

THE CHINESE UNIVERSITY OF HONG KONG

Institute of Network Coding and partment of Information Engineer



Department of Information Engineering Seminar

On Fountain Codes Under ML Decoding

by

Mr. Francisco Lázaro Blasco Institute of Communications and Navigation of the German Aerospace Center (DLR)

Date: 23 June 2015 (Tuesday)

Time: 10:30 - 11:30am

Venue: Room 833, Ho Sin Hang Engineering Building

The Chinese University of Hong Kong

Abstract

In this talk fountain codes under ML decoding are considered. Despite the fact that most of the works on LT and Raptor codes consider belief propagation decoding, in practice ML decoding is usually adopted. The talk will be structured in two parts. In the first part we will present some results concerning the distance spectrum of fixed-rate Raptor codes. In the second part we will present an approximate analysis of ML decoding algorithm which is usually used in practical implementations (inactivation decoding).

Biography

Francisco Lázaro Blasco received his Telecommunication Engineering degree from the Universidad de Zaragoza, Spain, in 2006. In 2008 he joined the Institute for Communications and Navigation at the German Aerospace Center (DLR), as a research scientist. Since 2011 he is pursuing his PhD at the Technische Universität Hamburg Harburg (TUHH). His main research interests are rateless codes and multi-user communications with focus on satellite and space communications. During the past years he has been involved in many national and international projects.

**ALL ARE WELCOME **

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