

论文

A NEW APPROACH ON IDENTIFICATION OF BOUNDARY PARAMETER FOR A TWODIMENSIONAL DIFFUSION SYSTEM

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摘要 This paper presents a new approach of the boundary parameter identification of adiffusion system. The system model is governed by a two-dimensional parabolic problem, which involves an unknown boundary parameter. Identifiability of the boundary parameter and the new approach are discussed briefly, which show that the new approach can overcome not only the ill-posedness of the nonlinear output least square method but also the difficulty of numerical computation of the nonlinear output least square estimate due to the existence of the local minima of the performance functional. Finally, some numerical examples are given.

关键词 [Boundary parameter identification, Local](#)

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Key words [Boundary parameter identification](#) [Local minimum](#) [Distributed parameter system](#) [Diffusion system](#) [Gr](#)

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