

OP - SF NET - Volume 22, Number 1 – January 15, 2015

Editors:

Diego Dominici
Martin Muldoon

dominicd@newpaltz.edu
muldoon@yorku.ca

The Electronic News Net of the
SIAM Activity Group on Orthogonal Polynomials and Special Functions

<http://math.nist.gov/opsf/>

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Calendar of Events:

March 3-6, 2015

Conference on Representation Theory, Special Functions and Painlevé Equations,
RIMS, Kyoto, Japan

<http://www2.kobe-u.ac.jp/~mhsaito/rims1503/>

May 10-12, 2015

International Conference on Orthogonal Polynomials and q-Series, celebrating the
70th birthday of Mourad Ismail, Orlando, Florida, USA

<http://math.cos.ucf.edu/opqs15/opqs2015.html>

June 1-5, 2015

13th International Symposium on Orthogonal Polynomials, Special
Functions and Applications (OPSFA13), Gaithersburg, Maryland, USA

<http://www.siam.org/meetings/opsfa13/>

June 7-11, 2015

“Asymptotics in integrable systems, random matrices and random

processes and universality”, in honour of Percy Deift’s 70th birthday,
Centre de Recherches Mathématiques, Montreal, Canada
http://www.crm.umontreal.ca/2015/Deift15/index_e.php

June 8-12, 2015

V Iberoamerican Workshop on Orthogonal Polynomials, Mexico City
<http://paginas.matem.unam.mx/eibpoa2015/index.php/en/>

June 10-13, 2015

AMS-EMS-SPM International meeting, with a special session on Orthogonal Polynomials and Integrable Systems, Porto, Portugal
<http://aep-math2015.spm.pt/>

June 15-18, 2015

Progress on Difference Equations, Covilhã, Portugal
<http://www.pode2015.ubi.pt/>

August 9-14, 2015

Orthogonal and Multiple Orthogonal Polynomials, Oaxaca, Mexico
<http://www.birs.ca/events/2015/5-day-workshops/15w5022>

August 10-14, 2015

ICIAM 2015 (International Congress on Industrial and Applied Mathematics),
Beijing, China
<http://www.iciam2015.cn/>

August 26-28, 2015

Symposium "The Real World is Complex" in honour of Christian Berg, in
Copenhagen, Denmark
<http://www.math.ku.dk/~henrikp/cb/>

September 28-30, 2015

International Conference on Analysis, Applications and Computations, in
memory of Lee Lorch, Fields Institute, Toronto, Canada
<http://www.fields.utoronto.ca/programs/scientific/15-16/analysisapplications/>

Topic #1 ----- OP-SF NET 22.1 ----- January 15, 2015

From: Martin Muldoon
Subject: Mizan Rahman 1932-2015

Just before going to press, we heard that Mizan Rahman, Distinguished Professor Emeritus at Carleton University died on January 5, 2015. Mizan was a well-known contributor to the areas of orthogonal polynomials and special functions, including his co-authorship, with George Gasper, of *Basic Hypergeometric Series*, 2nd ed., Cambridge University Press, 2004. He also had a considerable literary *oeuvre*, much of it in Bengali. See (thanks to Tom Koornwinder and Mourad Ismail for these links):

http://en.wikipedia.org/wiki/Mizan_Rahman

http://www.deshitv.com/deshitv_news/news_reports/news_display.asp?iNewsID=502

<http://mukto-mona.com/wordpress/?author=56>

<http://www.bas.org.bd/fellowship/list-of-fellows-/userprofile/mizanurrahman.html>

<http://biggani.org/?p=1019>

Topic #2 ----- OP-SF NET 22.1 ----- January 15, 2015

From: Diego Dominici and Martin Muldoon
Subject: Editorship of OPSF-NET

After several years of service, we have decided to step down as editors and the Activity Group officers are in the process of finding a new editor or editors. An announcement can be expected soon.

