

THE CHINESE UNIVERSITY OF HONG KONG

Department of Information Engineering

Seminar

Re-examing Network Beliefs by Professor Radia Perlman Fellow Intel Labs and Adjunct Professor Department of Information Engineering The Chinese University of Hong Kong

Date : 14 March, 2012 (Wed.) Time : 3:30-4:30pm Venue : Room 1009 William M.W. Mong Engineering Building The Chinese University of Hong Kong

<u>Abstract</u>

The world has evolved a great deal since most of the currently network protocols were designed. This talk, intended to raise questions that can be studied, rather than giving definitive answers, discusses beliefs such as that networks should not misorder packets, that networks should provide backpressure to flows to avoid losing packets due to congestion, that flows are sufficiently long-lived so that endnodes can have many round-trip delays to learn about network conditions and adjust their windows. It also raises questions that sound elementary, but are actually deep, such as "what is Ethernet"?

<u>Biography</u>

Radia Perlman is a Fellow at Intel Labs and Adjunct Professor at the Department of Information Engineering, The Chinese University of Hong Kong. Her contributions to the industry include innovations that make link state routing protocols robust and scalable, the spanning tree algorithm upon which Ethernet was based for decades, and most recently, TRILL, which eliminates the path restrictions of spanning tree while remaining compatible with both existing Ethernet switches and endnodes. She's also made contributions in security including assured delete of data, strong password protocols, and PKI models. She is the author of the textbook "Interconnections: Bridges, Routers, Switches, and Internetworking Protocols", and coauthor of "Network Security: Private Communication in a Public World". She holds over 100 patents, a PhD in computer science from MIT, and various awards, including lifetime achievement awards from ACM SIGCOMM and Usenix, and an honorary doctorate from KTH.

** ALL ARE WELCOME **

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