Abstract

The paper is devoted to the solution of a mixed problem for an equation with discontinuous coefficient parabolic in I.G. Petrovsky sense, degenerating into parabolic one in G.E. Shilov's sense. With the help of more exact asymptotic estimates of fundamental system of solutions of equation corresponding to the spectral problem and eigen values, subjecting the coefficients of the input equation and boundary conditions to some algebraic condition, we succeeded to prove the existence of the solution and construct the solution in the form of a series by resideves of some meromorphic function.