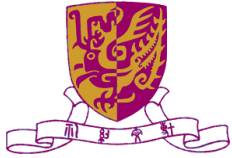


For Favour of Posting



Department of Mathematics
The Chinese University of Hong Kong

數學系
香港中文大學

Phone: (852) 3943 7988 • Fax: (852) 2603 5154 • Email: dept@math.cuhk.edu.hk (Math. Dept.)
Room 220, Lady Shaw Building, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong

Seminar

Average of sums of Fourier coefficients of modular forms

Prof. Chan Jeong KUAN
University of Maine

Abstract

Let f be a modular form with unnormalized coefficients $a(n)$ and $S(n)$ be the sum of the first n Fourier coefficients. In analogy with Dirichlet's divisor problem, Chandrasekharan and Narasimhan conjectured that $S(n) \leq n^{\frac{k-1}{2} + \frac{1}{4} + \varepsilon}$. They had shown that the conjecture is true on average over long intervals. By considering certain shifted convolution sums, we obtain asymptotics of a smoothed second moment and show that the conjecture holds over shorter intervals. This is joint work with Thomas Hulse, David Lowry-Duda and Alexander Walker.

Date : August 24, 2016 (Wednesday)
Time : 3:30pm – 5:00pm
Venue : Room 219, Lady Shaw Building,
The Chinese University of Hong Kong

All are Welcome