

THE INVERSE PROBLEMS FOR ONE SYSTEM OF PARABOLIC EQUATIONS

Abstract

The questions of correctness and approximate solution of the inverse problems of finding unknown functions in the right hand side of the system of parabolic equations are investigated in the work. For the considered problems the theorems on the uniqueness, existence and stability of solution have been proved and examples, which show the exactness of the established theorems are given.

Moreover, on the set of correctness the speed of convergence of the method of successive approximation, suggested for approximate solution of the given problems has been estimated.