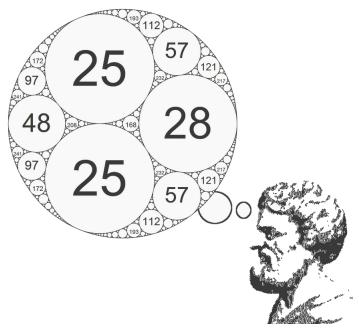
## The SUMO Speaker Series for Undergraduates

Thursday, May 22 4:15-5:05, Room 380C

(Food Provided)

Number Theory on Bubbles

## **Evan Warner**



## **Abstract**

Given any three mutually tangent circles, we can draw exactly two additional circles that are tangent to the first three. Repeating this process *ad infinitum* yields a bubbly diagram called an "Apollonian circle packing." We'll look at the algebraic structure of these objects and discuss a few counting problems, many of which are completely open.

sumo.stanford.edu/speakers