ALGEBRA SEMINAR

Chain-level string topology operations

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ABSTRACT: String topology studies algebraic invariants of manifolds arising from intersecting loops in the manifolds. Traditionally, the algebraic structure is phrased in terms of an action of the homology of the moduli space of Riemann surfaces on the homology of the free loop space of the manifold. It is expected that this action should be induced by an action of the chains on a compactification of moduli space on the chains of the free loop space. In this talk, we report on recent joint work with G.C. Drummond-Cole and N. Rounds constructing a space of operations on the chains of the free loop space which describes part of this action.

Monday, October 12, 2015 1:30 – 2:30 pm Room 617, Wachman Hall Department of Mathematics