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ON WEAK SOLVABILITY OF A DIFFERENCE SCHEME FOR
NAVIER-STOCKS EQUATIONS FOR DYNAMICS OF
INHOMOGENEOUS INCOMPRESSIBLE LIQUID WITH
INHOMOGENEOUS BOUNDARY CONDITIONS

Abstract

In the paper the difference scheme is constructed and investigated for Navier-Stocks equations of viscous incompressible fluid described in the form of Gromeck-Lamb. It is proved a theorem on weak stability of the constructed difference scheme. The proof of the theorem on uniform boundedness of the solution of the difference scheme guaranteeing realization of calculation for inhomogenous boundary conditions and any Reynolds numbers is given.