

# The SUMO Speaker Series for Undergraduates

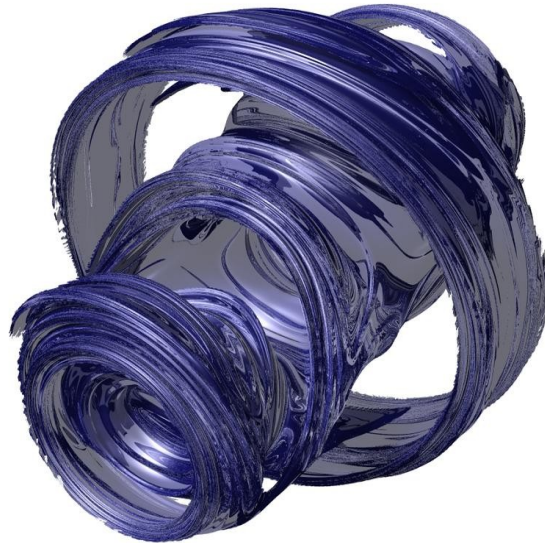
*(food from Pizza Chicago)*

Wednesday, April 22<sup>th</sup>

5:15-6:05, room 380C

## Quaternions in Everyday Life

Joseph Rabinoff



### ABSTRACT:

The quaternions are a number system extending the real and complex numbers. They have all sorts of great properties, including non-commutative multiplication. I'll explain several applications, such as: proving the four square theorem (any positive integer is a sum of four square integers), smooth rotations in video games, and why it is that when you turn all the way around, you don't really end up where you started.

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