THE UNIVERSITY



OF HONG KONG

Institute of Mathematical Research Department of Mathematics

INFORMATION THEORY SEMINAR

Concavity of Mutual Information Rate for Finite-State Channel

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Abstract

In this talk, we will show mutual information rate I(X, Z) for finite-state channel is a concave function with respect to the input markov chain under some positivity assumptions in high SNR (signal to noise ratio) case and give numerical examples to show that concavity fails in low SNR case.

Date: November 22, 2012 (Thursday)

Time: 4:00 – 6:00pm

Place: Room 309, Run Run Shaw Bldg., HKU

All are welcome