



**THE CHINESE UNIVERSITY OF HONG KONG**  
Department of Computer Science and Engineering  
and Department of Information Engineering

*Joint Seminar*

**Concurrent Security**

by

**Ms. Rachel Huijia Lin**  
**Department of Computer Science**  
**Cornell University**  
**U.S.A.**

**Date : 21 March, 2011 (Mon.)**  
**Time : 11:00am – 12:00noon**  
**Venue : Room 1009, William M.W. Mong Engineering Building**  
**The Chinese University of Hong Kong**

*Abstract*

Cryptographic protocols have been developed for a variety of tasks, including electronic auctions, electronic voting systems, privacy preserving data mining and more. The Internet allows for the concurrent execution of cryptographic protocols. Such concurrency severely challenges their security.

In this talk we introduce a novel technique for transforming any "stand-alone" secure protocol (i.e., one whose security is only guaranteed if executed in isolation) into one that is secure under concurrent executions. Contrary to previous results in the literature, this result is established without relying on additional trusted infrastructure or cryptographic hardness assumptions.

*Biography*

Huijia Lin is a Ph.D. candidate in the Department of Computer Science at Cornell. Her research interests are in the field of Cryptography. She is a recipient of the Microsoft Graduate Student Fellowship.

**\*\*\* ALL ARE WELCOME \*\*\***