

IDEMPOTENTS IN CYCLIC CODES

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ABSTRACT. In this work we describe some cyclic binary codes, considered as ideals in the group algebra of a finite (cyclic) group, by means of its idempotents generators. This point of view has the advantage that the algorithm to calculate the idempotents is much more easy, uses the group elements and allows us to obtain the parameters as weigth and dimension very easily, not only for the known cases but giving very interesting bounds to some unknown cases. This results are a joint work with Raul Ferraz, Marins Guerreiro and Cesar Polcino Milies.

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