

# Fall 2018 Undergraduate Seminar

Department of Mathematics



## Monster Math

### Dr. Bard Ermentrout

Distinguished University Professor,  
University of Pittsburgh

**Date:** Tuesday, October 30

**Time:** 12:00-12:50 pm

**Location:** Room 703, Thackeray Hall

Bard Ermentrout is a professor in the mathematics department at Pitt, whose interests include the application of nonlinear dynamics to biological problems. He works with differential equations to model certain types of biological systems. He is also an expert in Zombie Analysis, and as this talk will show, he is the first person you should tuen to should the dead rise again.



There is an impending doom that the undead will once again populate the Earth. In this talk, I will describe the mathematics behind this invasion. First, using scientific zombie data, I will discuss and analyze the population dynamics of zombie infestations and how it may be possible to overcome them. After, I will talk about some advances in the science of Vampirology with former Pitt math major Jackie Ruchti. In the presence of vampire killers, oscillations can emerge between the populations of vampires and their victims. Pizza and drinks will be provided!

**SPEAKER(S) FOR  
NEXT WEEK:**



**Organized by:** Tom Everest, Derek Orr, Jeff Wheeler, and Jeremiah Morgan