

**School of Mathematics and Applied Statistics**  
**2013 Colloquium Series**  
University of Wollongong

**Title:** Optimal Toll Design Problem of Urban Congestion Pricing

**Speaker:** Zhiyuan Liu (Monash University)

**Time and Date:** Friday 8 March 2013, 3:30pm

**Location:** 24.G03

**Abstract:** In a road transport network, the drivers route choice behaviour is un-cooperative, which would lead to an unwise use of the network and severe traffic congestions in some areas. Congestion pricing is one of the few instruments used by the transport authorities to properly adjust drivers route choice decisions. Based on given pricing locations, the Toll Design Problem aims to obtain the optimal toll pricing rate such that the total level of congestions in the network can be mitigated. This presentation will first briefly review some congestion pricing practices in Singapore, London and Scandinavia. Then discuss about the modelling skills for the optimal toll design problem. Subsequently, modelling for the Toll Design Problem for some newly proposed pricing schemes will be covered.