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Goodness of trees for generalized books. (In English)

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For any graph G, let $p(G)$ denote the cardinality of the vertex set of G, let $\chi(G)$ denote the vertex chromatic number of G and let $s(G)$ denote the "chromatic surplus" of G, i.e. the smallest number of vertices in a color class under any $\chi(G)$-coloring of the vertices of G. For any pair of graphs F and G, $r(F,G)$ is the least number N so that in every 2- coloring of the edges of K_N either there is a copy of F with all of its edges in the first color class or a copy of G with all of its edges in the second color class.

It is easy to see that for connected graphs F and G with $p(G) \geq s(F)$:

$$r(F,G) \geq (\chi(F)-1)(p(g)-1)-s(F).$$

We say that G is F-good if equality holds. The paper is devoted to a study of those graphs F for which all large trees are F-good. The results include: All sufficiently large trees are $K(1,1,m_1,...,M_2)$-good.

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