THE UNIVERSITY   **OF HONG KONG**

PROBABILITY AND INFORMATION THEORY SEMINAR

Cyclic linking network

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Abstract

A general network link model is formulated, unifying the previous directed cyclic graphical network, linear deterministic network and layered linking network. A Menger-type theorem is proved showing that the network can be decomposed into disjoint augmenting paths up to the min-cut value even in the presence of cycles and interference. This is obtained by developing new concepts for linking systems, which also lead to polynomial-time algorithms that compute the shortest path, maximum flow and optimal path decomposition.

Date: May 2, 2013 (Thursday)

Time: 10:30am – 12:30pm

Place: Room 206, Run Run Shaw Bldg., HKU

All are welcome