

Completeness of derivation algebras of finite commutative group algebras

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Abstract. This paper studies the set of derivations of a commutative group algebra over a finite field. The Lie algebra formed from this set by defining multiplication as the Lie commutator is shown to have trivial center. Also, the Lie algebra of derivations of the group algebra KG is shown to be complete, whenever K is a finite field of characteristic p , and G is a finite abelian group such that its Sylow p -subgroup is elementary abelian.

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Mathematics Subject Classification: 16W25, 16S34, 16P10, 20C05.

Key words and phrases: derivation, group algebra, Lie algebra, complete.