

The Hong Kong University of Science and Technology  
Department of Information Systems,  
Business Statistics and Operations Management

Seminar Announcement

***Optimal Policy for an Inventory System under  
Convex Variable Ordering Cost***

by

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**Date: Thursday, 2 December 2010**

**Time: 4:30 – 5:30 pm**

**Venue: Room 4379, ISOM Conference Room (Lift 17/18)**

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

**Abstract:**

We study the optimal policy for a periodic-review inventory system where the variable ordering cost is defined by a piece-wise linear convex function. The optimal policy is fully characterized for the case without the fixed ordering cost.

For the system with a fixed ordering cost, we fully characterize the optimal policy of the model by introducing the notion of strong  $K, c, q$ -convexity. We also identify some sufficient conditions under which the  $(s, S)$  policy is optimal.

**Biography:**

Dr. Ye Lu received a PhD in operations research from MIT in 2009, a PhD in mathematics from the University of Notre Dame in 2006 and a Bachelor of Science degree in applied math from Tsinghua University in 2002. His research interest includes supply chain management, revenue management, financial engineering and nonlinear optimization.