

## ***GRADUATE STUDENT SEMINAR***

**Guest Speaker: Pavel Mnev**  
**University of Notre Dame**



**Date:** Monday, September 23, 2019

**Time:** 4:00 PM

**Location:** 117 Hayes-Healy Hall

***Lecture Title:***

**"Discretization" of the de Rham algebra of the interval and effective Batalin-Vilkovisky actions**

***Abstract***

I will explain how, trying to formulate a discrete analog of the algebra of differential forms on an interval, one ends up with a  $C_\infty$  algebra on cell cochains of the interval, with multilinear operations expressed in terms of Bernoulli numbers. The construction extends to manifolds endowed with triangulations. I will also explain how this algebraic structure on cell cochains can be obtained from a stationary phase evaluation of a particular integral.