Achieving Full Diversity and Fast ML Decoding via Simple Analog Network Coding for Asynchronous Two-Way Relay Networks

by

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Date: 13 August 2009, Thursday
Time: 11:30 a.m. – 12:30 p.m.
Venue: Room 222, 2/F, Ho Sin Hang Engineering Building, CUHK

Abstracts
In this talk, we propose a simple analog network coding (or space-time coding) for asynchronous two-way relay networks. It is based on the OFDM transmission. At the receiver, it has orthogonal space-time block code (OSTBC) structure or quasi OSTBC structure and therefore has the fast decoding.

Biography of the Speaker
Xiang-Gen Xia (M'97,S'00,F'09) received his B.S. degree in mathematics from Nanjing Normal University, Nanjing, China, and his M.S. degree in mathematics from Nankai University, Tianjin, China, and his Ph.D. degree in Electrical Engineering from the University of Southern California, Los Angeles, in 1983, 1986, and 1992, respectively.

He was a Senior/Research Staff Member at Hughes Research Laboratories, Malibu, California, during 1995-1996. In September 1996, he joined the Department of Electrical and Computer Engineering, University of Delaware, Newark, Delaware, where he is the Charles Black Evans Professor. He was a Visiting Professor at the Chinese University of Hong Kong during 2002-2003, where he is an Adjunct Professor. His current research interests include space-time coding, MIMO and OFDM systems, digital signal processing, and SAR and ISAR imaging.

Dr. Xia has about 190 refereed journal articles published and accepted, and 7 U.S. patents awarded and is the author of the book Modulated Coding for Inter-symbol Interference Channels (New York, Marcel Dekker, 2000).


* Light refreshment will be served at 11:15 a.m. before the lecture *

For ENQUIRIES: (852) 3163-4351

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