Topic #3 ----- OP-SF NET 22.1 ----- January 15, 2015

From: OP-SF NET Editors
Subject: Contributed talks at OPSFA 13

We want to draw the attention of readers to the possibility of submitting a contributed paper in lecture or poster format during OPSFA 13, the 13th International Symposium on Orthogonal Polynomials, Special Functions and Applications, to be held in Gaithersburg, Maryland, USA during June 1-5, 2015. See <http://www.siam.org/meetings/opsfa13/>

Contributed presentations in lecture or poster format are invited in all areas consistent with the conference themes. A lecture format is generally a 25-minute oral presentation with an additional 5 minutes for discussion. Talk lengths will be determined by the co-chairs at the close of submissions. A poster format involves the use of non-electronic visual aids for mounting on a 4' x 6' or 4' x 8' poster board. A poster session is two hours long. Each contributor, either for a lecture or a poster, must submit a title and a brief abstract not to exceed 75 words. Please submit contributed presentations in lecture or poster format using the Conference Management System available at: <http://meetings.siam.org/start.cfm?CONFCODE=fa15>.

Deadline for submission of contributed abstracts: February 2, 2015

For details see:
<http://www.siam.org/meetings/opsfa13/submissions.php>

Topic #4 ----- OP-SF NET 22.1 ----- January 15, 2015

From: Walter Van Assche

Subject: Report: Foundations of Computational Mathematics 2014

The conferences on Foundations of Computational Mathematics are on topics at the interface of mathematics and computation. So far there have been FoCM conferences in Rio de Janeiro (1997), Oxford (1999), Minneapolis (2002), Santander (2005), Hong Kong (2008), Budapest (2011) and the latest meeting was in Montevideo, Uruguay from December 11 to December 20, 2014. These conferences usually are arranged into a number of periods emphasizing different topics within the scope of FoCM. In the mornings there are plenary talks by distinguished speakers, in the afternoons there are workshops devoted to a different theme.

I attended the second and third period of the conference. The second period had workshops in *Approximation Theory* (organized by Nira Dyn, Tom Lyche, and Holger Wendland) and a related plenary talk by Pencho Petrushev: *On the characterization of approximation spaces in nonlinear approximation*.

There was also a workshop on *Random Matrices* (organized by Alan Edelman and Raj Rao) and on *Symbolic Analysis* (organized by Evelyne Hubert, Peter Paule and Enrique Reyes) dealing with topics which are of interest to our Activity Group. However, I was mostly attending the conference for the third period, which had the workshop *Special Functions and Orthogonal Polynomials*, organized by Peter Clarkson, Kerstin Jordaan, and Francisco Marcellán, and a plenary talk by Andrei Martínez-Finkelshtein where he explained that *Zeros (of some polynomials) prefer curves*. As usual Andrei's talk was very well organized with interesting slides and nice transitions between the slides, and he succeeded well in explaining the potential theory and the symmetry property (S-property, where S stands for Symmetry or Stahl) for these curves. He also gave a nice open problem which he explained very well by using animated graphics of the zeros.

The workshop on *Special Functions and Orthogonal Polynomials* ran during three days and had a number of 30-minute talks and two 50-minute (semi-plenary) talks. It was nice to hear a number of talks of participants from South and Central America, such as Alagacone Sri Ranga, Luis Garza, Cleonice Bracciali, Primitivo Acosta-Humánez, Luis Verde-Star, Jan-Felipe van Diejen and Natig Atakishiyev. I particularly liked the talk of Arie Iserles who introduced the notion of *kissing polynomials*. Unfortunately one of the speakers did not come, so Peter Clarkson had to step in at the last moment, but he nevertheless managed to give a nice talk.

I recommend anyone to go to the next FoCM conference. It has not yet been decided where this will be held, but it will probably be in 2017 or 2018. Information about the Society of Foundations of Computational Mathematics can be found at <http://focm-society.org/index.php>.

