Zbl 278.10047

Erdős, Paul; Babu, Gutti Jogesh; Ramachandra, K.

An asymptotic formula in additive number theory. (In English)

Acta Arith. 28, 405-412 (1976). [0065-1036]

Let $\{b_j\}$ be a sequence of natural numbers satisfying $3 \leq b_1 < b_2 < b_3 \ldots, (b_i, b_j) = 1$ if $i \neq j$ and also let $\sum b_i^{-1}$ be convergent. Let $\{d_j\}$ be the sequence of all natural numbers not divisible by any b_j . Then given any natural number n an asymptotic formula for the number of solutions of n = p+d is developed where p runs through primes and d through the number of the sequence $\{d_j\}$. Some other questions which deal with relaxation of conditions on $\{b_j\}$ are also discussed.

Classification:

11P32 Additive questions involving primes