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## Automorphism of Cyclic Codes

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### ABSTRACT

We investigate how the code automorphism group can be used to study such combinatorial object as codes. Consider  $GF(qn)$  as a vector over  $GF(q)$ . For any  $k = 0, 1, 2, 3, \dots, n$ . Which  $GF(qn)$  exactly one subspace  $C$  of dimension  $k$  and which is invariant under the automorphism.

### KEYWORDS

Code; Cyclic Code; Automorphism

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