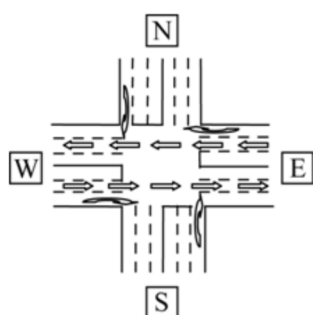
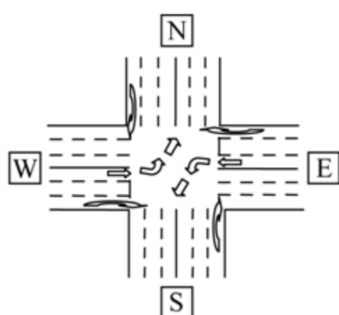


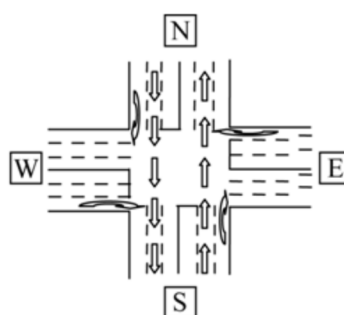
Applied Mathematics



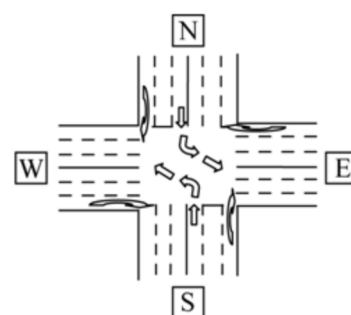
The first phase



The second phase



The third phase



The fourth phase

ISSN: 2152-7385



Journal Editorial Board

ISSN Print: 2152-7385

ISSN Online: 2152-7393

<http://www.scirp.org/journal/am>

Editor-in-Chief

Prof. Chris Cannings

University of Sheffield, UK

Editorial Board

Prof. Tamer Başar

University of Illinois at Urbana-Champaign, USA

Prof. Leva A. Beklaryan

Russian Academy of Sciences, Russia

Dr. Aziz Belmiloudi

Institut National des Sciences Appliquees de Rennes, France

Dr. Anjan Biswas

Delaware State University, USA

Prof. Mark Broom

City University, UK

Prof. Amares Chattopadhyay

Indian School of Mines, India

Prof. Badong Chen

Xi'an Jiaotong University, China

Prof. Ljubomir Ciric

University of Belgrade, Serbia

Prof. Jose Alberto Cuminato

University of Sao Paulo, Spain

Prof. Konstantin Dyakonov

University of Barcelona, Spain

Prof. Anwar H. Joarder

King Fahd University of Petroleum and Minerals, Saudi Arabia

Prof. Palle Jorgensen

University of Iowa, USA

Dr. Vladimir A. Kuznetsov

Bioinformatics Institute, Singapore

Prof. Kil Hyun Kwon

Korea Advanced Institute of Science and Technology, South Korea

Prof. Hong-Jian Lai

West Virginia University, USA

Dr. Goran Lesaja

Georgia Southern University, USA

Prof. Tao Luo

Georgetown University, USA

Prof. Addolorata Marasco

University of Naples Federico II, Italy

Prof. María A. Navascués

University of Zaragoza, Spain

Dr. Donatus C. D. Oguamanam

Ryerson University, Canada

Prof. Alexander S. Rabinowitch

Moscow State University, Russia

Prof. Yuriy V. Rogovchenko

University of Agder, Norway

Dr. Epaminondas Sidiropoulos

Aristotle University of Thessaloniki, Greece

Prof. Sergei Silvestrov

Mälardalen University, Sweden

Prof. Hari M. Srivastava

University of Victoria, Canada

Prof. Jacob Sturm

Rutgers University, USA

Prof. Mikhail Sumin

Nizhnii Novgorod State University, Russia

Table of Contents

Volume 5 Number 13

July 2014

Application of the Method of Characteristics to Population Balance Models Considering Growth and Nucleation Phenomena

S. M. Rehman, S. Qamar.....1853

Measuring Dependence Risk of Funds with Copula in China

J. Q. Tang, G. H. Sun.....1863

Empirical Determination of the Tolerable Sample Size for Ols Estimator in the Presence of Multicollinearity (ρ)

O. O. Alabi, T. O. Olatayo, F. R. Afolabi.....1870

Fourier and Wavelet Spectral Analysis of EMG Signals in 1-km Cycling Time-Trial

M. Bigliassi, P. R. Scalassara, T. F. D. Kanthack, T. Abrão, A. C. de Moraes, L. R. Altimari.....1878

Study of Stability Analysis for a Class of Fourth Order Boundary Value Problems

C. Bala Rama Krishna, P. S. Rama Chandra Rao.....1887

Block Matrix Representation of a Graph Manifold Linking Matrix Using Continued Fractions

F. I. Becerra López, V. N. Efremov, A. M. Hernandez Magdaleno.....1894

Global 1 Estimation of the Cauchy Problem Solutions to the Navier-Stokes Equation

A. Durmagambetov, L. Fazilova.....1903

Mathematical Analysis of a Large Scale Vector SIS Malaria Model in a Patchy Environment

J. Wairimu, S. Gauthier, W. Ogana.....1913

A New Approach for the Exact Solutions of Nonlinear Equations of Fractional Order via Modified Simple Equation Method

