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THE CHINESE UNIVERSITY OF HONG KONG
Institute of Network Coding
and
Department of Information Engineering
Seminar

An Easy-to-Decode Network Coding Scheme for Wireless Broadcasting

by

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and

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Time : 11:00 am – 12:00 pm
Venue : Room 833, Ho Sin Hang Engineering Building
The Chinese University of Hong Kong

Abstract

We propose an easy-to-decode network coding scheme to offer reliable wireless broadcasting. Our encoding algorithm, based on user feedback, generates encoding vectors that are sparse enough to make the decoding process at the receiver much easier than that of the random linear network coding (RLNC) scheme. Simulations show that the worst-case delay performance of our scheme with a small finite field size is comparable to that of the RLNC scheme with a large finite field size while the average required number of operations in decoding of our scheme is less than that of the RLNC scheme.

Biography

Dr. Ho-Yuet Kwan received his Ph.D. degree in information engineering from the Chinese University of Hong Kong in 2004. He is currently with City University of Hong Kong and Institute of Network Coding, CUHK. His research interests include cooperative communications, information theory and network coding.

****ALL ARE WELCOME ****

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