

STUDY OF LINEAR CODES AND MRD CODES

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In this dissertation Maximum Rank Distance (MRD) codes and linear codes are discussed. To find the decoder error probability of the MRD codes the concept of Elementary Linear Subspace (ELS) is described.

This dissertation has four chapters. Chapter one describes the basic concept of linear codes so as to make the dissertation a self contained one. Maximum Rank Distance (MRD) codes are described in chapter two. Decoder error probability of MRD codes are studied in chapter three. Elementary Linear Subspace (ELS) are described and analyzed and shown how they are used in decoder error probability of MRD codes. The final chapter gives the conclusions based on this study.