O P - S F N E T - Volume 20, Number 4 - July 15, 2013

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The Electronic News Net of the
SIAM Activity Group on Orthogonal Polynomials and Special Functions
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or to: listproc@nist.gov

Topics:

Calendar of Events:

July 15-19, 2013
Workshop "Elliptic Integrable Systems and Hypergeometric Functions", Leiden, The Netherlands 19.5 #6
www.lorentzcenter.nl/lc/web/2013/541/info.php3?wsid=541&venue=Oort

July 15-19, 2013
Conference "Symmetries of
Discrete Systems and Processes", Decin, Czech Republic
http://spmdd.fjfidecin.cz/conference-details

July 21-26, 2013
PODE Progress on Difference Equations, Bialystok, Poland
http://katmat.pb.bialystok.pl/pode13/

August 25-31, 2013
Formal and Analytic Solutions of Differential, Difference and Discrete Equations, Będlewo, Poland
http://bcc.impan.pl/13Formal&Analytic/

August 28-30, 2013

Workshop on Special Functions and their Application, Copenhagen, Denmark 20.3 #6
http://www.math.ku.dk/~henrikp/wosfa

September 16-20, 2013

The Third Najman Conference on Spectral Problems for Operators and Matrices, Biograd, Croatia
http://web.math.pmf.unizg.hr/najman_conference/index.html

September 21-27, 2013

Conference of Numerical Analysis and Applied Mathematics 2013 (ICNAAM 2013), in Rhodes, Greece
http://www.icnaam.org

October 23-24, 2013

Second International Conference of Mathematics and its Applications
Basra City, Iraq
Contact: Ahmad Zainy Al-Yasry http://www.azainy.com/

December 6-7, 2013

Conference on the occasion of Richard Askey's 80th birthday, Madison, Wisconsin, USA. 20.2 #2, 20.4 #5
http://www.math.umn.edu/~stanton/askey80

December 16-20, 2013

XXIVth International Workshop on Operator Theory and its Applications, Bangalore, India
http://math.iisc.ernet.in/~iwota2013/

January 20-24, 2014

OrthoQuad2014. An International Symposium on Orthogonality, Quadrature and Related Topics In Memory of Pablo González Vera, Puerto de la Cruz, Tenerife, Canary Islands, Spain.
http://gama.uc3m.es/pablo/

May 26-30, 2014

Constructive Functions 2014. On honor of Ed Saff's 70th birthday. Vanderbilt University, Nashville, Tennessee, USA.
http://www.math.vanderbilt.edu/~constructive2014/

December 11-20, 2014

Foundations of Computational Mathematics, Montevideo, Uruguay (including workshops on Approximation Theory and on Special Functions and Orthogonal Polynomials)
http://www.fing.edu.uy/~jana/www2/focm_2014.html

Topic #1 ---------- OP-SF NET 20.4 --------- July 15, 2013

From: OP-SF NET Editors
Subject: Election of officers, 2014-2016

The Nominating Committee for the upcoming election of officers of our SIAG/OPSF consists of Kathy Driver (Chair), Charles Dunkl, Arno Kuijlaars, Andrei Martínez-Finkelshtein, Nico Temme, and Roderick Wong.

The Committee has proposed the following List of Nominees:

Chair: Walter van Assche; Kerstin Jordaan

Vice Chair: Jeff Geronimo; Peter Miller

Program Director: Diego Dominici ; Howard Cohl

Secretary: Luis Garza; Yuan Xu

Topic #2 ---------- OP-SF NET 20.4 --------- July 15, 2013

From: OP-SF NET Editors
Subject: Herbert Stahl, 1942-2013

As announced in our May issue, Herbert Stahl died on April 22, 2013.
Kathy Driver has provided the following obituary notice:

Herbert Stahl was born on 3 August 1942 and spent his childhood on a small farm in Fehl-Ritzhausen (Westerwald, Germany). After completing the Volksschule [roughly equivalent to US Grade 10], he learnt the trade of electrician in the Siegerland and worked there for two years. During the time he worked as an electrician, he became interested in radio technology and realized that mathematics was the key to understanding information technology. He declined a bursary from AEG to study engineering, and instead worked as a casual labourer in Berlin, mostly as a packer in the Springer publishing company, while preparing for the “Externes Abitur”, an examination he passed in 1964. He immediately enrolled as a mathematics student at the Technical University in Berlin where he completed his studies and obtained his Ph D writing a thesis on Padé Approximation under the supervision of Christian Pommerenke.

