

# SUMO Speaker Series for Undergraduates

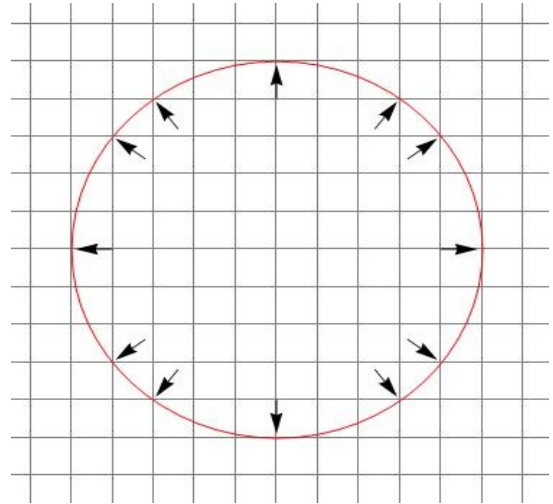
Wednesday, November 12<sup>th</sup>  
4:30-5:30, room 380C (in the basement)

## What is a Class Number Formula?

Professor Akshay Venkatesh

Abstract:

How many lattice points lie on a sphere?  
That is: how many integers  $(x,y,z)$  satisfy  $x^2+y^2+z^2 = N$ , in terms of the integer  $N$ ?  
We will study some data and then guess our way to the answer (or rather, an amazing exact formula for it). This is a very down-to-earth example of what mathematicians call a "class number formula."



Food provided from Pizza Chicago