

Analysis

International mathematical journal of analysis and its applications

Editor-in-chief

F. Schulz, Universität Ulm, Institut für Analysis, 89069 Ulm, GERMANY,
email: friedmar.schulz@uni-ulm.de

Co-editors

PD Dr. Verena Bögelein, Friedrich Alexander Universität, Lehrstuhl für Analysis, Cauerstraße 11,
91058 Erlangen, GERMANY, e-mail: boegelein@mi.uni-erlangen.de

Dr. Martin Bohner, Missouri S & T, 106 Rolla Building, Rolla, MO 65409-0020, Missouri, USA,
e-mail: bohner@mst.edu

Prof. Dr. Anna Dall'Acqua, Universität Ulm, Helmholtzstraße 18, 89081 Ulm, GERMANY,
e-mail: anna.dallacqua@uni-ulm.deUn

K. Dilcher, Department of Math. and Stats., Dalhousie University, Halifax, N.S., B3H 3J5,
CANADA, email: dilcher@mathstat.dal.ca

Prof. Dr. Reinhard Farwig, Darmstadt University of Technology, Department of Mathematics
and Center of Smart Interfaces (CSI), Schlossgartenstr. 7, 64289 Darmstadt, GERMANY,
e-mail: farwig@mathematik.tu-darmstadt.de

B. Fritzsche, Universität Leipzig, Mathematisches Institut, Augustusplatz 10/11, 04109 Leipzig,
GERMANY, email: fritzsche@math.uni-leipzig.de

W. Gawronski, Fachbereich 4 Mathematik/Angewandte Analysis, Universität Trier, 54286 Trier,
GERMANY, email: gawron@uni-trier.de

H.-Ch. Grunau, Institut für Analysis und Numerik, Otto von Guericke Universität, Universitätsplatz 2,
PF 4120, 39106 Magdeburg, GERMANY, email: hans-christoph.grunau@mathematik.uni-magdeburg.de

Q. Han, Department of Mathematics, University of Notre Dame, 255 Hurley Hall, Notre Dame,
IN 46556-4618, U.S.A., email: Qing.Han.7@nd.edu

W. Jäger, Institut für Angewandte Mathematik, Universität Heidelberg, Im Neuenheimer Feld 294,
69120 Heidelberg, GERMANY, email: jaeger@iwr.uni-heidelberg.de

F. Klopp, Département de Mathématiques – UMR CNRS 7539, Institut Galilée, Université Paris 13,
99 avenue Jean-Baptiste Clément, 93430 Villetaneuse, FRANCE, email: klopp@math.univ-paris13.fr

H. L. Montgomery, Department of Mathematics, University of Michigan, 530 Church Street,
Ann Arbor, MI 48109-1043, U.S.A., email: hlm@umich.edu

S. Rogosin, Belarusian State University, Mechanical-Mathematical Faculty, Nezavisimosti ave 4, 220030 Minsk,
BELARUS, email: rogosin@gmail.com

R. Schätzle, Mathematisches Institut der Eberhard-Karls-Universität Tübingen, Lehrstuhl für Analysis,
Auf der Morgenstelle 10, 72076 Tübingen, GERMANY, email: schaeetz@everest.mathematik.uni-tuebingen.de

H. Siedentop, Mathematisches Institut der LMU, Theresienstr. 39, 80333 München, GERMANY,
email: h.s@lmu.de

Y. Tonegawa, Hokkaido University, Department of Mathematics, Sapporo 060-0810, JAPAN,
email: tonegawa@math.sci.hokudai.ac.jp

N. S. Trudinger, Center for Mathematics and its Applications, School of Mathematical Sciences,
The Australian National University, Canberra ACT 0200, AUSTRALIA, email: Neil.Trudinger@anu.edu.au

Analysis

Volume 33 • Issue 4 • 2013

<i>K. Mazhouda, S. Omar</i> The Cardon and Robert Criterion for the Riemann hypothesis	309
<i>J. Larcher</i> Multiplications and convolutions in L. Schwartz' spaces of test functions and distributions and their continuity	319
<i>R. P. Agarwal, M. Bohner, J. M. Ferreira, S. Pinelas</i> Delay difference equations: Coexistence of oscillatory and nonoscillatory solutions	333
<i>G. Csató</i> On an integral formula for differential forms and its applications on manifolds with boundary	349
<i>M. A. Noor, F. Qi, M. U. Awan</i> Some Hermite–Hadamard type inequalities for log- h -convex functions	367
<i>A. G. Ramm</i> Asymptotic of some integral	377
<i>A. Muhammad</i> Argument properties of symmetric analytic functions	383
<i>D.-W. Niu, L.-S. Dong, J. Cao</i> Three new sequences converging to the Euler–Mascheroni constant	389
<i>L.-B. Maier, M. Nieß</i> Universality of multivariate interpolation	401