Herbert’s first position in academic life was in the statistics department at the Technical University in Berlin. His interests included environmental statistics, business statistics, econometrics, and special models for the environment, economy and management. His enthusiasm for the Russian language and

culture started in the 1970's and he frequently organised excursions to Moscow and accompanied student groups there during summer semesters.
In the early eighties he moved from the Technical University to the Technische Fachhochschule Berlin (TFH) and his interest in mathematics revived. The book General Orthogonal Polynomials (1992), co-authored with Vilmos Totik, has become a standard reference. His most significant papers include "Extremal domains associated with an analytic function" (1985), "Poles and zeros of best rational approximants for $|x|$" (1994),"Spurious poles in Padé approximation" (1998), "Best uniform rational approximation of $|x|^\alpha$ on [0,1]" (2003) , "Asymptotic distribution of zeros of quadratic Hermite-Padé polynomials associated with the exponential function" (2006) and, most recently, "Proof of the Bessis-Moussa-Villani Conjecture" which will appear shortly in Acta Mathematica.

Herbert died on 22 April 2013 in Berlin after a two-year battle with pancreatic cancer. He was an outstanding, innovative and versatile mathematician who solved several deep problems; a man of eclectic intellectual interests that included art, architecture, philosophy and psychoanalysis; an expert on the writings of Goethe; and a treasured beloved friend of all those who knew him.
Kathy Driver

Topic #3 ---------- OP-SF NET 20.4 --------- July 15, 2013

From: OP-SF NET Editors
Subject: Memorial issues for Gonchar and Stahl

[This item was sent to [SIAM-OPSF] by Paul Nevai on June 10, 2013]

CALL FOR PAPERS

Journal of Approximation Theory (JAT) and Matematicheskii Sbornik (MatSb) decided to join forces to dedicate some issues to the memory of Andrei Aleksandrovich Gonchar and Herbert Stahl.

The deadline for submissions to these special issues is December 31, 2013.

All manuscripts for JAT should be submitted electronically via Elsevier's EES system; see

http://www.ees.elsevier.com/jat

Please click on the "Submit New Manuscript" button and then "Choose Article Type" by selecting "JAT_GONCHAR_STAHL_SPECIAL". Then follow instructions. If you have problems submitting the manuscript electronically, then please email to jat@elsevier.com for help (instead of contacting any of the editors directly). In addition, manuscripts intended for consideration in MatSb only may also be submitted via

http://www.mathnet.ru/eng/sm

using the "Submit a manuscript" button.

All papers will be subject to standard editorial and refereeing procedures conducted jointly by JAT and MatSb.

The subject area of all papers should fall within the loosely defined areas of interest of Andrei Aleksandrovich and Herbert.

At the end of the process, the accepted papers will be divided by a more or less random process between JAT and MatSb taking into consideration the authors' wishes if any. Hence, if you want your paper to be considered for only one of the journals, please mention this explicitly in your letter of submission.

The papers in MatSb will be published in Russian and, if necessary, they will be translated into Russian free of charge to the authors, but then, almost immediately afterward, they will be published also in English in Sbornik: Mathematics.

The papers in JAT will be published in their original language although JAT reserves the right not to publish in languages that can represent typesetting difficulties.

Please note that all inquiries, except issues related to the electronic submission, should be addressed to Boris Kashin (kashin@mi.ras.ru) and Paul Nevai (paul@nevai.us).

We are looking forward to commemorating and celebrating with you the lives of Andrei Aleksandrovich Gonchar and Herbert Stahl.

