



ISSN: 1749-3889 (print)
1749-3897 (online)

Bimonthly

Vol.20 (2015) No.2
October

England, UK
www.NonlinearScience.org.uk
www.InterNonlinearScience.org

International Journal of **Nonlinear Science**

Edited by *International Committee for Nonlinear Science, WAU*
Published by *World Academic Union (World Academic Press)*

Academic House, 113 Mill Lane, Wavertree Technology Park, Liverpool, L13 4AH, UK
www.WorldAcademicUnion.com; www.WorldAcademicPress.com

CONTENTS

67 The Averaging of Linear Differential Inclusions with Variable Dimension on Finite Interval

Olga D. Kichmarenko, Andrii A. Plotnikov

79 Estimation of Jiangsu Provincial Atmospheric Environmental Capacity of Thermal Power Plants

Ying Chen, Jialiang Yang, Hanyu Li, Lixin Tian

86 Traffic Flow on Weighted Network Based on Strength-dependent Walk

Yujuan Dong, Meifeng Dai

93 On the Nonexistence of Pure Multi-Solitons for the BBM Equation

Weiwei Guo, Lixin Tian, Wenxia Chen, Zaili Zhen

100 A Class of Abstract Property with Tracial Approximation

Houqing Fang, Xiaochun Fang

107 On the Computation of Matrix Functions for Square Matrices Having Mixed Eigenvalues Using Numerical Hybrid Method

Mohamed A. Ramadan, Adel A. El-Sayed

123 Classification of Weak Solutions of Stationary Hartree-type Equations

Yun Wang, Lixin Tian

Copyright © World Academic Union (World Academic Press)

International Journal of Nonlinear Science (IJNS)

Bibliographic

ISSN: 1749-3889 (print), 1749-3897 (online), *Bimonthly*

Edited by International Editorial Committee of Nonlinear Science, WAU

Published by World Academic Union (World Academic Press)

Publisher Contact: Academic House, 113 Mill Lane

Wavertree Technology Park, Liverpool L13 4AH, England, UK

Email: publishing@wau.org.uk, publishing@WorldAcademicUnion.com

URL: [www. World Academic Union .com](http://www.WorldAcademicUnion.com)

Contribution enquiries and submitting

Paper(s) should be submitted through the online system. To submit papers, please visit

www.NonlinearScience.org.uk

www.InterNonlinearScience.org

Editorial Board

Editor in Chief: *Boling Guo*, Institute of Applied Physics and Computational Mathematics, Beijing, 100088, China; IJNS@ujs.edu.cn

Co-Editor in Chief: *Lixin Tian*, Nonlinear Scientific Research Center, Jiangsu University, Zhenjiang, Jiangsu, 212013; China; tianlx@ujs.edu.cn, IJNS@ujs.edu.cn

Standing Members of Editorial Board:

Ghasem Alizahdeh Afrouzi, Department of Mathematics, Faculty of Basic Sciences, Mazandaran University, Babolsar, Iran; afrouzi@umz.ac.ir

Stephen Anco, Department of Mathematics, Brock University, 500 Glenridge Avenue St. Catharines, ON L2S 3A1, Canada; sanco@brocku.ca

Adrian Constantin, Department of Mathematics, Lund University, 22100 Lund, adrian@maths.lth.se Sweden; adrian.constantin@math.lu.se ,

Ying Fan, Department of Management Science, Institute of Policy and Management, Chinese Academy of Sciences, Beijing 100080, China, yfan@casipm.ac.cn.

Juergen Garloff, University of Applied Sciences/ HTWG Konstanz, Faculty of Computer Science, Postfach 100543, D-78405 Konstanz, Germany; garloff@htwg-konstanz.de

Tasawar Hayat, Department of mathematics, Quaid-I-Azam University, Pakistan, pensy_t@yahoo.com

Yong Jiang, William Lee Innovation Center, University of Manchester, Manchester, M60 1QD UK; jianguk@hotmail.com

Zhujun Jing, Institute of Mathematics, Academy of Mathematics and Systems Sciences, Chinese Academy of Science, Beijing, 100080, China; jingzj@math03.math.ac.cn

Yue Liu, Department of Mathematics, University of Texas, Arlington, TX 76019, USA; yliu@uta.edu

Zengrong Liu, Department of Mathematics, Shanghai University, Shanghai, 201800, China; Zrongliu@online.sh.cn

Norio Okada, Disaster Prevention Research Institute, Kyoto University , n_okada@drs.dpri.kyoto-u.ac.jp

Jacques Peyriere, Université Paris-Sud, Mathématiques, b â t. 42591405 ORSAY Cedex , France;

Jacques.Peyriere@free.fr,

Jacques.Peyriere@math.u-psud.fr

Weiyi Su, Department of Mathematics, Nanjing University, Nanjing, Jiangsu, 210093, China; suqiu@nju.edu.cn

Konstantina Trivisa, Department of Mathematics, University of Maryland College Park, MD20472-4015, USA; trivisa@math.umd.edu

Yaguang Wang, Department of Mathematics, Shanghai Jiao Tong University, Shanghai, 200240, China; ygwang@sjtu.edu.cn

Yiming Wei, Institute of Policy and management, Chinese Academy of Science, Beijing, 100080, China; ymwei@mail.casipm.ac.cn

Zhiying Wen, Department of Mathematics, Tsinghua University, Beijing, 100084, China; wenzy@mail.tsinghua.edu.cn

Lifeng Xi, Institute of Mathematics, Zhejiang Wanli University, Ningbo 315100, China; xilf@zwu.edu.cn

Zhenyuan Xu, Faculty of Science, Southern Yangtze University, Wuxi , Jiangsu 214063 , China; Xu_zhenyuan@yahoo.com

Huicheng Yin, Department of Mathematics, Nanjing University, Nanjing, Jiangsu, 210093, China; huicheng@nju.edu.cn

Pingwen Zhang, School of Mathematic Sciences, Peking University, Beijing, 100871, China; pzhang@pku.edu.cn

Secretary: Xuedi Wang, Xinghua Fan

Editorial office:

Academic House, 113 Mill Lane

Wavertree Technology Park

Liverpool L13 4AH, England, UK

Email:

china@nonlinearscience.org.uk

IJNS@ujs.edu.cn

editor@nonlinearscience.org.uk