

In this master thesis we introduce algebraic geometry codes (AG codes). Besides basic definitions, properties and attributes of AG codes and algebraic geometry we show how to encode AG codes that has nontrivial Abelian group of permutation automorphisms and how to decode one-point AG codes. We also present Hermitian codes, which are example of one-point AG codes with nontrivial Abelian group of permutation automorphisms. We demonstrate the method for encoding and the method for decoding on specific Hermitian code.