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## A RAMSEY-TYPE THEOREM FOR MULTIPLE DISJOINT COPIES OF INDUCED SUBGRAPHS

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## Abstract

Let k and  $\ell$  be positive integers with  $\ell \leq k-2$ . It is proved that there exists a positive integer c depending on k and  $\ell$  such that every graph of order  $(2k-1-\ell/k)n+c$  contains n vertex disjoint induced subgraphs, where these subgraphs are isomorphic to each other and they are isomorphic to one of four graphs: (1) a clique of order k, (2) an independent set of order k, (3) the join of a clique of order  $\ell$  and an independent set of order  $k - \ell$ , or (4) the union of an independent set of order  $k - \ell$ .

**Keywords:** graph decomposition, induced subgraph, graph Ramsey theory, extremal graph theory.

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