



A PRIORI ESTIMATE AND FOURIER’S METHOD FOR NONLOCAL BOUNDARY CONDITIONS OF MIXED PROBLEM FOR SINGULAR PARABOLIC EQUATIONS IN SOBOLEV FUNCTION SPACES

Moussa Zakari Djibibe and Kokou Tcharie

Abstract

The aims of this paper is to prove existence and uniqueness of following integral boundary conditions mixed problem for parabolic equation

Partial differential equation system with boundary and integral conditions, labeled (0.1)

The proofs are based on a priori estimates established in Sobolev function spaces and Fourier’s method.

Keywords and phrases: Fourier’s method for nonlocal boundary conditions, singular parabolic equations, Sobolev function spaces.

Pioneer Journal of Advances in Applied Mathematics