Walter Van Assche, KU Leuven

Topic #5 ----- OP-SF NET 22.1 ----- January 15, 2015

From: Henrik Laurberg Pedersen Henrikp@math.ku.dk

Subject: Announcement: Symposium in honour of Christian Berg

Dear colleagues, we are happy to announce the symposium "The Real World is Complex" in honour of Christian Berg, in Copenhagen, Denmark, August 26-28, 2015. For further information, registration, and submission of abstract, please see

<http://www.math.ku.dk/~henrikp/cb/>

Invited speakers:

Antonio Durán, University of Seville, Spain
Erik Koelink, Radboud University Nijmegen, The Netherlands
Paul Ressel, Catholic University Eichstätt-Ingolstadt, Germany
Mikhail Sodin, Tel Aviv University, Israel
Ryszard Szwarc, Wrocław University, Poland
Vilmos Totik, University of Széged, Hungary and University of South Florida, USA

The aim of the symposium is to bring together experts in areas related to classical analysis, harmonic analysis, orthogonal polynomials, approximation theory, potential theory, and special functions to exchange knowledge. Furthermore, the meeting will serve as a celebration of the scientific contributions of Christian Berg. The title "The Real World is Complex" was chosen to illustrate the viewpoint in many of Christian Berg's contributions.

Looking forward to seeing you in August.

Jacob Stordal Christiansen and Henrik Laurberg Pedersen

Topic #6 ----- OP-SF NET 22.1 ----- January 15, 2015

From: Rul Ferreira

Subject: Announcement: Progress on Difference Equations 2015

On behalf of the Organizing Committee, it is a pleasure to invite you to the ninth edition of the conference "Progress on Difference Equations" which will be held in the University of Beira Interior, Portugal, from June 15 to 18, 2015. This conference, organized under the auspices of the International Society of Difference Equations, aims to be a forum where researchers can share their work and discuss the latest developments in the areas of difference equations, discrete dynamical systems and their applications.

University of Beira Interior (UBI) is located in the city Covilhã, one of the main urban centres of the Beira Interior region, in central Portugal.

The invited plenary speakers for PODE2015 are:

- Martin Bohner (Missouri University of Science and Technology)
- Saber Elaydi (Trinity University)
- Galina Filipuk (Warsaw University)
- Armengol Gasull (Universitat Autònoma de Barcelona)
- Alberto Pinto (University of Porto)

- Christian Pötzsche (University of Klagenfurt).

For additional information and registration, please consult the conference website <http://www.pode2015.ubi.pt/> and, if you have any additional question, please contact us at pode2015@ubi.pt.

We look forward to seeing you in Covilhã,

Rui Ferreira
Chair of the Organizing Committee

Topic #7 ----- OP-SF NET 22.1 ----- January 15, 2015

From: OP-SF NET Editors
Subject: New book by Nico Temme on asymptotic analysis

Nico M. Temme - Asymptotic Methods for Integrals
World Scientific, Singapore.
Publication date: January 2015
ISBN: 978-981-4612-15-9 (hardcover)
ISBN: 978-981-4612-17-3 (ebook)
Further information: <http://dx.doi.org/10.1142/9195>

Contents of the parts:

- Basic Methods for Integrals
- Basic Methods: Examples for Special Functions
- Other Methods for Integrals
- Uniform Methods for Integrals
- Uniform Methods for Laplace-Type Integrals
- Uniform Examples for Special Functions
- A Class of Cumulative Distribution Functions

For the Contents of chapters, sections, and subsections, see:
<https://repository.cwi.nl/docs/11/22/22548B.pdf>

Topic #8 ----- OP-SF NET 22.1 ----- January 15, 2015

From: Howard Cohl howard.cohl@nist.gov
Subject: NIST Postdoc position in Special Functions

[This item was sent to OP-SF NET on December 18, 2014. – Eds.]

