

Algebra/Topology Seminar

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OPERADS WITH HOMOLOGICAL STABILITY

Thursday, April 26, 2018
1:15 p.m. in ES-143

ABSTRACT. For a carefully constructed operad M of surfaces, Tillmann showed that algebras over M group complete to infinite loop spaces. This result relies, in part, on Harer's homological stability theorem for mapping class groups of surfaces. We will review Tillmann's result and provide a more general framework which shows that operads satisfying a certain homological stability condition detect infinite loop spaces. This is joint work with M. Basterra, I. Bobkova, K. Ponto, and U. Tillmann.