

Elina R. GASIMOVA

**STRONG SOLVABILITY OF THE FIRST
BOUNDARY VALUE PROBLEM FOR
DEGENERATE ELLIPTIC-PARABOLIC
EQUATIONS OF SECOND ORDER**

Abstract

In the work the first boundary value problem is considered for degenerate elliptic-parabolic equations of second order with, generally speaking, discontinuous coefficients. It's supposed that a matrix of senior coefficients satisfies parabolic Cordes condition with respect to space variables. A unique strong (almost everywhere) solvability is established for above mentioned problem in the corresponding weighted Sobolev space.