On semidefinite programming relaxations of the traveling salesman problem

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We consider a new semidefinite programming (SDP) relaxation of the symmetric traveling salesman problem (TSP), obtained via an SDP relaxation of the more general quadratic assignment problem (QAP). We show that the new relaxation dominates the one in the paper:


Unlike the relaxation of Cvetković et al., the new SDP relaxation is not dominated by the linear programming relaxation with sub-tour elimination constraints.