Boris Kashin and Sergey Suetin (on behalf of MatSb)

Paul Nevai and Vilmos Totik (on behalf of JAT)

[Editors' Note: For a short note on A. A. Gonchar by Guillermo López Lagomasino, see OP-SF NET 19.6, Topic #3. A much longer article about Gonchar, with contributions by Alexander I. Aptekarev, Ralitza K. Kovacheva, Guillermo López Lagomasino, Francisco Marcellán, Andrei Martínez Finkelshtein, Paul Nevai, John Nuttall, Vasiliy A. Prokhorov, Evguenii A. Rakhmanov, Edward B. Saff, Sergey P. Suetin and Richard S. Varga appears in Journal of Approximation Theory 172 (2013), A1–A13.]

Topic #4 ---------- OP-SF NET 20.4 --------- July 15, 2013

From: OP-SF NET Editors
Subject: Frank Olver, by Roderick Wong

In the June issue of SIAM News, there is a detailed obituary by Roderick Wong of Frank Olver, whose death was announced in our May issue.

Read it online at

http://www.siam.org/news/news.php?id=2074

Topic #5 ---------- OP-SF NET 20.4 --------- July 15, 2013

From: OP-SF NET Editors
Subject: Conference on the occasion of Richard Askey's 80th birthday

As announced in OP-SF NET 20.2, Topic #2, a two-day
conference in Dick Askey's honour will be held on December 6-7, 2013 in Madison, Wisconsin, USA. The conference web site
http://www.math.umn.edu/~stanton/askey80
has been updated to include the list of invited speakers:

George Andrews
Mourad Ismail
Tom Koornwinder
Hung-Hsi Wu

Bruce Berndt
Shaun Cooper
Persi Diaconis
Kathy Driver
Charles Dunkl
Christian Krattenthaler
Willard Miller
Hjalmar Rosengren
Alan Sokal
Vyacheslav Spiridonov (to be confirmed)
Paul Terwilliger
Walter Van Assche
Ole Warnaar
Roderick Wong
Doron Zeilberger

Topic #6 ---------- OP-SF NET 20.4 --------- July 15, 2013

From : OP-SF NET Editors
Subject: Hamza Yesilyurt wins JMAA Ames award

One of the winners of the 2012 JMAA (Journal of Mathematical Analysis and Applications) Ames Awards in pure and applied mathematics
is Hamza Yesilyurt for his paper "Elementary proofs of some identities
of Ramanujan for the Rogers-Ramanujan functions," JMAA 388 (2012), 420-434.

See http://tinyurl.com/ojkt3gh

Topic #7 ---------- OP-SF NET 20.4 --------- July 15, 2013

From : OP-SF NET Editors
Subject: Book on Applications of q-Calculus in Operator Theory

[This is from the site:
http://www.springer.com/mathematics/analysis/book/978-1-4614-6945-2]

A A. Aral, A V. Gupta and A R. P. Agarwal
Applications of q-calculus in operator theory
Springer-Verlag, 2013, $109.00
ISBN 978-1-4614-6945-2
(eBook version will be available soon.)

- The first book on q-calculus in approximation theory
- Provides a good resource for researchers and teachers
- Features many applications of q calculus in the theory of approximation

The approximation of functions by linear positive operators is an important research topic in general mathematics and it also provides powerful tools to application areas such as computer-aided geometric design, numerical analysis, and solutions of differential equations. q-Calculus is a generalization of many subjects, such as hypergeometric series, complex analysis, and particle physics. This monograph is an introduction to combining approximation theory and q-Calculus with applications, by using well- known operators. The presentation is systematic and the authors include a brief summary of the notations and basic definitions of q-calculus before delving into more advanced material. The many applications of q-calculus in the theory of approximation, especially on various operators, which includes convergence of operators to functions in real and complex domain forms the gist of the book.
This book is suitable for researchers and students in mathematics, physics and engineering, and for professionals who would enjoy exploring the host of

mathematical techniques and ideas that are collected and discussed in the book.
Content Level » Research
Keywords » Voronovskaya's theorem - generating functions - q-Bernstein polynomials - q-Durrmeyer operators - q-calculus - q-integers

Topic #8 ---------- OP-SF NET 20.4 --------- July 15, 2013

From : OP-SF NET Editors
Subject: Preprints in arXiv.org

The following preprints related to the fields of orthogonal polynomials and special functions were posted or cross-listed to one of the subcategories of arXiv.org, mostly during May and June 2013.

