Zbl 021.10602

Erdős, Pál

On the easier Waring problem for powers of primes. II. (In English)

Proc. Camb. Philos. Soc. 35, 149-165 (1939).

The author proves that the density of each of the sets of integers

$$p_1^2 + p_2^2 - p_3^2$$
,  $\sum_{\nu=1}^4 p_{\nu}^3 - \sum_{\mu=1}^4 q_{\mu}^3$ ,  $\sum_{\nu=1}^{2^l} \varepsilon_{\nu} p_{\nu}^l$   $(\varepsilon_{\nu} = \pm 1)$ 

is positive, where the p and the q are primes. It follows that a constant  $c_l$  exists such that every integer is the sum of at most  $c_l$  positive and negative l-th powers of primes. (I. see Zbl 016.10202)

Wright (Aberdeen)

Classification:

11P32 Additive questions involving primes