Zbl 323.05130

Erdős, Paul; Schönheim, J.

Edge decompositions of the complete graph into copies of a connected subgraph. (In English)

Proc. Conf. algebr. Aspects Comb., Semin. Toronto 1975, 271-278 (1975).

[For the entire collection see Zbl 307.00009.]

Necessary conditions on (n, k, l) are given for the possibility to partition the edges of a complete graph K_n into isomorphic copies of a connected subgraph $G_{k,t}$ with k vertices and l edges. It is conjectured that these conditions are sufficient if n is large. This conjecture is proved for k = 2, 3, and 4.

Classification: 05C99 Graph theory