http://arxiv.org/abs/1305.0161
On some properties of the Mittag-Leffler function E_α(-t^α), completely monotone for t > 0 with 0 < α< 1
Francesco Mainardi

http://arxiv.org/abs/1305.2509
On the dimensions of the oscillator algebras induced by orthogonal polynomials
G. Honnouvo, K. Thirulogasanthar

http://arxiv.org/abs/1305.2644
Matrix Orthogonal Polynomial in the theory of Full Kostant-Toda Systems
Amílcar Branquinho, Ana Foulquié Moreno, Ana Mendes

http://arxiv.org/abs/1305.3028
Determination of S-curves with applications to the theory of nonhermitian orthogonal polynomials
Gabriel Álvarez, Luis Mart\'\inez Alonso, Elena Medina

http://arxiv.org/abs/1305.0666
Special polynomials related to the supersymmetric eight-vertex model. I. Behaviour at cusps
Hjalmar Rosengren

http://arxiv.org/abs/1305.3239
A class of orthogonal functions given by a three term recurrence formula
Cleonice F. Bracciali, John H. McCabe, Teresa E. Pérez, A. Sri Ranga

http://arxiv.org/abs/1305.0687
Computer Algebra Algorithms for Special Functions in Particle Physics
Jakob Ablinger

http://arxiv.org/abs/1305.0938
Turán type inequalities for generalized inverse trigonometric functions
Árpád Baricz, Barkat Ali Bhayo, Matti Vuorinen

http://arxiv.org/abs/1305.2174
A gamma function in two variables
Mohamed El Bachraoui

http://arxiv.org/abs/1305.2613
An electrostatic depiction of the validity of the Riemann Hypothesis and a formula for the N-th zero at large N
Andre' LeClair

http://arxiv.org/abs/1305.0226
Hardy's type inequality for the over critical exponent associated with the Dunkl transform
Rahmouni Atef

http://arxiv.org/abs/1305.4083
Integral representations and properties of some functions involving the logarithmic function
Feng Qi, Wen-Hui Li

http://arxiv.org/abs/1305.5891
Some special values of hypergeometric series related to central values of automorphic L-functions
Akihito Ebisu

http://arxiv.org/abs/1305.7153
A sharpened estimate on the pseudo-Gamma function
Yuanyou Furui Cheng, Gongbao Li

http://arxiv.org/abs/1306.0496
Zeta of 2 and Euler constant: on a mathematical metaphor of Jonathan Sondow
Andrei Vieru

http://arxiv.org/abs/1306.2989
On Dümbgen's exponentially modified Laplace continued fraction for Mill's ratio
Florin Avram

http://arxiv.org/abs/1306.3265
Painleve Field Theory
G. Aminov, S. Arthamonov, A. Levin, M. Olshanetsky, A. Zotov

http://arxiv.org/abs/1306.3711
Riemann Hypothesis: Architecture of a conjecture "along" the lines of Pólya. From trivial zeros and Harmonic Oscillator to information about non-trivial zeros of the Riemann zeta-function
Stefano Beltraminelli, Danilo Merlini, Sergey Sekatskii

http://arxiv.org/abs/1306.5280
Mellin transforms with only critical zeros: Legendre functions
Mark W. Coffey, Matthew C. Lettington

http://arxiv.org/abs/1306.5281
Mellin transforms with only critical zeros: Chebyshev and Gegenbauer functions
Mark W. Coffey, Matthew C. Lettington

http://arxiv.org/abs/1306.5328
Remarks on Slater's asymptotic expansions of Kummer functions for large values of the $a-$parameter
Nico M Temme

http://arxiv.org/abs/1306.6181
A lower bound for the minimum deviation of the Chebyshev polynomial on a compact real set
Klaus Schiefermayr

http://arxiv.org/abs/1306.6182
An upper bound for the logarithmic capacity of two intervals
Klaus Schiefermayr

http://arxiv.org/abs/1306.6220
Some new properties of Jacobi's theta functions
Klaus Schiefermayr

