

Mahir M. SABZALIYEV

ON ASYMPTOTICS OF SOLUTION OF THE
BOUNDARY VALUE PROBLEM FOR SINGULARLY
PERTURBED NONLINEAR PARABOLIC
EQUATION WITH CORNER PARABOLIC
BOUNDARY LAYER

Abstract

In corner point domain we consider the boundary value problem for a second order nonlinear parabolic equation containing a small parameter at higher derivatives. Asymptotic expansion of generalized solution of the considered problem is constructed to within any power of small parameter with corner parabolic boundary layer, and residual term is estimated.