

Number Theory Seminar

Friday, October 24th at 3 pm in Hume 331

Zhu Cao

A Proof of Lagrange's Four-Square Theorem

Lagrange's four-square Theorem states that every positive integer can be expressed as the sum of four squares of integers. It was first proved in 1770 by Lagrange (and named after him much later). In this talk, we begin with some preliminary results in q -series and then deduce four-square Theorem using an elementary approach. Our proof was first given by Michael Hirschhorn.