

# Joint Seminar

## Joint Statistics Seminar

co-organized with

## Center for Statistical Science

*The Hong Kong University of Science and Technology*

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## **Stein's Method and Preferential Attachment Random Graphs**

by

### **Dr. Nathan Ross**

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The University of Melbourne

**Date: December 14, 2015 (Monday)**

**Time: 2:30 p.m. – 3:30 p.m.**

**Venue: Room 4047 (LSK Business Building)**

### *Abstract*

Stein's method is a powerful tool for providing errors in the approximation of a complicated probability distribution of interest by a well-understood target distribution. For example, the method can be gainfully applied to the classical setting of approximating the distribution of a sample mean by a Gaussian. But the strength of the method is in its use in non-classical situations when approximating distributions arising from stochastic systems such as random networks. In this talk I will discuss how Stein's method can be used to study degree statistics of preferential attachment random graphs or, what turns out to be equivalent, counts in generalized Polya urn models.

Joint work with Erol Pekoz and Adrian Roellin.

*All interested are welcome!*

*For details, please contact ISOM Department.*

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