Chair of Communications Engineering
TUM Department of Electrical and Computer Engineering
Technical University of Munich

Forschungspraxis

Identification Codes via Prime Numbers

In original scheme of **identificaion via channels** (Ahlswede and Dueck, 1989), a non-constructive method for coding for noiseless channel was studied. To address the explicit construction of identificaion codes, foremost Ahlswede and Verboven, 1991 provide a number theoretic approach based on the two successive prime number encryption. This method require the knowledge of first **2^n** prime numbers for a block-length of n codeword. In this research internship, this method along with related prime number encryption tools and theorems would be investigated. Further, the extension of this scheme to a general DMC will be analyzed.

Prerequisites

Interested student are encouraged to contact me and send me a **CV** as well as all the academic **transcripts** and **relevant courses** that they have attended.

As well familiarity with the Basics of following is required:

1. information/identification theory
2. channel coding
3. prime number theorem (Chebyshev)

Advisors

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