

An Augmented Lagrangian Method with convergence under the quasinormality constraint qualification and application to constrained multiobjective optimization.

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Resumo/Abstract:

The augmented Lagrangian approach is a popular technique for solving constrained optimization problems that has been extensively studied in the scalar case. In the present work the global convergence is proved using the quasinormality constraint qualification.

We also propose an application of the real-valued augmented Lagrangian approach to the multiobjective optimization setting. We present the AKKT for MOP condition given in [3] and we show that the CCP property [1] is the weakest condition that guarantees that AKKT for MOP implies weak regularity [2].

We also show that feasible limit points that satisfy the quasinormality constraint qualification or the cone continuity property are weak regular points.

References

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