

Simplicial quadratic optimization problems, conic duality and attainability

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Abstract

We are interested in exactness, strong conic duality and dual attainability in copositive relaxations of quadratic optimization problems (QPs) of a special form, in which any (feasible) QP can be recast. By using our results, the celebrated Frank-Wolfe theorem on the attainability of any bounded QP even over unbounded polyhedra, regardless of whether the objective function is convex or not, follows very easily.

This is joint work with Immanuel Bomze.