

Department of Information and Systems Management  
School of Business and Management  
The Hong Kong University of Science and Technology

Seminar Announcement

*Information Sharing, Production Diseconomies of Scale and  
Supply Chain Competition*

by

*Dr Shilu Tong*

*Department of Information and Systems Management  
The Hong Kong University of Science and Technology*

**30 November 2007 (Friday)  
4:00 – 5:00 pm  
Room 3405 (L17/18)**

~~~~~ All interested are welcome ~~~~~

**Abstract**

We consider the problem of information sharing in supply chains under horizontal competition. The problem is studied using a model of two competing supply chains, each consists of one manufacturer and one retailer. Each retailer observes a private imperfect demand signal about the market and decides whether to share it with the manufacturer of his own chain. Both manufacturers face diseconomies of scale in production. A multi-stage game is formulated to analyze how the firms make information sharing, contracting and retail quantity decisions. We analyze the effect of signal precision and information sharing on the performance of the firms as well as the supply chains. Our results show that it is more likely for a supply chain to have incentive for information sharing when the diseconomies of scale in production are higher, the signal precision of either supply chain is lower and the products are less similar. We extend some of our results to the case of more than two supply chains.

This is joint work with Albert Ha and Hongtao Zhang.

**Biography**

Shilu Tong is a postdoctoral fellow in the Department of Information and Systems Management at the Hong Kong University of Science and Technology. His research interests mainly focus on designing and evaluating incentive contracts within supply chain. In particular, he is interested in investigating incentive conflicts among parties with asymmetric information, contracting and information sharing under supply chain competition. He received the Ph.D. degree from Hong Kong University of Science and Technology and the B.S. and M.S. from Fudan University.