

# DEPARTMENTAL COLLOQUIM

### **MONDAY FEBRUARY 12TH**

#### IN HUME 321

AT 4PM

## MOMENTS OF DIRICHLET L-FUNCTIONS

RIZWANUR KHAN
DEPARTMENT OF MATHEMATICS
TEXAS A & M UNIVERSITY AT QATAR

## Abstract:

One of the beautiful features of number theory is that to answer simple sounding questions about the integers, one has to take a detour through the world of other seemingly unrelated but wonderful and complex objects. For example, to determine whether the number of primes that are 1 mod 4 is the same as the number of primes that are 3 mod 4, one has to first understand the Dirichlet L-function, a close relative of the Riemann Zeta function. This talk will focus on the moments of Dirichlet L-functions. There will be a nice mix of different types of number theory.