

NUMERICAL METHOD FOR SOLVING THE BOUNDARY INVERSE PROBLEM OF ONE DIMENSIONAL PARABOLIC EQUATION

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Numerical method for solving boundary inverse problem is considered, using implicit difference scheme for approximation this boundary inverse problem. Numerical solution of the boundary inverse problem is determined by using a special decomposition which transforms the problem into two standard problems. The results of numerical experiments including with random errors in the input data are presented, confirming the capabilities of the proposed computational algorithms for solving this boundary inverse problem.