## University of Notre Dame Department of Mathematics SPECIAL LECTURE SERIES

## **Moritz Groth**

University of Bonn, Germany

Will give a lecture entitled:

A Short Course on ∞-Categories

On

Thursday, September 9, 2010

At

8:45 AM

In

258 Hurley Hall

Abstract

Talk 4: We give a reformulation of the classical notion of a monoidal category using the language of Grothendieck opfibrations. We then sketch how to encode algebra objects in this framework. These reformulations are then 'easily' generalized to the setting of  $\infty$ -categories and encode the notion of monoidal products and monoid objects which are associative up to coherent homotopy.