

Constructions of LCD subspace codes

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The dual code C^\perp of a code C is the orthogonal complement of C under the standard inner product (\cdot, \cdot) . Linear codes with complementary duals, or LCD codes, are linear codes whose intersection with their duals are trivial. LCD codes were introduced by Massey in [5] and have been widely applied in information protection, electronics and cryptography.

In 2000, Ahlswede, Cai, Li and Yeung (see [1]) introduced network coding, and in 2006 random network coding was introduced by Ho, Médard, Kötter, Karger, Effros, Shi and Leong (see [3]). Further, in 2008, Kötter and Kschischang introduced subspace codes and propose their applications in error correction for random network coding (see [4]).

LCD subspace codes were introduced recently in [2]. In this talk, we will give some properties and constructions of LCD subspace codes.

References

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