Projective Essential idempotents

A. Duarte

São Paulo University and FATEC, Brasil

Abstract

In this presentation, we introduce the concept of projective essential idempotents. These are primitive central idempotents in a twisted group algebra. In the first main result, we prove that every q-ary simplex code can be seen as an ideal of a twisted group algebra generated by a projective essential idempotent. The second main result, provides conditions for the existence of them. Finally, we present some ideas for future work.

Keywords

Twisted Group Algebras, Simplex Codes, Central Primitive Idempotents.

.