

ISSN 1225-1763(Print)
ISSN 2234-3024(Online)

대한수학회논문집

MATHEMATICS

COMMUNICATIONS
OF THE KOREAN
MATHEMATICAL SOCIETY
제 32 권 제 4 호 2017

COMMUNICATIONS OF THE KOREAN MATHEMATICAL SOCIETY

VOL. 32, No. 4

October 2017

ISSN 1225-1763(Print)
ISSN 2234-3024(Online)

COMMUNICATIONS OF THE KOREAN MATHEMATICAL SOCIETY

Since 1986, this journal has endeavored to publish significant research developments of broad interests in pure and applied mathematics. One volume is published each year, and each volume consists of four issues (January, April, July, October).

Editorial Policy

To be published in the *Communications*, a paper must be correct, new, nontrivial, and significant. The *Communications* also publishes good survey papers and can issue special volumes for specific topics.

Submission of Manuscripts

See **Information for Authors** at the end of this issue.

Copyright

A Copyright Transfer Agreement is required before the publication of a paper in this journal. The submission of a paper implies the author's assurance that it has not been copyrighted, published, nor submitted for publication elsewhere.

Subscriptions

The subscription price is 50 USD per year to individuals, 100 USD per year to institutions. Members of the KMS receive exclusive discount on annual subscriptions to KMS journals. Correspondences regarding subscriptions, membership, and notices of change of address should be sent to:

Korean Mathematical Society, The Korea Science and Technology Center 202,
22, Teheran-ro 7-gil, Gangnam-gu, Seoul 06130, Korea
Tel: +82-2-565-0361, Fax: +82-2-565-0364
E-mail: kms@kms.or.kr

Publications of the Society

The KMS publishes three research periodicals, the Journal, the Bulletin, and the Communications. The Journal and Bulletin are published bimonthly and the Communications is published quarterly.

Indexing and Abstracting Services

Articles published in this journal are indexed on abstracted in Mathematical Reviews, Zentralblatt für Mathematik, KCI, SCOPUS, and Emerging Sources Citation Index.

For details, please refer to the journal website <http://ckms.kms.or.kr>.

© Korean Mathematical Society, 2017

Published by the Korean Mathematical Society

Printed in Korea, October 2017

This work was supported by the Korean Federation of Science and Technology Societies(KOFST) grant funded by the Korean government.

Continued from back cover

YEOL JE CHO, MOHAMMAD S. R. CHOWDHURY, AND JE AI HA	
Generalized bi-quasi-variational-like inequalities on non-compact sets	933
ZONG SHENG GAO AND XIAO MING WANG	
Some results on uniqueness of meromorphic solutions of difference equations	959
PETRICĂ DICU AND ALINA TOTOI	
Inclusion properties regarding classes of meromorphic p -valent functions, involving the operator $J_{p,\lambda}^n$	971
SÉBASTIEN GABOURY AND ARJUN KUMAR RATHIE	
Evaluation of a new class of double definite integrals	979
SUNG GUEN KIM	
The geometry of $\mathcal{L}_s({}^3\mathcal{I}_\infty^2)$	991
JUNESANG CHOI AND I. A. SHILIN	
A family of series and integrals involving Whittaker, Bessel functions, and their products derivable from the representation of the group $SO(2, 1)$	999
METIN BAŞARIR AND AYNUR ŞAHİN	
Some results of the new iterative scheme in hyperbolic space	1009

GEOMETRY

YONG HAH LEE	
Uniqueness of solutions for the boundary value problem of certain nonlinear elliptic operators via p -harmonic boundary	1025
ABDUL HASEEB AND RAJENDRA PRASAD	
Certain curvature conditions in Kenmotsu manifolds with respect to the semi-symmetric metric connection	1033
DAE HO JIN	
Generic lightlike submanifolds of an indefinite Kaehler manifold with a non-metric ϕ -symmetric connection	1047

PROBABILITY AND STATISTICS

JONGSIG BAE, CHANGHA HWANG, AND DOOBAE JUN	
The laws of the iterated logarithm for the tent map	1067

APPLIED MATHEMATICS

MUHAMMAD AKRAM AND NEHA WASEEM	
Novel decision making method based on domination in m -polar fuzzy graphs	1077

CONTENTS

ALGEBRA AND NUMBER THEORY

- AJCHARA HARNCHOOWONG AND PITCHAYATAK PONROD
 Unit groups of quotient rings of integers in some cubic fields 789
- HASAN AL-EZEH, MANAL GHANEM, AND JAMEEL RWALAH
 The hull number of powers of cycles 805
- ABDULLAH M. ABDUL-JABBAR, CHENAR ABDUL KAREEM AHMED,
 TAI KEUN KWAK, AND YANG LEE
 On commutativity of nilpotent elements at zero 811
- NEŞET AYDIN AND SELİN TÜRKMEN
 On a Lie ring of generalized inner derivations 827

ANALYSIS

- PRAVEEN AGARWAL, SHILPI JAIN, MUMTAZ AHMAD KHAN,
 AND KOTTAKKARAN SOOPPY NISAR
 On some formulas for the generalized Appell type functions 835
- NGUYEN SINH BAY, LE VAN HIEN, AND HIEU TRINH
 Exponential stability of a class of nonlinear difference equations in
 Banach spaces 851
- MOHAMMED M. AWAD, ASMAA O. MOHAMMED, MEDHAT A. RAKHA,
 AND ARJUN K. RATHIE
 New series identities for $\frac{1}{H}$ 865
- FETHI SOLTANI
 Applications on the Bessel-Struve-type Fock space 875
- S. AHMAD ALI AND SAYYAD NADEEM HASAN RIZVI
 Certain new WP-Bailey pairs and basic hypergeometric series
 identities 885
- PARVIZ SADAT HOSSEINI AND BAHMANN YOUSEFI
 Fixed points of BSC-sequences 899
- KOTTAKKARAN SOOPPY NISAR
 On the generalized modified k -Bessel functions of the first kind 909
- MOHAN ARUNKUMAR, ABASALT BODAGHI, THIRUMAL NAMACHIVAYAM,
 AND ELUMALAI SATHYA
 A new type of the additive functional equations on intuitionistic
 fuzzy normed spaces 915

Continued on inside back cover