at low weights.