

Zbl 213.51003

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Decompositions of complete graphs into factors with diameter two (In English)

Mat. Čas., Slovensk. Akad. Vied 21, 14-28 (1971).

Let $f(k)$ be the smallest integer n so that the complete graph $\langle n \rangle$ can be decomposed into k edge disjoint subgraphs of diameter 2. The authors prove:

(1) $f(k) < \left(\frac{49}{10}\right)^2 k^2 \log k$. Recently *N. Sauer* considerably improved (1) by showing $f(k) < 7k$ [cf. the paper reviewed below, *J. Comb. Theory* 9, 423-426 (1970; Zbl 213.51004)].

Classification:

05C70 Factorization, etc.