University of Florida • Mathematics Department
16th Erdős Colloquium

held in conjunction with the 2016 Gainesville International Number Theory Conference[†] in honor of Professor Krishnaswami Alladi for his 60-th birthday

by

Professor Hugh L. Montgomery[*]

University of Michigan

on

Littlewood Polynomials

Date and Time: 4:05 - 4:55pm, Friday, March 18, 2016
Location: The Straughn Center
Refreshments: before the lecture from 3:20pm

OPENING REMARKS
by
Dr. David P. Norton
Vice-President of Research

Abstract: A *Littlewood polynomial* is a trigonometric polynomial whose coefficients c_n are ± 1 for n in an interval of length N, and are otherwise 0. Such trigonometric polynomials are of interest to analysts, and in signal processing. We survey what is known, what is new, and open questions regarding these intriguing functions, with special attention to the Shapiro polynomials.

[*] ABOUT THE SPEAKER: Professor Hugh Montgomery is one of most eminent mathematicians in the world. He specializes in analytic number theory where he has established several fundamental results on the Riemann zeta function, prime numbers, and the large sieve. His revolutionary PhD thesis at Cambridge University on Multiplicative Number Theory written under the direction of Harold Davenport, earned him the prestigious Adams Prize in 1972. For his seminal work on the Large Sieve, he was awarded the Salem Prize in 1974. Through his own work, his collaborations, most notably with Robert Vaughan, and through his mentoring of students and post-docs, he is one of the most influential mathematicians of our time.

[†] CONFERENCE URL: www.qseries.org/alladi60