

Annals of the University of Craiova
Mathematics and Computer Science Series
Vol. XLVI Issue 2, December 2019

Managing Editor

Ionel Roventă, University of Craiova, Romania

Editorial Board

Viorel Barbu, Romanian Academy, Romania

Maria Magdalena Boureanu, University of Craiova

Dumitru Bușneag, University of Craiova, Romania

Matija Cencelj, University of Ljubljana, Slovenia

Philippe G. Ciarlet, French Academy of Sciences, France

Constanța Dana Constantinescu, University of Craiova, Romania

Nicolae Constantinescu, University of Craiova, Romania

Jesus Ildefonso Diaz, Universidad Complutense de Madrid, Spain

Gioia Failla, Mediterranea University of Reggio Calabria, Italy

Roberta Filippucci, University of Perugia, Italy

George Georgescu, University of Bucharest, Romania

Ionel-Dumitrel Ghiba, University "Alexandru Ioan Cuza" of Iași, Romania

Ion Iancu, University of Craiova, Romania

Marius Iosifescu, Romanian Academy, Romania

Giovanni Molica Bisci, Mediterranea University of Reggio Calabria, Italy

Robert J. Martin, University Duisburg Essen, Germany

Andaluzia Matei, University of Craiova, Romania

Sorin Micu, University of Craiova, Romania

Gheorghe Moroșanu, Central European University Budapest, Hungary

Octavian Mustafa, University of Craiova, Romania

Constantin Năstăsescu, Romanian Academy, Romania

Constantin P. Niculescu, University of Craiova, Romania

Paul Popescu, University of Craiova, Romania

Patrizia Pucci, University of Perugia, Italy

Mihaela Racilă, University of Craiova, Romania

Vicențiu Rădulescu, University of Craiova, Romania

Mircea Sofonea, Université de Perpignan, France

Enzo Vitillaro, University of Perugia, Italy

Antonio Vitolo, University of Salerno, Italy
Cristian Vladimirescu, University of Craiova, Romania
Michel Willem, Université Catolique de Louvain, Belgium
Tudor Zamfirescu, Universitat Dortmund, Germany
Enrique Zuazua, Basque Center for Applied Mathematics, Spain
Runzhang Xu, Harbin Engineering University, China
Mihai Gabroveanu, University of Craiova, Romania

Managing Assistant Editor

Mihaela Sterpu, University of Craiova, Romania

Assistant Editors

Maria Mălin, University of Craiova, Romania
Laurențiu-Emanuel Temereancă, University of Craiova, Romania

Website Editor

Mihai Gabroveanu, University of Craiova, Romania

Volume Editors: Vicențiu Rădulescu, Ionel Rovența, Mihaela Sterpu

Layout Editor: Mihai Gabroveanu

ISSN 1223-6934

Online ISSN 2246-9958

Web: <http://inf.ucv.ro/~ami/>

Printed in Romania: Editura Universitară, Craiova, 2019.

<http://www.editurauniversitaria.ro>

Table of contents

Homoclinic solutions for a class of damped vibration systems <i>Khelfi Fathi and Timoumi Mohsen</i>	223
Strong convergence result for Meir-Keeler contractions and a countable family of accretive operators in Banach spaces with applications <i>C.C. Okeke, F.U. Ogbuisi, and O.T. Mewomo</i>	236
Separation axioms on topological effect algebras <i>R.A. Borzooei, M.R. Rakhshani, and G.R. Rezaei</i>	254
Nonlinear parabolic capacity and renormalized solutions for PDEs with diffuse mea- sure data and variable exponent <i>Mohammed Abdellaoui, Elhoussine Azroul, Stanislas Ouaro, and Urbain Traoré</i>	269
Fixed point results for a new three steps iteration process <i>A.A. Mebawondu and O.T. Mewomo</i>	298
On cyclic $(\phi - \psi)$ -Kannan and $(\phi - \psi)$ -Chatterjea contractions in metric spaces <i>Mohammad Al-Khaleel and Sharifa Al-Sharif</i>	320
A topological result for a class of anisotropic difference equations <i>Mustafa Avci</i>	328
Dynamics of superior fractals via Jungck SP orbit with s-convexity <i>Sudesh Kumari, Mandip Kumari, and Renu Chugh</i>	344
Object detection by grouping partial perception changes <i>Nicolae Constantinescu</i>	366
Genetic algorithm/extreme learning machine paradigm for cancer detection <i>Mircea-Sebastian Serbanescu</i>	372
Bifurcation analysis in a 3D symmetric system of interest in fusion plasma physics <i>Dana Constantinescu and Raluca Efrem</i>	381

Impact factors involved in cryptoperiod computation in key compromise impersonation scenario	392
<i>Nicolae Constantinescu</i>	
On certain applications of the two-point Padé approximants by using extended epsilon algorithm	400
<i>Y. Chakir, J. Abouir, and B. Benouahmane</i>	
Simulation of the transmission line equation by a high-order FDTD method	410
<i>Anass Bouchrifi, Morgan Pierre, and Nour Eddine Alaa</i>	
Study and simulation of soil salinity evolution by Reflexw and GprMax	426
<i>Ahmed Faize, Fouad Lahalal, and Mohamed Atounti</i>	
New classification technique using neural networks and genetic algorithms	433
<i>Charaf Eddine Bailoul and Nour Eddine Alaa</i>	
Identification of parameters of Richards equation using Grey Wolf Optimizer algorithm	445
<i>W. O. Sawadogo, O. Selt, P. O. F. Ouédraogo, K. Somé, and B. Somé</i>	
Combination and fusion of some 2D invariant moments with generative and discriminative classifiers for recognition of isolated handwritten Tifinagh characters	457
<i>M. Oujaoura, I. Rahil, W. Bouarifi, and A. Atlas</i>	