O P–S F N E T – Volume 23, Number 4 – July 15, 2016

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Calendar of Events:

July 11–15, 2016
    V Latin American Congress of Mathematicians,
    Thematic session on "Special functions, orthogonal polynomials and approximation theory"
    Universidad del Norte, Barranquilla, Colombia
    http://www.uninorte.edu.co/web/vclam/ana6

July 11–15, 2016
    OPSF–S6 Summer School on Orthogonal Polynomials and Special Functions,
    Dedicated to the memory and legacy of Frank W. J. Olver,
    Norbert Wiener Center for Harmonic Analysis and Applications,
    University of Maryland, College Park, Maryland, USA
    http://www.norbertwiener.umd.edu/Education/OPSFS6

July 14, 2016
> Minisymposium on "Computational Aspects of Special Functions",
> 2016 SIAM Annual Meeting,
> Boston, Massachusetts, USA
> http://meetings.siam.org/sess/dsp_programsess.cfm?SESSIONCODE=23333

July 18–22, 2016
> Minisymposium on "Orthogonal Polynomials and Applications",
> 7th European Congress of Mathematics,
> Technische Universität Berlin, Berlin, Germany
> http://www.7ecm.de

July 20–22, 2016
> The 41st International Symposium on Symbolic and Algebraic Computation 2016,
> Wilfrid Laurier University, Waterloo, Ontario, Canada
> http://www.issac-conference.org/2016

August 8–12, 2016
> Dunkl operators, special functions and harmonic analysis,
> Universität Paderborn, Paderborn, Germany
> https://math.uni-paderborn.de/arbeitsgruppen/arbeitsgruppe-harmonische-analyse/dunkl2016

August 22–26, 2016
> Conference on Methods of Modern Mathematical Physics,
> *A Young Researcher Symposium on the Occasion of the 70th Birthday of Barry Simon*,
> Fields Institute, Toronto, Canada
> http://www.fields.utoronto.ca/programs/scientific/16-17/modern-physics

August 28–September 1, 2016
> Frontiers in Mathematical Physics,
> *A Conference on the Occasion of Barry Simon's 70th Birthday*,
> CRM, Montreal, Canada
> http://www.crm.umontreal.ca/2016/Simon16/index_e.php

September 13, 2016
> Random Matrix Theory: perspectives and applications
> School of Mathematics, Statistics & Actuarial Science, University of Kent, Canterbury, UK
> https://www.kent.ac.uk/smsas/events/matrix-theory.html

September 8–13, 2016
> 4th Dolomites Workshop on Constructive Approximation and Applications (DWCAA16)
> Dedicated to Annie Cuyt in the occasion of her 60th birthday
> Alba di Canazei, Trento, Italy
> http://events.math.unipd.it/dwcaa16

November 16–17, 2016
> Workshop on Orthogonal Polynomials and Special Functions,
> The H.C. Ørsted Institute (HCØ), University of Copenhagen, Denmark
> http://www.math.ku.dk/∼henrikp/w2016

November 28–December 02, 2016
> International Conference on Mathematical Analysis and its Applications 2016,
> Department of Mathematics, Indian Institute of Technology Roorkee, Roorkee, India
> http://www.iitr.ac.in/icmaa/2016/index.html

January 4, 2017
AMS Special Session on "Orthogonal Polynomials,"
Joint Mathematics Meetings,
Atlanta, Georgia, USA
http://jointmathematicsmeetings.org/meetings/national/jmm2017/2180_program_ss17.html

June 26–30, 2017
OPSF–S7 Summer School on Orthogonal Polynomials and Special Functions,
University of Kent, Canterbury, UK
http://www.kent.ac.uk/smsas/personal/opsfa

July 3–7, 2017
14th International Symposium on Orthogonal Polynomials, Special Functions and
Applications (OPSFA14), University of Kent, Canterbury, UK
http://www.kent.ac.uk/smsas/personal/opsfa

July 10–15, 2017
Computational Methods and Function Theory,
Maria Curie–Skłodowska University, Lublin, Poland
http://www.cmft2017.umcs.lublin.pl/index.html

July 10–19, 2017
Foundations of Computational Mathematics,
Barcelona, Spain
http://www.ub.edu/focm2017/index.html

Topic #1 ⸻ OP – SF Net 23.4 ⸻ July 15, 2016

From: Walter Van Assche (Walter.VanAssche@wis.kuleuven.be)
Subject: Election of SIAG/OPSF officers

The term of the present elected officers of the activity group ends December 31, 2016.
There will be an election of new officers. SIAM has approved a nominating committee for
our activity group, which consists of:

