

对称群上Cayley图的条件匹配排除数

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Conditional Matching Preclusion Number for the Cayley Graph on the Symmetric Group

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摘要 一个图的条件匹配排除数是最少的边的数量, 使得从图中删除这些边后形成的图既没有孤立点, 也没有完美匹配和几乎完美匹配. 条件匹配排除数是衡量网络在边故障情况下的鲁棒性的参数之一. 本文给出了对称群上Cayley图的条件匹配排除数.

关键词: [完美匹配](#) [Cayley图](#) [条件匹配排除](#)

Abstract: The conditional matching preclusion number of a graph is the minimum number of edges whose deletion results in a graph with no isolated vertices that has neither perfect matchings nor almost-perfect matchings. The conditional matching preclusion number is one of the parameters to measure the robustness of interconnection networks in the event of edge failure. In this paper, we give the conditional matching preclusion number for the Cayley graph on the symmetric group.

Key words: [perfect matchings](#) [Cayley graphs](#) [conditional matching preclusion](#)

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