Sur une classe de problmes paraboliques quasi-linéaires avec second membre höldérian

M. Artola

Abstract

Let Ω be an open bounded set of R^N, $\partial\Omega = \Gamma_0 \cup \Gamma_1, \nu$ the outside normal to $\partial\Omega$. We give existence, regularity and uniqueness resultsfor a problem of the type

$$\begin{cases} \frac{\partial u}{\partial t} - div(A(x,u)\nabla u) = f(x,t,u) \\ u = 0 \ \ on \ \ \Gamma_0, \ \nu.A(x,u)\nabla u = 0 \ \ on \ \ \Gamma_1 \\ u(x,o) = u_0(x) \end{cases}$$

where $A(x,u)$ has a suitable modulus of continuity and $f(x,t,u)$ is sublinear and Hö lderian with respect to u.