I wish to announce a postdoc opening in Orthogonal Polynomials and Special Functions at NIST in Gaithersburg, Maryland. Applicants must be U.S. citizens.

The next application deadline is February 1, 2015.

Interested individuals should contact me at howard.cohl@nist.gov for further information before submitting an application. The NIST postdoc program is administered by the National Research Council. The annual base salary for NIST NRC Postdocs who starts in CY 2015 will be \$66,919 plus \$5,500 per year for travel and equipment. For general information about the program see <http://sites.nationalacademies.org/pga/rap>, <http://nrc58.nas.edu/RAPLab10/Opportunity/Program.aspx?LabCode=50>, and <http://www.nist.gov/itl/math/mcsd-postdoctoral-opportunities.cfm>.

This opening in Special Functions is connected with a multidisciplinary program of research and development that focuses on functions that have recognized or potential importance in scientific applications. Research proposals relating to mathematical analysis and computer science in the area of orthogonal polynomials and special functions will be considered.

Topic #9 ----- OP-SF NET 22.1 ----- January 15, 2015

From: Daniel W. Lozier daniel.lozier@nist.gov
Subject: NIST announces a special function evaluation service

Version 1.0 (beta) of the DLMF Standard Reference Tables web service (DLMF Tables) generates, on demand from users, accurate values of selected special functions for real arguments and parameters. The required accuracy is specified in advance. All computation errors (truncation and rounding) are analyzed a priori, and the precision is determined on-the-fly to satisfy the required accuracy.

DLMF Tables has the capability to read arguments and function values from an external source and provide a comparison with the computed accurate values up to 500 decimal digits.

The goal of DLMF Tables is to provide a platform for computing numerical values of special functions to user-defined accuracy with guaranteed error bounds. Its most important use is to provide a standard of comparison for testing numerical software.

DLMF Tables is accessible at <http://dlmftables.uantwerpen.be/>. It has the following features:

1. arguments are read from web form or uploaded file;
2. user-specified accuracy (up to 500 digits);
3. provides strict high-precision enclosures (guaranteed lower and upper bounds) for each function value;
4. enclosures are displayed with several digits beyond the user-specified accuracy;
5. optionally, user can specify a desired mode of rounding:
 - * round to nearest even,
 - * round up (toward +infinity),
 - * round down (toward -infinity),
 - * round toward zero, or
 - * round away from zero;
6. for comparisons, input values are aligned below the accurate values with digit differences clearly indicated and approximate relative errors are also provided.

The functions are keyed to <http://dlmf.nist.gov>, the NIST Digital Library of

Mathematical Functions. Functions from the following DLMF chapters are included:

- 4. Elementary Functions
- 7. Error Functions, Dawson's and Fresnel Integrals
- 8. Incomplete Gamma and Related Functions
- 10. Bessel Functions
- 13. Confluent Hypergeometric Functions
- 15. Hypergeometric Functions
- 16. Generalized Hypergeometric Functions

More functions are in the pipeline and can be expected this year.

DLMF Tables is the result of a collaboration between the NIST Applied and Computational Mathematics Division and the University of Antwerp Computational Mathematics Research Group. Any comments on the new service will be gratefully received at dlmftables-feedback@nist.gov.

Topic #10 ----- OP-SF NET 22.1 ----- January 15, 2015

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 November and December 2014.

