

Topology Seminar

Ben Knudsen

of Harvard University will be speaking on

Higher enveloping algebras and configuration spaces of manifolds

on November 7 at 4:30 in
MIT Room 2-131

I will describe a construction providing Lie algebras with enveloping algebras over the operad of little n -dimensional disks for any n . These algebras enjoy a combination of good formal properties and computability, the latter afforded by a Poincare-Birkhoff-Witt type result. The main application pairs this theory with the theory of factorization homology in a study of the rational homology of configuration spaces, leading to a wealth of computations, improvements of classical results, and a combinatorial proof of homological stability.