

# 中央研究院數學研究所

Institute of Mathematics, Academia Sinica

## Taipei Postdoc Seminar

**Speaker** : 島袋祐介 博士 Dr. Yusuke Shimabukuro  
(本所 Academia Sinica)

**Title** : *Stochastic six vertex model*

**Abstract** :

The six vertex model is a two dimensional square lattice with an arrow on each edge and exactly two arrows pointing to each vertex. Each directed lattice contains at most six types of vertices and is written as a multiplication of associated vertex weights. Physical quantity of such model is the partition function that is the sum of all possible directed lattices. This model is known as an exactly solvable model, as the partition function can be studied exactly depending on boundary conditions. With randomly assigned arrows, the model is naturally related to a random path or an interacting particle system, and yields a probability distribution which is tractable to take limit. I plan to give an expository talk to the recent result Stochastic Six Vertex Model by A. Borodin, I. Corwin, and V. Gorin.

**Time** : 11:00 – 12:30, Wednesday, March 1<sup>st</sup>, 2017

**Venue** : **Room 201**, Astro-Math. Buidling (NTU Campus)

**Organizer** : Yu-Yen Chien (NCTS), Jyun-Ao Lin (Academia Sinica)

**Refreshment** : 10:30

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