<http://arxiv.org/abs/1411.0002>

A Quick Empirical Reproof of the Asymptotic Normality of the Hirsch Citation Index (First proved by Canfield, Corteel, and Savage)
Shalosh B. Ekhad, Doron Zeilberger

<http://arxiv.org/abs/1411.1371>

Generalizations of generating functions for basic hypergeometric orthogonal polynomials
Howard S. Cohl, Roberto S. Costas-Santos, Philbert R. Hwang

<http://arxiv.org/abs/1411.2455>

Generalized hypergeometric function ${}_3F_2$ with unit argument and negative integral parameter differences
M. A. Shpot

<http://arxiv.org/abs/1411.5116>

Monomial Deformations of Certain Hypersurfaces and Two Hypergeometric Functions
Kazuaki Miyatani

<http://arxiv.org/abs/1412.1634>

Monotonicity of ratios of q-Kummer confluent hypergeometric and q-hypergeometric functions and associated Turán types inequalities
Khaled Mehrez, Sergei M. Sitnik

<http://arxiv.org/abs/1412.3957>

Hypergeometric Functions for Projective Toric Curves
Christine Berkesch Zamaere, Jens Forsgård, Laura Felicia Matusevich

<http://arxiv.org/abs/1412.4022>

The Sums of a Double Hypergeometric Series and of the First $m+1$ Terms of ${}_3F_2(a,b,c; (a+b+1)/2, 2c; 1)$ when $c = -m$ is a Negative Integer
Charles F. Dunkl, George Gasper

<http://arxiv.org/abs/1412.7214>

Multivariate Hypergeometric Terms
Garth Payne

<http://arxiv.org/abs/1411.2000>

On the q -Charlier multiple orthogonal polynomials
J. Arvesú, A.M. Ramírez-Aberasturis

<http://arxiv.org/abs/1411.3045>

Perturbations around the zeros of classical orthogonal polynomials
Ryu Sasaki

<http://arxiv.org/abs/1411.4220>

About several classes of bi-orthogonal polynomials and discrete integrable systems
Xiangke Chang, Xiaomin Chen, Xingbiao Hu, Honwah Tam

<http://arxiv.org/abs/1411.5205>

Universality of mesoscopic fluctuations for orthogonal polynomial ensembles
J. Breuer, M. Duits

<http://arxiv.org/abs/1411.5223>

On some 2D orthogonal q -polynomials
Mourad E. H. Ismail, Ruiming Zhang

<http://arxiv.org/abs/1411.6125>

On a pair of difference equations for the ${}_4F_3$ type orthogonal polynomials and related exactly-solvable quantum systems
E.I. Jafarov, N.I. Stoilova, J. Van der Jeugt

<http://arxiv.org/abs/1411.7056>

Inverse Theorem on Row Sequences of Linear Padé-orthogonal Approximation
N. Bosuwan, G. López Lagomasino

<http://arxiv.org/abs/1412.0326>

Slater determinants of orthogonal polynomials
Dimitar Dimitrov, Yuan Xu

<http://arxiv.org/abs/1412.5874>

Ladder operators for solvable potentials connected with exceptional orthogonal polynomials
C. Quesne

<http://arxiv.org/abs/1412.7235>

Bi-orthogonal Polynomial Sequences and the Asymmetric Simple Exclusion Process

Richard Brak

<http://arxiv.org/abs/1411.0903>

Modified Nörlund polynomials

Atul Dixit, Adam Kabza, Victor H. Moll, Christophe Vignat

<http://arxiv.org/abs/1411.2112>

Wilson polynomials/functions and intertwining operators for the generic quantum superintegrable system on the 2-sphere

Willard Miller Jr, Qiushi Li

<http://arxiv.org/abs/1411.2113>

(Quasi)-exact-solvability on the sphere S^n

Willard Miller, Jr., Alexander V. Turbiner

<http://arxiv.org/abs/1411.3120>

Connection formulas for general discrete Sobolev polynomials. Mehler-Heine asymptotics

A. Peña, M.L. Rezola

<http://arxiv.org/abs/1411.3533>

Explicit matrix inverses for lower triangular matrices with entries involving continuous q -ultraspherical polynomials

Noud Aldenhoven

<http://arxiv.org/abs/1411.3646>

Haglund's conjecture on 3-column Macdonald polynomials

Jonah Blasiak

<http://arxiv.org/abs/1411.4220>

About several classes of bi-orthogonal polynomials and discrete integrable systems

