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Semidefinite programming in combinatorial optimization.
(English. English summary)

Lectures on mathematical programming (ismp97) (Lausanne, 1997).

Math. Programming **79** (1997), *no.* 1-3, *Ser. B*, 143–161.

Convex optimization techniques and, in particular, semidefinite programming, have raised much interest in solving combinatorial optimization problems. On this basis the development of efficient interior-point algorithms for semidefinite programming has improved approximation algorithms for the maximum cut and related problems and in parallel complexity results have shown the limitations of semidefinite programming.

   The paper is a nice survey of results in this area, with some new results showing, in particular, the relation between the Lovász theta function and the Delsarte linear programming approach.

   {For the entire collection see 98b:90004}

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