Copyright: It is a general condition that submitted manuscripts have not been submitted or published and will not – without written consent by the publishers – be submitted or published elsewhere. By submitting a manuscript, the authors agree that the copyright for their article is transferred to the publisher if and when the article is accepted for publication. The copyright covers the exclusive rights to reproduce and distribute the article, including reprints, photographic reproduction, microform or any other reproductions of similar nature, and translations. Photographic reproduction, microform, or any other reproduction of text, figures, or tables from this journal are not allowed without permission obtained from the publisher.

The use of general descriptive names, trade marks etc. in this publication even if the former are not specifically identified, is not to be taken as a sign that such names are exempt from the relevant protective laws and regulations and may accordingly be used freely by anyone. Authors are requested to present copyright releases of published materials used in their contributions.

Re: Copyright in the USA: The appearance of the code at the top of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This authorization to photocopy items is granted for users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the base fee of \$ 3.00 per copy is paid directly to CCC, 27 Congress St., MA 01970. For those organizations that have been granted a photocopy license by CCC, a separate system of payment has been arranged. The fee code for users of the Transactional Reporting Service is: 0174-4747.

This consent is given for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale.

Open Access: Authors of peer-reviewed and accepted contributions can choose to make their articles freely accessible at the journal's online site for anyone, anytime, and anywhere in the world in exchange for payment of an Open Access fee in the amount of € 1500. Open Access can be ordered with the return of the Copyright Agreement and will be realized after the issued invoice has been paid.

Subscription information: Volume 33, Issues 1–4 will appear in 2013. Annual subscription price ONLINE: € 408,-; annual subscription price PRINT or ONLINE+PRINT: € 448,- + postage Germany: € 9,-; postage elsewhere: € 15,-. Single issue: € 118,- + € 3,- elsewhere. For cancellation of the subscription the publisher must be noticed not later than two months before the end of the calendar year. Single articles can be purchased for US\$ 35 at <http://analysis-international.de>. For EU countries all prices are including 7% VAT, for all other countries they are gross prices. Orders can either be placed with your bookdealer or sent directly to: Oldenbourg Wissenschaftsverlag, Postfach 80 13 60, 81613 München, Germany; email to: vertrieb-zs@oldenbourg.de.

For further information refer to <http://analysis-international.de>

Information: Oldenbourg Wissenschaftsverlag, Postfach 80 13 60, 81613 München, Germany,
phone: +49 (0)89 4 50 51-2 99; fax: +49 (0)89 4 50 51-2 92; internet: oldenbourg.de

Printing: grafik + druck GmbH, München

Index of Volume 33 (2013)

Number 1

<i>T. Varga</i> Uniform spacing of zeros of orthogonal polynomials for locally doubling measures	1
<i>A. Banerjee, I. Lahiri</i> A uniqueness polynomial for equi-polar meromorphic functions	13
<i>S. K. Upadhyay, R. S. Pandey, A. Tripathi</i> The spectrum of the Hausdorff operator on a subspace of $L^2(\mathbb{R})$	25
<i>X. Z. Krasniqi</i> An application of q -mathematics on absolute summability of orthogonal series	35
<i>W.-H. Li, F. Qi, B.-N. Guo</i> On proofs for monotonicity of a function involving the psi and exponential functions	45
<i>P. N. Natarajan</i> On the (M, λ_n) method of summability	51
<i>L. Debnath</i> Developments of the theory of generalized functions or distributions – A vision of Paul Dirac	57

Number 2

<i>R. Farwig, Ch. Komo</i> Optimal initial value conditions for local strong solutions of the Navier–Stokes equations in exterior domains	101
<i>M. W. Coffey</i> Hypergeometric summation representations of the Stieltjes constants	121
<i>P. Sahoo, S. Seikh</i> Meromorphic functions whose certain differential polynomials share a small function with finite weight	143
<i>L. Li, S. Ponnusamy</i> Convolutions of slanted half-plane harmonic mappings	159
<i>A. H. H. Al-Khaladi</i> Meromorphic functions that share one small function DM with their first derivative	177

<i>P.N. Natarajan</i> A product theorem for the Euler and the Natarajan methods of summability	189
<i>Y. Shuang, H.-P. Yin, F. Qi</i> Hermite–Hadamard type integral inequalities for geometric-arithmetically s -convex functions	197

