

# Philadelphia Area Number Theory Seminar

**Dianbin Bao**  
Temple University

## On an additive function

**Abstract:** K. Alladi and P. Erdős studied the arithmetic function

$$A(n) = \sum_{p \mid n} \alpha_p,$$

where  $n = \prod_{p \mid n} p$  is the product of powers of distinct primes, and proved that the average order of  $A(n)$  is a constant times  $n/\log n$ , where the constant is given by a rational multiple of  $\zeta(2)$ .

In this talk, I will give a new approach to this result and prove the function field analogue of the above result.

Wednesday, April 15, 2015  
2:40{4:00PM

Bryn Mawr College  
Department of Mathematics  
Park Science Center 328

Tea and refreshments at 2:20PM in Park 355