http://arxiv.org/abs/1306.6232
Counting words with Laguerre series
Jair Taylor

http://arxiv.org/abs/1306.5873
Inequalities for the Jacobian elliptic functions with complex modulus
Klaus Schiefermayr

http://arxiv.org/abs/1306.5911
A unique method to evaluate the general integral $\int_0^\infty dx\frac{\sin ^a px \cos ^c qx}{x^b} $
Joseph Amal Nathan

http://arxiv.org/abs/1306.4225
Note on Malmstèn's paper De Integralibus quibusdam definitis seriebusque infinitis
Alexander Aycock

http://arxiv.org/abs/1305.2126
The singular and the 2:1 anisotropic Dunkl oscillators in the plane
Vincent X. Genest, Luc Vinet, Alexei Zhedanov

http://arxiv.org/abs/1305.3711
Information-theoretic-based spreading measures of orthogonal polynomials
Jesus S. Dehesa, A. Guerrero, Pablo Sánchez-Moreno

http://arxiv.org/abs/1305.3819
Linear partial q-difference equations on q-linear lattices and their bivariate q-orthogonal polynomial solutions
I. Area, N. Atakishiyev, E. Godoy, J. Rodal

http://arxiv.org/abs/1305.4449
Relative Fisher information of discrete classical orthogonal polynomials
Jesus S. Dehesa, Pablo Sánchez-Moreno, Rafael J. Yáñez

http://arxiv.org/abs/1305.5156
A Generalization of Classical Symmetric Orthogonal Functions Using a Symmetric Generalization of Sturm-Liouville Problems
Mohammad Masjed-Jamei

http://arxiv.org/abs/1305.5385
New isometry of Krall-Laguerre orthogonal polynomials in martingale spaces
Edmundo J. Huertas, Nuria Torrado, Fabrizio Leisen

http://arxiv.org/abs/1305.5669
A basic class of symmetric orthogonal polynomials using the extended Sturm-Liouville theorem for symmetric functions
Mohammad Masjed-Jamei

http://arxiv.org/abs/1305.6647
Orthogonal Polynomials on the Unit Circle with Fibonacci Verblunsky Coefficients, II. Applications
David Damanik (Rice University), Paul Munger (Rice University), William N. Yessen (UC Irvine)

http://arxiv.org/abs/1305.7453
Gauss-Seed Nets of Sturm-Liouville Problems With Energy-Independent Characteristic Exponents and Related Sequences of Exceptional Orthogonal Polynomials I. Canonical Darboux Transformations Using AEH Functions

http://arxiv.org/abs/1305.7510
Inequalities for the one-dimensional analogous of the Coulomb potential
Árpád Baricz, Tibor K. Pogány

http://arxiv.org/abs/1306.6421
Asymptotics for Laguerre-Sobolev type ortogonal polynomials modified within their oscillatory regime
Edmundo J. Huertas, F. Marcellán, María F. Pérez, Yamilet Quintana

http://arxiv.org/abs/1306.6448
Solution of the constant radial acceleration problem using Weierstrass elliptic and related functions
Dario Izzo, Francesco Biscani

http://arxiv.org/abs/1306.6697
Poly-Bernoulli polynomials arising from umbral calculus
Dae san Lom, Taekyun Kim

http://arxiv.org/abs/1306.6895
q-Bernoulli polynomials and q-umbral calculus
Dae san Kim, Taekyun Kim

http://arxiv.org/abs/1306.6901
Some identities of q-Euler polynomials arising from q-umbral calculus
Dae San Kim, Taekyun Kim

http://arxiv.org/abs/1306.0209
Determining Singularities Using Row Sequences of Padé-orthogonal Approximants
N. Bosuwan, G. López Lagomasino, E.B. Saff

http://arxiv.org/abs/1306.0794
Characterization theorem for Laguerre-Hahn orthogonal polynomials on non-uniform lattices
Amílcar Branquinho, Maria das Neves Rebocho

http://arxiv.org/abs/1306.2492
Two Finite Classes of Orthogonal Functions
Mohammad Masjed-Jamei, Wolfram Koepf

http://arxiv.org/abs/1306.3835
Multiple orthogonal polynomials associated with an exponential cubic weight
Walter Van Assche, Galina Filipuk, Lun Zhang

