

LAGRANGE AND MARKOV SPECTRA AND COOKIE CUTTERS

MARK POLLICOTT

The Lagrange and Markoff spectrum are two subsets of the positive real numbers which were defined by A.A. Markov in 1879-1880 and are related to problems in diophantine approximation. It wasn't until 1968 that it was known that they were different sets. In the past few months there has been considerable progress in understanding the size of the set theoretic difference of these two sets due to Matheus and Moreira (who will be giving a plenary address related to this in ICM-2018). In this talk I will describe the connection to thermodynamic formalism