## Philadelphia Area Number Theory Seminar

## Dianbin Bao

Temple University

## On an additive function

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

$$A(n) = \sum_{p^{\alpha} \parallel n} \alpha p,$$

where  $n = \prod_{p^{\alpha} \parallel n} p^{\alpha}$  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