http://arxiv.org/abs/1305.2404
A product formula for multivariate Rogers-Szegö polynomials
Stephen Cameron, C. Ryan Vinroot

http://arxiv.org/abs/1305.3071
Asymptotics of L_p-norms of Hermite polynomials and Rényi entropy of Rydberg oscillator states
Alexander I. Aptekarev, Jesús S. Dehesa, Pablo Sánchez-Moreno, Dmitrii N. Tulyakov

http://arxiv.org/abs/1305.3220
On the Identities Involving Special Polynomials Arising From Point of View of Fractional Calculus
Serkan Araci, Erdoğan Şen, Mehmet Acikgoz, Kamil Oruçoğlu

http://arxiv.org/abs/1305.5044
Uniform Treatment of Darboux's Method and the Heisenberg Polynomials
Sai-Yu Liu, R. Wong, Yu-Qiu Zhao

http://arxiv.org/abs/1305.1674
On form factors and Macdonald polynomials
Michael Lashkevich, Yaroslav Pugai (Landau Inst. and MIPT)

http://arxiv.org/abs/1306.0745
Irreducibility of generalized Hermite-Laguerre polynomials
http://arxiv.org/abs/1306.0740
Irreducibility of generalized Hermite-Laguerre polynomials II
http://arxiv.org/abs/1306.0736
Irreducibility of generalized Hermite-Laguerre polynomials III
Shanta Laishram, Tarlok N. Shorey

http://arxiv.org/abs/1306.1224
On polynomials connected to powers of Bessel functions
Victor H. Moll, C. Vignat

http://arxiv.org/abs/1306.4256
The multivariate Krawtchouk polynomials as matrix elements of the rotation group representations on oscillator states
Vincent X. Genest, Luc Vinet, Alexei Zhedanov

http://arxiv.org/abs/1306.4889
On a polynomial transformation of hypergeometric equations, Heun's differential equation and exceptional Jacobi polynomials
Mahouton Norbert Hounkonnou, André Ronveaux

http://arxiv.org/abs/1306.5143
Rational extensions of the quantum harmonic oscillator and exceptional Hermite polynomials
David Gomez-Ullate, Yves Grandati, Robert Milson

http://arxiv.org/abs/1306.6511
Generalized Fibonacci polynomials and Fibonomial coefficients
Tewodros Amdeberhan (Tulane University), Xi Chen (Dalian University of Technology), Victor H. Moll (Tulane University), Bruce E. Sagan (Michigan State University)

http://arxiv.org/abs/1306.6599
Vector polynomials and a matrix weight associated to dihedral groups
Charles F. Dunkl

http://arxiv.org/abs/1306.4263
Ore Polynomials in Sage
Manuel Kauers, Maximilian Jaroschek, Fredrik Johansson

http://arxiv.org/abs/1305.0729
Hyperbolic monodromy groups for the hypergeometric equation and Cartan involutions
Elena Fuchs, Chen Meiri, Peter Sarnak

http://arxiv.org/abs/1305.1892
Recursion Rules for the Hypergeometric Zeta Functions
Alyssa Byrnes, Lin Jiu, Victor H. Moll, Christophe Vignat

http://arxiv.org/abs/1305.1966
Multiple hypergeometric series -- Appell series and beyond
Michael J. Schlosser

http://arxiv.org/abs/1305.3113
Hypergeometric type functions and their symmetries
Jan Dereziński

http://arxiv.org/abs/1305.5891
Some special values of hypergeometric series related to central values of automorphic L-functions
Akihito Ebisu

http://arxiv.org/abs/1306.2046
New Series Expansions of the Gauss Hypergeometric Function
José Luis López, Nico M. Temme

http://arxiv.org/abs/1306.1754
Efficient and accurate algorithms for the computation and inversion of the incomplete gamma function ratios
Amparo Gil, Javier Segura, Nico M. Temme

http://arxiv.org/abs/1305.0228
On the Sums of Inverse Even Powers of Zeros of Regular Bessel Functions
Jorge L. deLyra

