Twisted group algebras of Abelian groups

C. Polcino Milies

Universidade de São Paulo

joint work A. Duarte and R.A. Ferraz

Abstract

We discuss the structure of twisted group algebras of Abelian groups. In particular, we describe a method to fully determine their structure adapting the notion of idempotent determined by a subgroup, which is very useful in the context of group algebras We also consider how to extend the notion of essential idempotent to these algebras and give criteria for their existence.

Keywords

.

Twisted group algebra, idempotent, essential idempotent, codes.

References

- [1] A. Duarte, A. Ferraz and C. Polcino Milies, Twisted group algebras of Abelian groups, *preprint*.
- [2] R. Ferraz and C. Polcino Milies, Essential idempotents in group algebras and coding theory, *Indian J Pure Appl Math.*. 52 (2021), 747-760.
- [3] P. Grover and A.K. Bhandari, Explicit determination of certain minimal constabelian codes. *Finite Fields and Their Applications*, 18 (2012), 1037-1060.

1