

Fall 2018 Undergraduate Seminar

Department of Mathematics



Redefining the Integral

Derek Orr

Math PhD student, University of Pittsburgh

Date: Tuesday, September 11

Time: 12:00-12:50 pm

Location: Room 703, Thackeray Hall

Derek is a math biology PhD student at Pitt, and has a few publications in number theory as well. Derek went to Pitt for his undergrad too, graduating in 2016 with degrees in both math and physics. During his time here, he has given a variety of talks in both the Math Club and in this seminar, as well as served president of Math Club for 2 years and scored top 10% in the Putnam exam his senior year.



In this talk, we will discuss a “new” way to define an integral. Instead of using the standard definition of $\sum_{i=1}^n f(x_i) \Delta x_i$, can we use an infinite product? How will this change the definition of an integral? Will this also change the definition of a derivative? This talk will examine the new mysteries of the so-called “star-integral” and “star-derivative”. Pizza and drinks will be provided!

**SPEAKER FOR
NEXT WEEK:**

Dr. Fedorov



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