

Liu Bie Ju Centre for Mathematical Sciences  
City University of Hong Kong

## **Mathematical Analysis and its Applications Colloquium**

### **Selberg and related integrals**

by

**Professor Peter Forrester**

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University of Melbourne**

**Date : 29 May, 2018 (Tuesday)**

**Time : 4:30 pm to 5:30 pm**

**Venue : Room B5-307**

**Blue Zone, Level 5**

**Yeung Kin Man Academic Building**

**City University of Hong Kong**

#### **ABSTRACT:**

The Selberg integral is an  $n$ -dimensional generalisation of the Euler beta integral. Some of the probabilistic interpretations of the latter can be extended to the Selberg integral, and now relate to random matrices. A close relative of the Selberg integral, due independently to Dixon (1905) and Anderson (1991), also relates to random matrices. A generalisation implies some interlacing identities. Most recently, the Selberg integral has been shown to be related to the Muttalib-Borodin random matrix ensembles. Also to be discussed is a multi-dimensional generalisation of an integral due to Boole (1851).

Light refreshments will be provided before the colloquium from 4:00 pm to 4:30 pm. Please come and join us!

**\*\* All interested are welcome \*\***

