Revisit Conic Trust Region Methods for Optimization (I)

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ABSTRACT

In this talk we revisit the trust region methods based on conic model for optimization. First, we recall the recent progress of Conic Trust Region (CTR) methods. Second, we present an adaptive CTR method for optimization, discuss its global and local convergence, and then give numerical results which show the efficiency of the new method. Finally, we propose a nonmonotone form of adaptive CTR method. The corresponding theoretical analysis and numerical results are established.