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Title: On $B[\lambda](q)$ sets

Abstract: For positive integers λ and q , a $B[\lambda](q)$ set C is a set of m positive integers such that all the elements ac , where $1 \leq a \leq \lambda$ and c is in C , are incongruent modulo q (and not congruent 0). Clearly, $1 + \lambda m \leq q$.

It can be shown that $B[\lambda](q)$ sets can be used to construct codes correcting single limited asymmetric errors. This is a kind of errors that can occur in flash memories.

We will present constructions of $B[\lambda](q)$ sets and bounds on the size m of such sets. In particular, we are interested in sets where $1 + \lambda m = q$.