http://arxiv.org/abs/1305.1849
Marichev-Saigo-Maeda fractional integration operators of generalized Bessel functions
Saiful. R. Mondal, K. S. Nisar

http://arxiv.org/abs/1306.1224
On polynomials connected to powers of Bessel functions
Victor H. Moll, C. Vignat

http://arxiv.org/abs/1306.5663
Riemann-Hilbert approach to gap probabilities for the Bessel process
Manuela Girotti

http://arxiv.org/abs/1305.6462
Painleve Equations and Complex Reflections
Philip Boalch

http://arxiv.org/abs/1305.6593
Geometry of moduli spaces of meromorphic connections on curves, Stokes data, wild nonabelian Hodge theory, hyperkahler manifolds, isomonodromic deformations, Painleve equations, and relations to Lie theory
Philip Boalch

http://arxiv.org/abs/1306.1317
Existence and Uniqueness of Tronquée Solutions of the Third and Fourth Painlevé Equations
Yu Lin, Dan Dai, Pieter Tibboel

http://arxiv.org/abs/1306.4959
Ultradiscrete Painleve VI with parity variables
Kouichi Takemura, Terumitsu Tsutsui

http://arxiv.org/abs/1306.5045
Quicksilver Solutions of a q-difference first Painlevé equation
Nalini Joshi

http://arxiv.org/abs/1305.2028
On some mean value results for the zeta-function in short intervals
Aleksandar Ivić

http://arxiv.org/abs/1305.2685
On a hybrid fourth moment involving the Riemann zeta-function
Aleksandar Ivić, Wenguang Zhai

http://arxiv.org/abs/1305.3844
On the exact location of the non-trivial zeros of Riemann's zeta function
Juan Arias de Reyna (Univ. Sevilla, Spain), Jan van de Lune (formerly at the CWI, Amsterdam)

http://arxiv.org/abs/1305.5429
Gaussian Mills ratio is completely monotone
Armengol Gasull, Frederic Utzet

http://arxiv.org/abs/1305.6247
A note on products involving zeta(3) and Catalan's constant
Jean-Paul Allouche

http://arxiv.org/abs/1305.6529
Sum formula for finite multiple zeta values
Shingo Saito, Noriko Wakabayashi

http://arxiv.org/abs/1305.6215
On some interrelations of generalized q-entropies and a generalized Fisher information, including a Cramér-Rao inequality
Jean-François Bercher (LIGM)

http://arxiv.org/abs/1305.6647
Orthogonal Polynomials on the Unit Circle with Fibonacci Verblunsky Coefficients, II. Applications
David Damanik (Rice University), Paul Munger (Rice University), William N. Yessen (UC Irvine)

http://arxiv.org/abs/1306.5371
A partition inequality involving products of two q-Pochhammer symbols
Alexander Berkovich, Keith Grizzell

http://arxiv.org/abs/1306.6444
A symmetric generalization of Sturm-Liouville problems in q-difference spaces
I. Area, M. Masjed-Jamei

http://arxiv.org/abs/1306.2596
Generalizations of Ramanujan's reciprocity formula and the Askey-Wilson integral
Chuanan Wei, Xiaoxia Wang, Qinglun Yan

http://arxiv.org/abs/1306.1362
Relativistic Coulomb Integrals and Zeilberger's Holonomic Systems Approach II
Christoph Koutschan, Peter Paule, Sergei K. Suslov

http://arxiv.org/abs/1305.6018
Averages of Ramanujan sums: Note on two papers by E. Alkan
László Tóth

http://arxiv.org/abs/1306.3919
Holomorphic projections and Ramanujan's mock theta functions
Özlem Imamoglu, Martin Raum, Olav K. Richter

http://arxiv.org/abs/1306.5592
Extension of a summation due to Ramanujan
Arjun K. Rathie

http://arxiv.org/abs/1306.6668
Generalizing and Implementing Michael Hirschhorn's Amazing Algorithm for Proving Ramanujan-Type Congruences
Edinah Gnang, Doron Zeilberger

http://arxiv.org/abs/1306.4081
Computing the truncated theta function via Mordell integral
Alexey Kuznetsov

http://arxiv.org/abs/1305.4818
Computer-Assisted Proofs of Some Identities for Bessel Functions of Fractional Order
Stefan Gerhold, Manuel Kauers, Christoph Koutschan, Peter Paule, Carsten Schneider, Burkhard Zimmermann

