Beke, Ákos; Szabó, Sándor; Zavalnij, Bogdán
Some zero-one linear programming reformulations for the maximum clique problem. (English) [Zbl 07364778]

The maximal clique problem is to determine the size of the maximum cliques in a graph \( G \). The authors study 0–1 linear programming equivalents of the maximal clique problem to determine if the upper estimates obtained by this machinery can improve the standard search techniques used in this problem. They give four 0–1 linear programming equivalents for this problem and apply numerical techniques on these problems. This numerical information supports the conclusion that the symmetric reformulation with local and global colorings give the best upper bound among the ten competing reformulations given in the text.

Reviewer: Steven T. Dougherty (Scranton)

MSC:
94B60 Other types of codes
05B45 Combinatorial aspects of tessellation and tiling problems
52C22 Tilings in \( n \) dimensions (aspects of discrete geometry)

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