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Dual bent functions on finite groups and C -algebras. (English) Zbl 1327.43004
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Summary: The dual of a (bent) function on a finite abelian group is a natural concept. In this paper we study the dual bent functions on finite nonabelian groups. A more general algebraic structure of a C -algebra provides a better and natural context for this purpose. We will first study Fourier transforms, bent functions, and dual bent functions on C -algebras. Then as an application, we obtain the properties of dual bent functions on finite nonabelian groups. Examples of bent functions on C -algebras are also presented.

MSC:

- 43A30** Fourier and Fourier-Stieltjes transforms on nonabelian groups and on semigroups, etc. Cited in 4 Documents
- 20C99** Representation theory of groups
- 11T71** Algebraic coding theory; cryptography (number-theoretic aspects)

Full Text: [DOI](#)

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