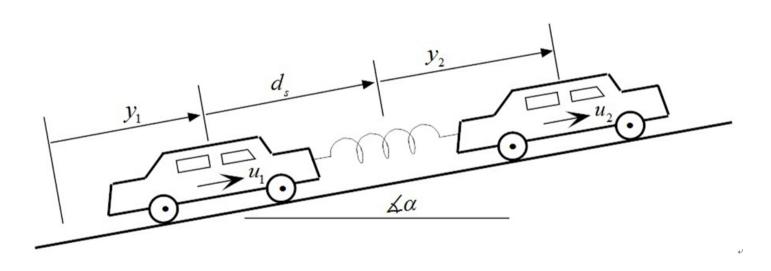




International Journal of Modern Nonlinear Theory and Application





Journal Editorial Board

ISSN: 2167-9479 (Print) ISSN: 2167-9487 (Online)

http://www.scirp.org/journal/ijmnta

.....

Editor-in-Chief

Prof. Ahmad M. Harb German Jordanian University, Jordan

Editorial Board

Prof. Nabil M. Abdel-Jabbar American University of Sharjah, UAE

Dr. Eihab M. Abdel-Rahman University of Waterloo, Canada

Prof. Ahmad Al-Qaisia University of Jordan, Jordan

Prof. Jan Awrejcewicz The Technical University of Lodz, Poland

Prof. Nabil Ayoub German Jordanian University, Jordan

Prof. Cristian S. Calude The University of Auckland, New Zealand

Prof. Seonho Cho Seoul National University, South Korea

Prof. Prabir Daripa Texas A&M University, USA

Prof. Bruce Henry The University of New South Wales, Australia

Dr. Boon Leong Lan Monash University, Australia

Prof. Hongyi Li Bohai University, China

Dr. C. W. Lim City University of Hong Kong, Hong Kong (China)

Prof. Gamal M. Mahmoud Assiut University, Egypt

Prof. Lamine Mili Virginia Polytechnic Institute and State University, USA

Prof. Zuhair Nashed University of Central Florida, USA

Prof. Antonio Palacios San Diego State University, USA

Dr. Samir M. Shariff Taibah University, Saudi Arabia

Prof. Guo-Wei Wei Michigan State University, USA

Prof. Pei Yu University of Western Ontario, Canada



TABLE OF CONTENTS

Volume 2 Number 1

March 2013

Stability Analysis of a Nonlinear Difference Equation	
F. Bozkurt	1
Classic and Non-Classic Soliton Like Structures for Traveling Nerve Pulses	
F. Contreras, H. Cervantes, M. Aguero, Ma. de L. Najera.	
Some Explicit Formulae for the Hull and White Stochastic Volatility Model	
L. Fatone, F. Mariani, M. C. Recchioni, F. Zirilli	14
Practical Stabilization for Uncertain Pseudo-Linear and Pseudo-Quadratic MIMO Systems	
L. Celentano	34
A Unified Newtonian-Relativistic Quantum Resolution of the Supposedly Missing Dark Energy of the Cosmos and the Constancy of the Speed of Light	e
M. S. El Naschie.	43
Mohamed El Naschie's Revision of Albert Einstein's $E = m_0 c^2$: A Definite Resolution of the Mystery of the Missing Dark Energy of the Cosmos	
J. H. He, L. Marek-Crnjac	55
A Simple Jerky Dynamics, Genesio System	
Ö. Umut, S. Yasar	60

The figure on the front cover is from the article published in International Journal of Modern Nonlinear Theory and Application, 2012, Vol. 2, No. 1, pp. 34-42 by Laura Celentano.

Copyright © 2013 SciRes.

International Journal of Modern Nonlinear Theory and Application (IJMNTA)

Journal Information

SUBSCRIPTIONS

The *International Journal of Modern Nonlinear Theory and Application* (Online at Scientific Research Publishing, www.SciRP.org) is published quarterly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$39 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright©2013 Scientific Research Publishing, Inc.

