

# Prime number theorem for $GL(n)$

Dorian Goldfeld

September 18, 2015

The classical prime number theorem states that the number of primes less than  $x$  is asymptotic to  $x/\log x$  as  $x$  tends to infinity. This result is obtained by studying the Riemann zeta function. In this talk I will discuss generalizations of the prime number theorem in the case where the Riemann zeta function is replaced by higher rank L-functions on  $GL(n)$  with  $n > 1$ .