ON THE NON-COMMUTING GRAPH OF A GROUP

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Abstract. In this paper, groups whose non-commuting graphs are k-apex for $1 \leq k \leq 5$ are classified. The 1-planarity of the non-commuting graph for an AC-group G is discussed. Moreover, the k-connectivity of the non-commuting graph is verified, for $k \leq 6$. Finally, some properties of the line graph of the non-commuting graph of a group are studied.

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