

THE CONVERGENCE OF PROJECTION DIFFERENTIAL METHOD FOR QUASILINEAR PARABOLIC EQUATIONS

Smagin V. V., Sotnikov D. S.

The convergence of projection differential method has been established in order to find an approximate solution of a quasilinear parabolic equation in the condition of it's weak solvability. The time discretization is carrying out with the help of implicit Eilers scheme. Also, for more smooth solutions it has been shown that the convergence of the approximate solutions to the exact one is taking place with the order of time and space convergence speed.