Speaker: Mr Zhongkai Chen, Department of Statistics, Macquarie University

Date: Tuesday 23 April, 2013  Time 2pm
Venue: E4A523

Title: Empirical Study of Australian Equity High Frequency Trading Strategy

Abstract:
This thesis adopts a Generalised Linear Autoregressive Moving Average ("GLARMA") model to study the dynamics of Australian equity trading data in high frequency transaction time space. We believe the derived understanding of such dynamics is an important base to accurately forecast future price evolution to operate a profitable market making strategy. The GLARMA model is originally proposed by Rydberg and Shephard in 2003, which forecasts the tick price changes in three distinct components - Activity, Direction and Size, based on information such as historical price movement, seasonal pattern and trading volumes. In addition, we test the significance of market depth information, i.e. bid/ask quote volume at each price level, in our thesis. This presentation provides a brief overview of the the subject matter - market making, GLARMA model, and the result/ interpretation of our revised model when incorporating market depth information.