



The Chinese University of Hong Kong  
Department of Statistics

## Seminar

# One-point Function Estimates and Natural Parametrization for Loop-erased Random Walk in Three Dimensions

By

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### Abstract

In this talk, I will talk about loop-erased random walk (LERW) in three dimensions. I will first give an asymptotic estimate on the probability that 3D LERW passes a given point (commonly referred to as the one-point function). I will then talk about how to apply this estimate to show that 3D LERW as a curve converges to its scaling limit in natural parametrization. If time permits, I will also talk about the asymptotics of non-intersection probabilities of 3D LERW with simple random walk. This is a joint work with Daisuke Shiraishi (Kyoto).

Date: January 10, 2019 (Thursday)  
Time: 11:00 a.m. - 12:00 p.m.  
Venue: Lady Shaw Building, Room LT2  
The Chinese University of Hong Kong

ALL INTERESTED ARE WELCOME !!