

# Undergraduate Mathematics Seminar

Department of Mathematics, Fall 2020



## Big numbers matter too!

### Derek Orr

Math PhD Student, University of Pittsburgh

**Date:** Tuesday, August 25

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

**Location:** Zoom, ID: 935 1032 7072

Derek Orr received his BS in both math and physics from the University of Pittsburgh in 2016. As a PhD student, he's received the Elizabeth Baranger Teaching Award in his first year as a graduate student, worked towards an MS in number theory in 2019, and he is a current recipient of the Mellon Predoctoral Fellowship. He currently works under Dr. Bard Ermentrout in mathematical biology, studying oscillatory and excitable neuron interactions. He has been an organizer of the UMS since 2016.



Consider the number 61,917,364,224. What's so special about it? Nothing really comes to mind. But this exact number was crucial towards a two-sentence published paper that gave a counterexample to one of Euler's famous conjectures that tried to generalize Fermat's Last Theorem. In this talk, I'll discuss why we can't just assume conjectures from famous people are "obviously" true. This talk is a recap and continuation from last semester.

### SPEAKER(S) FOR NEXT WEEK:

Dr. Cezar Lupu

