COEFFICIENT IDENTIFICATION IN REACTION-DIFFUSION EQUATIONS

Weiming Yu & Diego A. Murio

University of Cincinnati
Department of Mathematical Sciences
Cincinnati, OH 45221-0025
USA

diego@dmurio.csm.uc.edu

ABSTRACT

A "local" approach for the numerical identification of space dependent coefficients in systems of nonlinear parabolic equations -that reach steady state in a finite time- is introduced. Stability and error analysis results, together with some numerical examples of interest are also presented.