

Improved Convergence Rates for The Multiobjective Frank-Wolfe Method

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In this talk, we analyze the convergence rates of the Frank-Wolfe method for solving convex constrained multiobjective optimization. We establish improved convergence rates under different assumptions on the objective function, the feasible set, and the localization of the limit point of the sequence generated by the method. We show that under some special assumptions, the method achieves linear convergence rate. We also discuss enhanced convergence rates for the algorithm in terms of an optimality measure. Finally, we provide some examples to illustrate the convergence rates and the set of assumptions. Co-authored by Douglas S. Gonçalves and Max L.N. Gonçalves

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