

Zbl 413.10049

Erdős, Paul; Sárközy, András

On differences and sums of integers. II. (In English)

Bull. Greek Math. Soc. 18, 204-223 (1977). [0072-7466]

This paper continues the authors' investigation of difference and sum intersector sets and the solubility of related equations begun in part I [J. Number Theory 10, 430-450 (1978; Zbl 404.10029)]. They prove that the set $\{[\alpha], [2\alpha], \dots, [n\alpha], \dots\}$ where α is a fixed irrational number and $[x]$ is the integer part of the real number x , is a difference intersector set but need not be a sum intersector set. "Sparse" intersector sets are also investigated and it is shown that while there are bounded difference intersector sets, sum intersector sets are always unbounded. A number of conjectures are made.

M.M.Dodson

Classification:

11B13 Additive bases

11B83 Special sequences of integers and polynomials

11P99 Additive number theory

11D85 Representation problems of integers

Keywords:

sequences of integers; density; sum intersector sets; difference intersector set