

Speaker: **Jesse Wolfson**
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Thursday, September 27, 2012
3:10 pm
258 Hurley Hall

Title: Extensions of Lie n-Groups

Abstract:

n-groups, first studied by Whitehead, are analogues of groups where associativity and unit laws only hold up to coherent homotopy. Discoveries in mathematical physics have led to the study of Lie n-groups, such as the String 2-group, which in addition have the structure of a (simplicial) smooth manifold. I will develop a framework for studying extensions of Lie n-groups. As the primary application, we obtain a Lie's third theorem for L_∞ -algebras, which recovers and extends results of Schommer-Pries for String, and of Getzler for nilpotent L_∞ -algebras.