

Additive Combinatorics
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Large sum-free sets in finite Abelian groups

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Abstract

Let A be a subset of a finite abelian group G . We say that A is sum-free if the equation $x + y = z$, has no solution (x, y, z) with x, y, z belonging to the set A . In a *joint work with R. Balasubramanian* we characterize all largest sum-free subsets of G in case the order of G is only divisible by primes which are congruent to 1 modulo 3. We obtain this result by improving a recent result of Ben Green and Imre Ruzsa. In this talk we shall describe these result and give a brief sketch of proof.