

CONTENTS

Adelina Georgescu (25.04.1942 - 01.05.2010)	3
Petre Băzăvan Attractors of the periodically forced Rayleigh system	8
Ilie Burdujan The flow of a particular class of Oldroyd-B fluids	23
Mitrofan M. Choban, Laurențiu I. Calmuțchi Fixed points theorems in multi-metric spaces	46
Rodica Curtu Folded saddle-nodes and their normal form reduction in a neuronal rate model	69
Vasile Dragan, Toader Morozan, Adrian-Mihail Stoica H_2 Optimal controllers for a large class of linear stochastic systems with periodic coefficients	87
Adelina Georgescu, L. Palese On the nonlinear stability of a binary mixture with chemical surface reactions	106
Adelina Georgescu, Liliana Restuccia An application of double-scale method to the study of non-linear dissipative waves in Jeffreys media	116

Raluca Georgescu , Simona Cristina Nartea Finite singularities of total multiplicity four for a particular system with two parameters	135
Stelian Ion , Anca Veronica Ion A finite volume method for solving generalized Navier-Stokes equations ...	145
Liviu Ixaru Approximation formulae generated by exponential fitting	164
Maria Paola Mazzeo , Liliana Restuccia Material element model for extrinsic semiconductors with defects of dislocation	188
Constantin P. Niculescu A new look at the Lyapunov inequality	207
Nicolae Suciu , Călin Vamoş , Harry Vereecken , Peter Knabner Global random walk simulations for sensitivity and uncertainty analysis of passive transport models	218
Laura Ungureanu Degenerated HOPF bifurcations in a mathematical model of economical dynamics	235
Şerban Vlad Universal regular autonomous asynchronous systems: ω -limit sets, invariance and basins of attraction	249