

Advances in Pure Mathematics

Special Issue on Eigen Values and Eigenvectors Analysis



www.scirp.org/journal/apm

Journal Editorial Board

ISSN 2160-0368 (Print) ISSN 2160-0384 (Online)

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

Editor-in-Chief

Prof. Dexing KongZhejiang University, China

Editorial Board

Dr. Taher S. H. AbdelmonemMansoura University, EgyptDr. Adel Ahmed AttiyaUniversity of Mansoura, EgyptProf. Józef BanaśBronislaw Markiewicz State School of Higher

Vocational Education in Jaroslaw, Poland

Prof. Constantin Buse

Prof. Sumit Chandok

Vocational Education in Jaroslaw, Poland
West University of Timisoara, Romania
Punjab Technical University, India

Prof. Muhammad A. Chaudhry King Fahd University of Petroleum and Minerals, Saudi Arabia

Prof. Pantelis A. DamianouUniversity of Cyprus, CyprusProf. Dragan S. DjordjevicUniversity of Nis, SerbiaProf. Ahmed M. A. El-SayedAlexandria University, EgyptProf. Marisa FernandezUniversidad del País Vasco, SpainProf. Cristescu GabrielaAurel Vlaicu University of Arad, Romania

Prof. Hongya Gao Hebei University, China

Prof. Aleksander Grytczuk University of Zielona Góra and Jan Pawel II Western, Poland

Prof. Yuxia Guo Tsinghua University, China

Prof. Sevdzhan HakkaevUniversity of Kansas, Lawrence, USADr. Chengchun HaoChinese Academy of Sciences, ChinaProf. Tian-Xiao HeIllinois Wesleyan University, USAProf. Wei HeNanjing Normal University, China

Prof. Tingzhu Huang University of Electronic Science & Technology of China, China

Prof. Shuichi IzumiyaHokkaido University, JapanProf. Toshitake KohnoThe University of Tokyo, JapanProf. Vichian LaohakosolKasetsart University, Thailand

Dr. Jingjing MaUniversity of Houston-Clear Lake, USAProf. Elimhan N. MahmudovIstanbul Technical University, Turkey

Prof. Ming MeiMcGill University, CanadaProf. Rer. nat. Mara D. NeuselTexas Tech University, USA

Dr. Marek Niezgoda
University of Life Sciences in Lublin, Poland
Charotar University of Science and Technology, India

Dr. Marius RădulescuInstitute of Mathematical Statistics and Applied Mathematics
"Gheorghe Mihoc-Caius Iacob" of the Romanian Academy, Romania

Prof. Jingli Ren
Prof. Bayram Sahin
Dr. Samir H. Saker

Zhengzhou University, China
Inonu University, Turkey
Mansoura University, Egypt

Dr. Bessem Samet Tunis College of Sciences and Techniques, Tunisia

Prof. Yongli Song Tongji University, China

Prof. Yeong-Jeu Sun I-Shou University, Chinese Taipei

Dr. Néstor Thome Universidad Politécnica de Valencia, Spain

Prof. Aydin Tiryaki Izmir University, Turkey

Prof. Gabor TothEötvös Loránd University, HungaryDr. Amitabha TripathiIndian Institute of Technology, IndiaProf. Nodari VakhaniaGeorgian Academy of Sciences, MexicoProf. Jose C. ValverdeUniversity of Castilla-La Mancha, SpainProf. Mingxin WangHarbin Institute of Technology, China

Prof. Qingwen Wang Shanghai University, China

Dr. Yanjin Wang Institute of Applied Physics and Computational Mathematics, China

Dr. Jasang Yoon The University of Texas-Pan American, USA

Prof. Norio YoshidaUniversity of Toyama, JapanProf. Mohamed F. YousifThe Ohio State University, USADr. Shijun ZhengGeorgia Southern University, USAProf. Changjiang ZhuHuazhong Normal University, China



TABLE OF CONTENTS

Volume 3	Number 9B	December 2013
Riesz Means (of Dirichlet Eigenvalues for the Sub-Laplace Oper	rator on the Engel Group
J. J. Xue		1
From Eigenva	alues to Singular Values: A Review	
A. Dax		8

Open Access APM

Advances in Pure Mathematics (APM)

Journal Information

SUBSCRIPTIONS

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

Subscription rates:

Print: \$59 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.

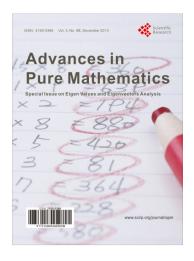
Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assumes no responsibility or liability for any damage or injury to persons or property arising out of the use of 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: apm@scirp.org





Advances in Pure Mathematics (APM)

ISSN 2160-0368 (Print) ISSN 2160-0384 (Online) http://www.scirp.org/journal/apm

Advances in Pure Mathematics (APM) is an international journal dedicated to the latest advancement of ordered algebraic structures. 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 ordered algebraic structures.

Subject Coverage

This journal invites original research and review papers that address the following issues. Topics of interest include, but are not limited to:

- Applied Harmonic Analysis
- Approximation Theory
- Asymptotic Methods
- Bifurcation Theory
- Coding Theory
- County TheoryCombinatorics
- Complex Analysis
- Complex/marysi
- Convex Analysis
- Difference Equations
- Differential EquationsDynamical Systems
- Fixed-Point Theory
- Fourier Analysis
- Fractals
- Fractional Analysis

- Functional Differential Equations
- Fuzzy Mathematics
- Geometry
- Geometry of Banach Spaces
- Integral Equations
- Mathematical Biology, including Population Dynamics
- Mathematical Physics
- Matrix Theory
- Moment Theory
- Number Theory
- Numerical Analysis
- Operator Theory
- Optimal Control
- Optimization Wavelets

- Partial Differential Equations
- Probability
- Reaction-Diffusion Problems, Discrete Mathematics
- Scattering Theory
- Semigroups of Operators
- Signal Theory
- Special Functions
- Statistics
- Stochastic Process
- Topology and Applications
- Transport Theory
- Ultrametric Analysis
- Variational Methods

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of the APM.

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/apm E-mail: apm@scirp.org

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