

# Simplified versions of the conditional gradient method

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## Abstract

© 2018, © 2018 Informa UK Limited, trading as Taylor & Francis Group. We suggest simple modifications of the conditional gradient method for smooth optimization problems, which maintain the basic convergence properties, but reduce the implementation cost of each iteration essentially. Namely, we propose an adaptive step-size procedure without any line-search and inexact solution of the direction finding subproblem. Preliminary results of computational tests confirm efficiency of the proposed modifications.

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## Keywords

conditional gradient method, convergence properties, inexact direction finding subproblem, Optimization problems, pseudo-convex function, simple adaptive step-size

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