Xiangke Chang, Xiaomin Chen, Xingbiao Hu, Honwah Tam

<http://arxiv.org/abs/1411.5257>

An extension of a series containing Laguerre polynomials

A K Rathie, R B Paris

<http://arxiv.org/abs/1411.5262>

A derivation of two quadratic transformations contiguous to that of Gauss via a differential equation approach

M Swathi, A K Rathie, R B Paris

<http://arxiv.org/abs/1411.5527>

A uniform bound for the Lagrange polynomials of Leja points for the unit disk

Amadeo Irigoyen

<http://arxiv.org/abs/1411.7299>

Two-variable q -Jacobi polynomials

Vincent X. Genest, Jean-Michel Lemaire, Luc Vinet, Alexei Zhedanov

<http://arxiv.org/abs/1411.7400>

A Study on q -Appell Polynomials from Determinantal Point of View

Marzieh Eini Keleshteri, Nazim I. Mahmudov

<http://arxiv.org/abs/1411.7398>

Properties of Tensor Hermite Polynomials

Parul Maheshwari, Gautam Mukhopadhyay, Siddhartha SenGupta

<http://arxiv.org/abs/1411.7857>

Rational extensions of the trigonometric Darboux-Pöschl-Teller potential based on para-Jacobi polynomials

B. Bagchi, Y. Grandati, C. Quesne

<http://arxiv.org/abs/1412.0714>

A representation-theoretic proof of the branching rule for Macdonald polynomials

Yi Sun

<http://arxiv.org/abs/1412.1220>

Expansion of Dirichlet L-function on the critical line in Meixner-Pollaczek polynomials

Hiroto Inoue

<http://arxiv.org/abs/1412.1570>

Eventual positivity of Hermitian polynomials and integral operators

Colin Tan

<http://arxiv.org/abs/1412.3026>

On spectral asymptotic of quasi-exactly solvable quartic and Yablonskii-Vorob'ev polynomials

B.Shapiro, Milos Tater

<http://arxiv.org/abs/1412.3931>

Multivariate Poisson-Charlier, Meixner and Hermite-Chebyshev polynomials and Lancaster distributions

Robert Griffiths

<http://arxiv.org/abs/1412.4703>

Critical points of random polynomials and characteristic polynomials of random matrices

Sean O'Rourke

<http://arxiv.org/abs/1412.6364>

Zeros of exceptional Hermite polynomials

A.B.J. Kuijlaars, R. Milson

<http://arxiv.org/abs/1412.7115>

A relation for a class of Racah polynomials

Ilija D. Mishev

<http://arxiv.org/abs/1412.7363>

On reciprocity formula of character Dedekind sums and the integral of products of Bernoulli polynomials

M. Cihat Dağlı, Mümün Can

<http://arxiv.org/abs/1412.8592>

Generalized Macdonald polynomials, spectral duality for conformal blocks and AGT correspondence in five dimensions
Yegor Zenkevich

<http://arxiv.org/abs/1411.1645>

The resurgence properties of the Incomplete gamma function II
Gergő Nemes

<http://arxiv.org/abs/1412.0654>

Series solutions of confluent Heun equations in terms of incomplete Gamma-functions
A.M. Ishkhanyan

<http://arxiv.org/abs/1411.6710>

Theory of Bessel Functions of High Rank - II: Hankel Transforms and Fundamental Bessel Kernels
Zhi Qi

<http://arxiv.org/abs/1411.7069>

Expansion of Infinite Series Containing Modified Bessel Functions of the Second Kind
Guglielmo Fucci, Klaus Kirsten

<http://arxiv.org/abs/1412.0831>

The hard edge tacnode process and the hard edge Pearcey process with non-intersecting squared Bessel paths
Steven Delvaux, Bálint Vető

<http://arxiv.org/abs/1412.2000>

The radius of q -convexity of normalized Bessel functions of the first kind
Árpád Baricz, Halit Orhan, Róbert Szász

