An existence for an Inverse problem for a qualisilinear parabolic equation and its numerical simulation

Ma Yichen   Chen Qi   Ying Genjun
(Science College ,Xi'an Jiaotong Univ.,Xi'an,710049)
Li Gongsheng
(Department of math. and phys.,Zibo Univ.,Zibo City,Shandong,255000)

Abstract   In this paper we are concerned with quasilinear parabolic equation with ho-
mogeneous Cauchy and non-homogeneous Neumann condition arising from combustion
theory by the Schauder ¯xed point theorem and Green function of second homogeneous
boudary value problem.We get a local existence result for the solution to an inverse prob-
lem on a semi-in¯nite stand.Then we give the numerical algorithm and the algorithm
examples show that this numerical algorithm is e±cient and available.