THE CHINESE UNIVERSITY OF HONG KONG



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



Network Coding for a Survivable and Secure Internet

by

Prof. Harald Ø verby Norwegian University of Science and Technology

Date : 9 December 2011 (Friday) Time : 2:30 - 3:30 pm Venue : Room 833, Ho Sin Hang Engineering Building The Chinese University of Hong Kong

Abstract

This talk will focus on how network coding can be applied to provide survivable and secure data transmission in the Internet. After a brief introduction to network coding, we will introduce the basic mechanisms available to provide survivability in the Internet. We will then present a scheme utilizing network coding in order to provide 1+1 path protection in communication networks. At last, we show how the presented scheme may be extended to also provide secure data transmission in communication networks.

<u>Biography</u>

Harald Ø verby received his Msc in Computer Science in 2002, a BSc in Economics in 2003 and a PhD in Information and Communication Technology in 2005, all from the Norwegian University of Science and Technology (NTNU). In his PhD, he focused on teletraffic analysis and quality of service aspects of optical packet switched networks. He was employed as a Post.Doc at the Department of Telematics, NTNU, in the period 2005-2006, focusing on optical networking and cost analysis. In the period 2006-2010, Harald was employed as a research and education coordinator at the Department of Telematics, NTNU, working with student administration, study plans and recruting activities. From 2010, Harald has been working as an Associate Professor at the Department of Telematics, NTNU, focusing on tele-economics, network coding and optical networking.

****ALL ARE WELCOME ****

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