On idempotent units in commutative group rings

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Abstract - We find a necessary and sufficient condition when each normalized unit in a commutative modular group ring of prime characteristic \( p \) can be decomposed as a \( p \)-torsion unit and an idempotent unit. This somewhat strengthens our recent results from (An. Univ. Bucuresti, Mat., 2005 and 2008) as well as from (Kochi Math. J., 2009).

Key words and phrases : idempotent units, normalized units, torsion elements, commutative rings, abelian groups, prime characteristic.