

DOI: 10.21538/0134-4889-2016-22-3-231-243

MSC: 90C25, 90C46

**ON THE CHOICE OF PARAMETERS IN THE RESIDUAL METHOD
FOR OPTIMAL CORRECTION
OF IMPROPER PROBLEMS OF CONVEX OPTIMIZATION**

Received February 15, 2016

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For the correction of improper problems of convex programming, the residual method is used, which is the standard regularization procedure for ill-defined optimization models. We propose new iterative implementations of the residual method, in which the constraints of the problem are included by means of penalty functions. New convergence conditions are established for algorithmic schemes, and bounds are found for the approximation error.

Keywords: convex programming, improper problem, optimal correction, residual method, penalty function methods.

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Cite this article as:

V. D. Skarin, On the choice of parameters in the residual method for optimal correction of improper problems of convex optimization, *Trudy Inst. Mat. Mekh. UrO RAN*, 2016, vol. 22, no. 3, pp. 231–243.