Existence and Blow up studies of a p(x)-Laplacian parabolic equation with memory

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October 7, 2020

Abstract

In this paper, we establish existence and finite time blow up of weak solutions of a parabolic equation of p(x)-Laplacian type with the Dirichlet boundary condition. Moreover, we obtain upper and lower bounds for the blow up time of solutions, by employing concavity method and differential inequality technique respectively.

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