

Zbl 862.11007

Spencer, Joel; Erdős, Paul

A problem in covering progressions. (In English)

Stud. Sci. Math. Hung. 30, No.1-2, 149-154 (1995). [ISSN 0081-6906]

Let $f_s(n)$ be the minimal size of a set $S \subseteq \{1, 2, \dots, n\}$ possessing the property that $S \cap \{t, 2t, \dots, st\} \neq \emptyset$ for $1 \leq t \leq n/s$. The authors make the asymptotics $f_s(n) \sim c_s n$ precise in the sense that they show that $c_s = \Theta(1/(s \ln s))$.

Š.Porubský (Praha)

Classification:

11B05 Topology etc. of sets of numbers

11B25 Arithmetic progressions

Keywords:

density; arithmetic progressions