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as described below, without the permission in writing of the Publisher.

Copying of articles is not permitted except for personal and internal use, to the extent permitted by national copyright law, or under the terms of a license issued by the national Reproduction Rights Organization.

Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assumes no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: ijmnta@scirp.org

Call for Papers



International Journal of Modern Nonlinear Theory and Application

ISSN: 2167-9479 (Print) ISSN: 2167-9487 (Online)

http://www.scirp.org/journal/ijmnta

International Journal of Modern Nonlinear Theory and Application (IJMNTA) is an international peer-reviewed journal dedicated to publishing original papers on all topics related to nonlinear dynamics and its applications such as, electrical, mechanical, civil, and chemical systems and so on. The contributions concerned will be discussion of a practical problem, the formulating nonlinear model, and determination of closed form exact or numerical solutions.

Editor-in-Chief

Prof. Ahmad M. Harb

German Jordanian University, Jordan

Editorial Board

Prof. Nabil M. Abdel-Jabbar Dr. Eihab M. Abdel-Rahman Prof. Ahmad Al-Qaisia Prof. Jan Awrejcewicz Prof. Nabil Ayoub Prof. Cristian S. Calude Prof. Seonho Cho Prof. Prabir Daripa Prof. Bruce Henry Dr. Boon Leong Lan Prof. Hongyi Li
Dr. C. W. Lim
Prof. Gamal M. Mahmoud
Prof. Lamine Mili
Prof. Zuhair Nashed
Prof. Antonio Palacios
Dr. Samir M. Shariff
Prof. Guo-Wei Wei
Prof. Pei Yu

Subject Coverage

This journal invites original papers and review papers that address the following issues in modern nonlinear Theory and its applications. The interested topics that may be covered, but not limited to:

- Application of Modern Nonlinear Theory in:
- Biology
- Business
- Chemical systems
- Electrical and power systems
- Fluid mechanics
- Mechanical systems
- Medicine
- Physics
- Applied mechanics
- Bifurcation and Chaos
- Chaos control
- Classic control systems
- Electrical drives and power electronics

- Fractal order systems
- High dimensional chaos and applications
- Intelligent control systems (Fuzzy, Neural, Genetic...)

E-mail: ijmnta@scirp.org

- Nonlinear control
- Nonlinear differential equations and applications
- Nonlinear dynamic stability
- Nonlinear dynamics
- Nonlinear mathematical physics
- Nonlinear optical physics & materials
- Nonlinear oscillations
- Nonlinear phenomena
- Nonlinear science and numerical simulation
- Power systems and energy
- Security in communication systems

We are also interested in: 1) Short Reports—2-5 page papers where an author can either present an idea with theoretical background but has not yet completed the research needed for a complete paper or preliminary data; 2) Book Reviews—Comments and critiques.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submission, please access the website.

Website and E-Mail

http://www.scirp.org/journal/ijmnta

What is SCIRP?

Scientific Research Publishing (SCIRP) is one of the largest Open Access journal publishers. It is currently publishing more than 200 open access, online, peer-reviewed journals covering a wide range of academic disciplines. SCIRP serves the worldwide academic communities and contributes to the progress and application of science, by delivering superior scientific publications and scientific information solution provider that enable advancement in scientific research.

What is Open Access?

All original research papers published by SCIRP are made freely and permanently accessible online immediately upon publication. To be able to provide open access journals, SCIRP defrays operation costs from authors and subscription charges only for its printed version. Open access publishing allows an immediate, world-wide, barrier-free, open access to the full text of research papers, which is in the best interests of the scientific community.

- •High visibility for maximum global exposure with open access publishing model
- •Rigorous peer review of research papers
- Prompt faster publication with less cost
- •Guaranteed targeted, multidisciplinary audience





Website: http://www.scirp.org Subscription: sub@scirp.org Advertisement: service@scirp.org