## Zbl 868.05009

Bergelson, Vitaly; Erdős, Paul; Hindman, Neil; Łuczak, Tomasz Dense difference sets and their combinatorial structure. (In English)

Graham, Ronald L. (ed.) et al., The mathematics of Paul Erdős. Vol. I. Berlin: Springer, Algorithms Comb. 13, 165-175 (1997). [ISBN 3-540-61032- 4/hbk ]

Given a set B of positive integers, the "difference set" of B is defined in the paper as the set of differences  $D(B) = \{x - y \mid x, y \in B, x > y\}$ . It is shown that if B has positive upper density then D(B) has rich additive and multiplicative structure.

V.D. Tonchev (Houghton)

Classification: 05B10 Difference sets

Keywords: difference sets