<http://arxiv.org/abs/1412.6340>

On the large values of the Riemann zeta-function on the critical line - II
M.A. Korolev

<http://arxiv.org/abs/1412.0163>

Multiple q -zeta brackets
Wadim Zudilin

<http://arxiv.org/abs/1411.4661>

Note on the Painlevé V tau-functions
Yu.P. Bibilo, R.R. Gontsov

<http://arxiv.org/abs/1412.0102>

Singular linear statistics of the Laguerre Unitary Ensemble and Painlevé III (P_{III}): Double scaling analysis
Min Chen, Yang Chen

<http://arxiv.org/abs/1412.3782>

Rigorous analytical approximation of tronquée solution to Painlevé-1 and the first singularity
A. Adali, S. Tanveer

<http://arxiv.org/abs/1412.8586>

Painlevé III asymptotics of Hankel determinants for a perturbed Jacobi weight
Zhao-Yun Zeng, Shuai-Xia Xu, Yu-Qiu Zhao

<http://arxiv.org/abs/1412.8761>

Existence of Nontrivial Negative Resonances for Polynomial Ordinary Differential Equations With Painlevé Property
Stanislav Sobolevsky

<http://arxiv.org/abs/1412.3541>

Asymptotic behaviour of the fourth Painlevé transcendents in the space of initial values
Nalini Joshi, Milena Radnović

<http://arxiv.org/abs/1412.6331>

Zeros of combinations of Euler products for $\sigma > 1$
Mattia Righetti

<http://arxiv.org/abs/1412.5445>

Rationally extended shape invariant potentials in arbitrary D-dimensions associated with exceptional X_m polynomials
Rajesh Kumar Yadav (BHU), Nisha Kumari (BHU), Avinash Khare (IISER-Pune), Bhabani Prasad Mandal (BHU)

<http://arxiv.org/abs/1411.6834>

Asymptotic density of zeros of half range generalized Hermite polynomials
Mohamed Bouali

<http://arxiv.org/abs/1411.2389>

On Filter Banks and Wavelets Based on Chebyshev Polynomials
R. J. Cintra, H. M. de Oliveira, L. R. Soares

<http://arxiv.org/abs/1411.2268>

Matrix Pearson equations satisfied by Koornwinder weights in two variables
Francisco Marcellán, Misael E. Marriaga, Teresa E. Pérez, Miguel A. Piñar

<http://arxiv.org/abs/1411.0875>

Painlevé 2 equation with arbitrary monodromy parameter, topological recursion and determinantal formulas
Kohei Iwaki, Olivier Marchal

<http://arxiv.org/abs/1412.8001>

Tableau formula for Macdonald polynomial of type C_n and D_n with one row diagram
B. Feigin, A. Hoshino, M. Noumi, J. Shibahara, J. Shiraishi

<http://arxiv.org/abs/1411.7945>

Complete Monotonicity and Zeros of Sums of Squared Baskakov Functions
Ulrich Abel, Wolfgang Gawronski, Thorsten Neuschel

<http://arxiv.org/abs/1411.0463>

Difference equation for the Heckman-Opdam hypergeometric function and its confluent Whittaker limit

J.F. van Diejen, E. Emsiz

Topic #11 ----- OP-SF NET 22.1 ----- January 15, 2015

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 115 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:

<https://staff.fnwi.uva.nl/t.h.koornwinder/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
phone: +1-215-382-9800
email: service@siam.org
WWW : <http://www.siam.org>
<http://www.siam.org/membership/outreachmem.htm>

Topic #12 ----- OP-SF NET 22.1 ----- January 15, 2015

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 22.2 should be sent by March 1, 2015.

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 (2014-2016) are:

Chair: Walter Van Assche

Vice Chair: Jeff Geronimo

Program Director: Diego Dominici

Secretary: Yuan Xu

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