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

INC

Codes Correcting Asymmetric/Symmetric Errors of Limited Magnitude

by

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Date	**:**	**15 August 2012 (Wednesday)**
Time	**:**	**2:30 - 3:30 pm**
Venue	**:**	**Room 833 , Ho Sin Hang Engineering Building**
		The Chinese University of Hong Kong

Abstract

An error model with asymmetric/symmetric errors of limited magnitude is a good model for some multi-level flash memories. This talk is about constructions of codes correcting such errors. In the asymmetric case, our results are about codes correcting single error and codes of length m correcting all errors in m−1 or less positions. In the symmetric case, several constructions of codes correcting a single error are given. In some cases, the codes are perfect or quasi-perfect.

Biography

Jinquan Luo received the B.S. degree from Zhejiang University, Hangzhou, China, in July 2001 and the Ph.D. degree from Tsinghua University, Beijing, China, in January 2007, both in mathematics. He joined Yangzhou University, China from 2007 and later become a research fellow at Nanyang Technological University, Singapore from 2009. Currently, he servers as postdoctor in Selmer Center, Department of Informatics, University of Bergen, Norway. His major research interests are coding theory, cryptology, and number theory.

**ALL ARE WELCOME **

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