

A DUALITY SCHEME FOR SEMI-CONTINUOUS LINEAR CONSTRAINED QUADRATIC OPTIMIZATION PROBLEMS

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Resumo:

We study some solution existence conditions for semi-continuous linear constrained quadratic optimization problems based on asymptotic techniques, which recovers, in a simple way, the results of the Frank-Wolf Existence Theorem. Then, we devise the duality scheme for this problem through the construction of an auxiliary function and the application of a modification of the Fenchel-Moreau conjugation. The theoretical results are applied to a couple of numerical examples.