THE CHINESE UNIVERSITY OF HONG KONG



Institute of Network Coding and Department of Information Engineering *Seminar*



An Online Combinatorial Virtual Machine Auction for Cloud Computing

by

Prof. Zongpeng LI University of Calgary, Canada

Date : 4 June 2014 (Wednesday) Time : 2:30 - 3:30 pm Venue: Room 833, Ho Sin Hang Engineering Building The Chinese University of Hong Kong

<u>Abstract</u>

This talk provides an overview of our recent work on designing combinatorial auctions for heterogeneous types of Virtual Machines (VMs) in a cloud computing market. In particular, we cover a randomized auction design technique, which may be of independent interest and can be applied in other settings of resource allocation problems. An overview of an online auction framework that turns a round-by-round VM auction into an online VM auction will also be covered.

<u>Biography</u>

Zongpeng Li is Associate Professor and Associate Head at the Department of Computer Science, University of Calgary, in Calgary, Alberta, Canada. Zongpeng received his BSc from Tsinghua University in 1999, and his MSc and PhD from University of Toronto, in 2001 and 2005, respectively. His research interests include network coding, and efficient algorithms and mechanisms for computer networks, cloud computing, and power systems.

**** All ARE WELCOME ****

Host: Professor Raymond W.H. Yeung (Tel: 3943-8375, Email: whyeung@ie.cuhk.edu.hk) Enquiries: Department of Information Engineering, CUHK (Tel.: 3943-8388)