Number Theory Seminar

Friday, November 15th, 2019

11:30 am in Hume 321

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The History of the Circle Method

ABSTRACT

The Circle Method is a powerful technique that can be applied to a multitude of problems. It is particularly useful when we wish to count certain additive representations of numbers. The method was developed by Hardy, Ramanujan, and Littlewood in the early 20th century, and has since then become one of the primary tools of analytic number theory. In this talk, we will discuss examples of famous problems that have been solved using the circle method. We will then give a rough overview of how the method works for a general problem, and explore some of the innovations the method has seen over the last 100 years. This is an expository talk, and graduate students are encouraged to attend.