



Speaker: Jeremy Mann
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Monday, September 28, 2015

4:00 PM

129 Hayes-Healy Hall

Title: Differential Cohomology

Abstract:

A differential cohomology theory produces invariants of manifolds. Like a generalized cohomology theory, these invariants are in some sense “locally determined,” and give global measurements of shape. However, unlike a “regular” cohomology theory, a differential cohomology theory is not homotopy invariant. Thus, these theories can “see” more refined geometric properties of manifolds, such as the curvature of a connection. In this talk, I will present some of the basic aspects of differential cohomology theories, their applications to physics, and their modern formulation.