

Speaker: Justin Thomas University of Notre Dame

> Thursday, October 28, 2010 3:00 PM 258 Hurley Hall

Title: Phantom of the operad V

Abstract:

For the first talk, I will do a basic elementary introduction to operads. It will include the definition of the associative and commutative operads, the E_n operads, and the A-infinity operad of Stasheff. The second talk will begin with the Hochschild cohomology of associative algebras. We will discuss the Gerstenhaber algebra structure on Hochschild cohomology and how it leads naturally to Deligne's conjecture. The third talk will describe the Swiss cheese operad, the notion of an E_n algebra acting on an E_{n+1} algebra, and a proof of Kontsevich's Swiss cheese conjecture.