

**ON ESTIMATING THE ERROR OF AN APPROXIMATE SOLUTION CAUSED  
BY THE DISCRETIZATION OF AN INTEGRAL EQUATION  
OF THE FIRST KIND**

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A regularizing algorithm for the approximate solution of integral equations of the first kind is investigated. The algorithm involves a finite-dimensional approximation of the problem; more exactly, the integral equation is discretized in two variables. An error estimate of the algorithm is obtained with the use of the equivalence of the generalized discrepancy method and the generalized discrepancy principle.

Keywords: regularization, error estimate, ill-posed problem.

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