

Year: 2011

Vol.: 79

Fasc.: 3-4

Title: The difference graph of S -units

Author(s): Imre Z. Ruzsa

For a given finite set S of primes we construct a graph on $\mathbb{Z}$ by connecting two integers if their difference is an S -unit. We investigate finite subgraphs of this graph. We show that the average degree is always small. We also meditate on the possible cycles that arise as induced subgraphs.

Address:

Imre Z. Ruzsa
Alfréd Rényi Institute of Mathematics
H-1364 Budapest, P.O. Box 127
Hungary