

# Parallel Algorithms of Numerical Solution of One dynamic Problem for Quasilinear System of Equations of Elasticity Theory

*Tinatin Davitashvili*

e-mail: [tinatin.davitashvili@tsu.ge](mailto:tinatin.davitashvili@tsu.ge)

Department of Mathematics, Department of Computer Sciences, Tbilisi State University, Tbilisi, Georgia

The mixed problem with first order boundary conditions for systems of quasilinear equations, which describes dynamics of homogeneous and isotropic elastic body in case of flat deformation is considered. In this paper for solving of stated problem is constructed three-layer factorized difference scheme. For the numerical solution of the received difference equations the algorithm, which can be used effectively for parallel computing systems, is offered. The pseudocode of this algorithm is given.