THE UNIVERSITY   OF HONG KONG

Institute of Mathematical Research
Department of Mathematics

Geometry Seminar

L-algebras and homotopy types

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Abstract

In the early 70's, Sullivan introduced his minimal model for rational homotopy types. Since this important construction in homotopy theory, several attempts have been made to extend the theory to torsion homotopy types. This talk presents such an attempt. I will give a detailed description of *L*-algebras, motivations for them, and discuss the properties of the Eilenberg-Mac lane transformation which are essential for associating to each simplicial set an *L*-algebra in a canonical way. I will explain the bar-construction for multiplicative *L*-algebras (those which are associated to simplicial groups), and give some directions of research for further developments.

Date: May 17, 2010 (Monday)

Time: 4:00 – 5:00pm

Place: Room 210, Run Run Shaw Bldg., HKU

All are welcome