Topic #9 ---------- OP-SF NET 20.4 --------- July 15, 2013

From: OP-SF NET Editors
Subject: About the Activity Group

The SIAM Activity Group on Orthogonal Polynomials and Special Functions consists of a broad set of mathematicians, both pure and applied. The Group also includes engineers and scientists, students as well as experts. We have around 130 members scattered about in more than 20 countries. Whatever your specialty might be, we welcome your participation in this classical, and yet modern, topic. Our WWW home page is:
http://math.nist.gov/opsf/

This is a convenient point of entry to all the services provided by the Group. Our Webmaster is Bonita Saunders (bonita.saunders@nist.gov).

The Activity Group sponsors OP-SF NET, an electronic newsletter, and SIAM-OPSF (OP-SF Talk), a listserv, as a free public service; membership in SIAM is not required. OP-SF NET is transmitted periodically through a post to OP-SF Talk. The OP-SF Net Editors are Diego Dominici (dominicd@newpaltz.edu) and Martin Muldoon (muldoon@yorku.ca).

Back issues of OP-SF NET can be obtained at the WWW addresses:
http://staff.science.uva.nl/~thk/opsfnet
http://math.nist.gov/~DLozier/OPSFnet/

SIAM-OPSF (OP-SF Talk), which was recently moved to a SIAM server, facilitates communication among members and friends of the Activity Group. To subscribe or to see a link the archive of all messages, go to http://lists.siam.org/mailman/listinfo/siam-OPSF and follow the instructions under the sub-heading "Subscribing to SIAM-OPSF". To contribute an item to the discussion, send email to siam-opsf@siam.org . The moderators are Bonita Saunders (bonita.saunders@nist.gov) and Diego Dominici (dominicd@newpaltz.edu).

SIAM has several categories of membership, including low-cost categories for students and residents of developing countries. In addition, there is the possibility of reduced rate membership for the members of several societies with which SIAM has a reciprocity agreement; see
http://www.siam.org/membership/individual/reciprocal.php
For current information on SIAM and Activity Group membership, contact:

Society for Industrial and Applied Mathematics
3600 University City Science Center
Philadelphia, PA 19104-2688 USA
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email: service@siam.org
WWW : http://www.siam.org
http://www.siam.org/membership/outreachmem.htm

Topic #10 ---------- OP-SF NET 20.4 --------- July 15, 2013

From: OP-SF NET Editors
Subject: Submitting contributions to OP-SF NET and SIAM-OPSF (OP-SF Talk)

To contribute a news item to OP-SF NET, send email to one of the OP-SF Editors dominicd@newpaltz.edu or muldoon@yorku.ca .
Contributions to OP-SF NET 20.5 should be sent by September 1, 2013.

OP-SF NET is an electronic newsletter of the SIAM Activity Group on Special Functions and Orthogonal Polynomials. We disseminate your contributions on anything of interest to the special functions and orthogonal polynomials community. This includes announcements of conferences, forthcoming books, new software, electronic archives, research questions, and job openings. OP-SF NET is transmitted periodically through a post to SIAM-OPSF (OP-SF Talk).

SIAM-OPSF (OP-SF Talk) is a listserv of the SIAM Activity Group on Special Functions and Orthogonal Polynomials, which facilitates communication among members, and friends of the Activity Group. See the previous Topic. To post an item to the listserv, send email to siam-opsf@siam.org .

WWW home page of this Activity Group:
http://math.nist.gov/opsf/
Information on joining SIAM and this activity group: service@siam.org

The elected Officers of the Activity Group (2011-2013) are:
Chair: Francisco Marcellán
Vice Chair: Jeff Geronimo
Program Director: Diego Dominici
Secretary: Peter Clarkson
The appointed officers are:
Diego Dominici, OP-SF NET co-editor and OP-SF Talk moderator
Martin Muldoon, OP-SF NET co-editor
Bonita Saunders, Webmaster and OP-SF Talk moderator