Radical Pi presents:

Foundational Problems in Additive Combinatorics

by Daniel Glasscock

In 1929, a twenty four year old Soviet mathematician named Lev Schnirelmann proved that every integer greater than 1 can be written as the sum of at most 800,000 prime numbers! Important in his work was not the number 800,000; indeed, just a few years later, fellow Soviet Ivan Vinogradov with advanced techniques from analytic number theory reduced this number to 3. Instead, it was the soft combinatorial approach Schnirelmann employed that persisted. Though the term "additive combinatorics" was coined much later, ideas stemming from Schnirelmann and others around his time laid the groundwork for this rapidly developing field.

In this talk, I will present many of the foundational problems and their solutions in the relatively short history of additive combinatorics. Emphasis will be placed on digesting statements and generating a feeling for the nature of the subject. Time permitting, we will discuss the fruitful intersections between additive combinatorics and other fields.

$$n = p_1 + p_2 + p_3$$

Wednesday, October 29, 5 PM

Undergraduate Math Study Space (MA 052)

Free pizza!

http://www.alphapixel.com/content/prime-number-diagrams-python-and-svg