

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

COLLOQUIUM

Primes and Polynomials in Short Intervals

Professor Jon Keating

Henry Overton Wills Professor of Mathematics
University of Bristol, UK

Abstract

I will discuss a classical problem in Number Theory concerning the distribution of primes in short intervals and explain how an analogue of this problem concerning polynomials can be solved by evaluating certain matrix integrals of a kind that play a central role in Mathematical Physics and Probability, specifically in the area of Random Matrix Theory. I will also mention generalisations to other arithmetic questions with a similar flavour.

Date: June 12, 2017 (Monday)

Time: 4:00 – 5:00pm

Venue: Room 210, Run Run Shaw Bldg., HKU

All are welcome