M. Younis.....1927

Dividend Payments with a Hybrid Strategy in the Compound Poisson Risk Model

P. Li, C. C. Yin, M. Zhou.....1933

Changing the Paradigm

R. W. Nielsen.....1950

Entrance Region Flow of Herschel-Bulkley Fluid in an Annular Cylinder

R. G. Pai, A. Kandasamy.....1964

Positive Definite Solutions for the System of Nonlinear Matrix Equations $X + A^* Y^{-n} A = I$, $Y + B^* X^{-m} B = I$

S. M. El-Sayed, A. M. Al-Dubiban.....1977

Asymptotic Estimates for Second-Order Parameterized Singularly Perturbed Problem	
M. Kudu.....	1988
Local Search-Inspired Rough Sets for Improving Multiobjective Evolutionary Algorithm	
A. A. EL-Sawy, M. A. Hussein, E.-S. M. Zaki, A. A. Mousa.....	1993
Reliability Analysis of a Powerloom Plant Using Interval Valued Intuitionistic Fuzzy Sets	
S. K. Tyagi.....	2008
Solution of Multi-Delay Dynamic Systems by Using Hybrid Functions	
K. Maleknejad, R. Ezzati, T. Damercheli.....	2016
A Trivariate Causality Test: A Case Study in Cameroon	
J. G. Tamba, F. D. Koffi, M. Lissouck, M. Ndamé, N. E. Afuoti.....	2028
A Semi-Analytical Method for Solutions of a Certain Class of Second Order Ordinary Differential Equations	
S. O. Edeki, H. I. Okagbue, A. A. Opanuga, S. A. Adeosun.....	2034
Coordinated Control of Traffic Signals for Multiple Intersections	
L. Q. Fan.....	2042
Heavy-Tailed Distributions Generated by Randomly Sampled Gaussian, Exponential and Power-Law Functions	
F. von Wegner.....	2050
Truncated Geometric Bootstrap Method for Time Series Stationary Process	
T. O. Olatayo.....	2057
Wavelet Density Estimation of Censoring Data and Evaluate of Mean Integral Square Error with Convergence Ratio and Empirical Distribution of Given Estimator	
M. Afshari.....	2062
A Method to Simulate the Skew Normal Distribution	
D. Ghorbanzadeh, L. Jaupi, P. Durand.....	2073
An Error Controlled Method to Determine the Stellar Density Function in a Region of the Sky	
M. A. Sharaf, Z. A. Mominkhan.....	2077
Influence of the Domain Boundary on the Speeds of Traveling Waves	
L. X. Ma, J. L. Tan.....	2088
Empirical Study on Credit Risk of Our Listed Company Based on KMV Model	
L. Lin, T. Lou, N. Zhan.....	2098

Applied Mathematics (AM)

Journal Information

SUBSCRIPTIONS

The *Applied Mathematics* (Online at Scientific Research Publishing, www.SciRP.org) is published monthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$89 per copy.

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 AND REUSE RIGHTS FOR THE FRONT MATTER OF THE JOURNAL:

Copyright © 2014 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY).

<http://creativecommons.org/licenses/by/4.0/>

COPYRIGHT FOR INDIVIDUAL PAPERS OF THE JOURNAL:

Copyright © 2014 by author(s) and Scientific Research Publishing Inc.

REUSE RIGHTS FOR INDIVIDUAL PAPERS:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

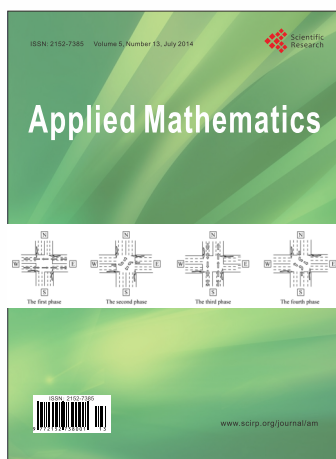
DISCLAIMER OF LIABILITY

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 assume 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: am@scirp.org



Call for Papers

Applied Mathematics (AM)

ISSN Print: 2152-7385 ISSN Online: 2152-7393

<http://www.scirp.org/journal/am>

Applied Mathematics (AM) is an international journal dedicated to the latest advancement of applied mathematics. The goal of this journal is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in different areas of applied mathematics.

Subject Coverage

All manuscripts must be prepared in English, and are subject to a rigorous and fair peer-review process. Accepted papers will immediately appear online followed by printed hard copy. The journal publishes original papers including but not limited to the following fields:

- | | | |
|--|----------------------------|-----------------------------------|
| ● Applied Probability | ● Evolutionary Computation | ● Matrix Computations |
| ● Applied Statistics | ● Financial Mathematics | ● Neural Networks |
| ● Approximation Theory | ● Fuzzy Logic | ● Nonlinear Processes in Physics |
| ● Chaos Theory | ● Game Theory | ● Numerical Analysis |
| ● Combinatorics | ● Graph Theory | ● Operations Research |
| ● Complexity Theory | ● Information Theory | ● Optimal Control |
| ● Computability Theory | ● Inverse Problems | ● Optimization |
| ● Computational Methods in Mechanics and Physics | ● Linear Programming | ● Ordinary Differential Equations |
| ● Continuum Mechanics | ● Mathematical Biology | ● Partial Differential Equations |
| ● Control Theory | ● Mathematical Chemistry | ● Probability Theory |
| ● Cryptography | ● Mathematical Economics | ● Statistical Finance |
| ● Discrete Geometry | ● Mathematical Physics | ● Stochastic Processes |
| ● Dynamical Systems | ● Mathematical Psychology | ● Theoretical Statistics |
| ● Elastodynamics | ● Mathematical Sociology | |

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 submissions, please access the website.

Website and E-mail

<http://www.scirp.org/journal/am>

E-mail: am@scirp.org