Number 3

<i>K. Yabuta</i> Remarks on L^2 boundedness of Littlewood–Paley operators	209
<i>A. Schikorra</i> A note on regularity for the n -dimensional H -system assuming logarithmic higher integrability	219
<i>B.-Y. Xi, F. Qi</i> Convergence, monotonicity, and inequalities of sequences involving continued powers	235
<i>A.N. Zachos</i> Location of the weighted Fermat–Torricelli point on the K -plane	243
<i>V.A. Khan, K. Ebadullah</i> Zweier I -convergent sequence spaces defined by Orlicz function	251
<i>C. Szerement</i> Solution of the Dirichlet problem for G -minimal graphs with a continuity and approximation method	263
<i>F.A. Shah, L. Debnath</i> Tight wavelet frames on local fields	293

Number 4

<i>K. Mazhouda, S. Omar</i> The Cardon and Robert Criterion for the Riemann hypothesis	309
<i>J. Larcher</i> Multiplications and convolutions in L. Schwartz’ spaces of test functions and distributions and their continuity	319
<i>R.P. Agarwal, M. Bohner, J.M. Ferreira, S. Pinelas</i> Delay difference equations: Coexistence of oscillatory and nonoscillatory solutions	333

<i>G. Csató</i> On an integral formula for differential forms and its applications on manifolds with boundary	349
<i>M. A. Noor, F. Qi, M. U. Awan</i> Some Hermite–Hadamard type inequalities for log- h -convex functions	367
<i>A. G. Ramm</i> Asymptotic of some integral	377
<i>A. Muhammad</i> Argument properties of symmetric analytic functions	383
<i>D.-W. Niu, L.-S. Dong, J. Cao</i> Three new sequences converging to the Euler–Mascheroni constant	389
<i>L.-B. Maier, M. Nieß</i> Universality of multivariate interpolation	401

Analysis – Instructions for authors

Journal home page: analysis-international.de

Submission of papers. All manuscripts have to be submitted online at <http://analysis.edmgr.com>. After registration you will be guided step by step by the manuscript submission interface through the submission process. You only have to register once and will receive a password which allows you to track all your contributions. Authors are asked to write their manuscript in English and prepare it using the Analysis templates in L^AT_EX.

Review process. Manuscripts are accepted for review with the understanding that the same work has not been published or submitted for publication elsewhere. The Editors-in-Chief and Co-Editors reserve the right to return manuscripts at any time without stating the reasons for doing so. The identity of the reviewers will not be disclosed to the authors or to any other part of the review process. The Editorial Board attempts to reach final decisions on papers submitted within six months. To facilitate a timely review, authors are encouraged to take extreme care in the preparation of the manuscripts that they submit.

Copyright. If and when an article is accepted for publication, the author(s) agree(s) to grant Oldenbourg Verlag an exclusive and unlimited right to reproduce and distribute the article in any form anywhere in the world.

Electronic Format. Authors are asked to prepare their manuscripts using the [Analysis templates](#). The templates support the program L^AT_EX. Templates and instructions can be called from the Welcome Page of <http://analysis.edmgr.com>.

Preparation of manuscripts. Papers published in Analysis should not exceed 25 pages after typesetting. Longer papers require a special decision of the editorial board in order to be published.

The cover page of each paper contains the title of the paper, the names of the authors and a short summary not exceeding 200 words. In addition, authors should include a footnote on the cover page the paper containing key words and phrases as well as the statement of the [AMS 2000 Math. Subject Classification \(MSC\) numbers](#).

No further footnotes should appear in the paper.

Each paper must begin with an informative introduction to the problem that is the subject of the paper and a survey of previous work done by other authors.

For the preparation of the Manuscript please follow the style guidelines (font sizes, text height and text width, etc.) defined in the publisher's L^AT_EX template. Usual mathematical environments (definitions, theorems, etc.) should be typed using the standard L^AT_EX macros.

Pages of manuscripts should be numbered consecutively. Final page numbers will be provided by the Editor. The title pages will be assigned an odd page number. Each subsequent odd numbered page should contain a header stating the title of the paper in abbreviated form (less than 35 characters). Even numbered pages should contain a header stating the names of the authors.

All references are to be listed by the author in a bibliography at the end of the paper, containing complete information according to usual scientific standards. Book titles and journal titles should be typed in italic style. References in the text have to be indicated by figures (numbers or character strings) in square brackets referring to the appropriate section of the bibliography.

Authors must provide their addresses (both postal and electronic) and their institutional affiliations at the end of the paper (following the bibliography). The date of submission will be inserted by the Editor at the very end of the paper. Acknowledgements, if any, should be inserted after the text of the paper, but in front of the bibliography.