

Mathematics Colloquium at IUB

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will speak on

Raptor Codes

Date: Monday, February 20, 2006

Time: 17:15

Place: Lecture Hall Research II, IUB

Abstract:

Fountain Codes are a new class of codes designed for transmission of data on erasure channels with unknown erasure probabilities. Raptor codes form a sub-class of Fountain Codes. They allow for linear time encoding and decoding algorithms. Particular codes from this class approach the capacity of an unknown erasure channel arbitrarily closely.

On the theoretical side, I will discuss properties and applications of these codes as erasure and error-correcting codes, and introduce their relationship to threshold phenomena in random graphs. On the practical side, I will introduce some applications of these codes.

Colloquium Tea at ca. 16:45 in the Tea Room of Research II, close to the lecture hall. Everybody is welcome!