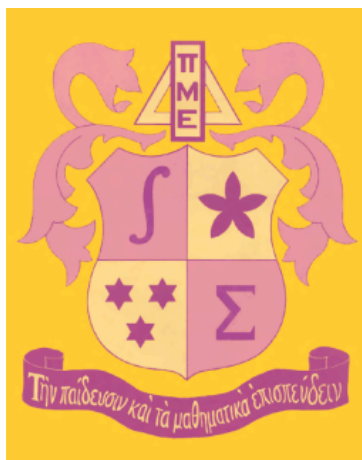


# Pi Mu Epsilon



**Friday, April 10, 2015  
12:00-12:50 PM in Hume 101**

## **Powerful Numbers William Staton**

**We will call a positive integer "powerful" if for every prime  $p$ , if  $p$  divides  $n$ , then  $p^2$  divides  $n$ . That is, every prime in the factorization of  $n$  appears to at least the second power. We will discuss some algebraic properties of the set of powerful numbers to emphasize an important property of primes. Then we will show that there are infinitely many pairs of consecutive powerful numbers, such as 8 and 9.**

**Come join us for lunch and Dr. Staton's talk this Friday!**