- Peter Clarkson (P.A.Clarkson@kent.ac.uk), Chair of the nominating committee
- Kathy Driver (Kathy.Driver@uct.ac.za)
- Diego Dominici (dominicd@newpaltz.edu)
- Jeff Geronimo (geronimo@math.gatech.edu)
- Kerstin Jordaan (kerstin.jordaan@up.ac.za)
- Francisco Marcellán (pacomarc@ing.uc3m.es)

The task of the nominating committee is to collect names of candidates who are willing
to run for an office of the activity group. There are four positions to be filled: Chair, Vice
Chair, Program Director, and Secretary. The present Vice Chair (Jeff Geronimo) and pro-
gram director (Diego Dominici) have already informed me that they will not be running for
another term. The Chair (Walter Van Assche) and the secretary (Yuan Xu) are now serving
a first term

Every member of SIAG/OPSF can nominate candidates. All candidates must be members of the activity group. Diversity and gender equity are goals that are strongly supported. Please send your nominations to the Chair of the nominating committee. The deadline for nominations is July 31, 2016. The final list of candidates will be mailed to SIAM for approval. Elections will start in September and end November 30. The new officers will start their term on January 1, 2017.

Some more information about the election and the profile for the four officers can be found using the following links:

SIAM Election
SIAM Activity group officers
SIAG Chair
SIAG Vice Chair
SIAG Program Director
SIAG Secretary

Note that SIAM prefers that SIAG officers serve only one term in a given office. In the past most officers in our activity group served more than one term. SIAM allows this, provided that there is another contestant for that office.

Topic #2 ——— OP – SF Net 23.4 ——— July 15, 2016

From: Walter Van Assche (Walter.VanAssche@wis.kuleuven.be)
Subject: Reminder: Call for Nominations for the Gábor Szegő Prize

Call for nominations for the Gábor Szegő Prize (opens May 1, 2016 and closes October 15, 2016)

The SIAM Activity Group on Orthogonal Polynomials and Special Functions (SIAG/OPSF) awards the Gábor Szegő Prize every two years to an early-career researcher for outstanding research contributions, as determined by the prize committee, in the area of orthogonal polynomials and special functions. The contributions must be contained in a paper or papers published in English in peer-reviewed journals. This prize is intended for an early career researcher. The prize can only be awarded to a researcher who has at most 10 years (full time equivalent) of involvement in mathematics since PhD at the award date, allowing for breaks in continuity, or who in the opinion of the prize committee is at an equivalent stage in their career.

A valid nomination requires:

1. a Letter of Nomination signed by two (2) members of the SIAG; and
2. a Curriculum Vitae (CV) of the nominee.

Letters of nomination should indicate the paper(s) cited for the work being recognized, explain the significance of the work, and (especially in the case of multiple authors) indicate the contribution of each of the individuals nominated. Please send all required materials to: szego_prize@siam.org, with a copy to the SIAG/OPSF chair walter@wis.kuleuven.be.

The award will consist of a plaque and a certificate containing the citation. As part of the award, the recipient will be invited to give a plenary lecture at the International Symposium

on Orthogonal Polynomials, Special Functions, and Applications (OPSFA-14), which will be held at the University of Kent (Canterbury, UK), July 3-7, 2017. Travel funds will be made available to reimburse the recipient for reasonable travel expenses incurred in attending the award ceremony and giving the talk. SIAM will cover expenses for travel to and from the OPSFA conference and the OPSFA conference will waive the conference registrations fee and cover local accommodation costs.

For more information, see:
http://www.siam.org/prizes/nominations/nom_siag_szego.php.

Topic #3 —— OP - SF Net 23.4 —— July 15, 2016

From: Howard Cohl (howard.cohl@nist.gov)
Subject: OPSF-S6: A Report

From July 11 – July 15, 2016, the Norbert Wiener Center at the University of Maryland in College Park, Maryland, U.S.A., hosted the OPSFA Summer School, OPSF-S6, on Orthogonal Polynomials and Special Functions. This summer school was dedicated to the memory and legacy of Frank W. J. Olver, who was a professor at UMD as well a researcher at NIST. For more information on Frank's accomplishments see:
https://en.wikipedia.org/wiki/Frank_W._J._Olver.

The summer school was attended by early career researchers including high school students, post-graduate students, postdoctoral researchers, and assistant professors. These participants came from the U.S. (California, Indiana, Colorado, Florida, Minnesota, Virginia, Oklahoma, Wisconsin, North Dakota, and Michigan), Spain, UK, Austria, Poland, Morocco, Tunisia, and China.

The lecturers were Mourad Ismail, Hjalmar Rosengren, Erik Koelink, Antonio Durán, and Jiang Zeng, who spoke respectively on q-series, elliptic hypergeometric functions, spectral theory & special functions, exceptional orthogonal polynomials, and orthogonal polynomials & combinatorics. Thanks to financial grants from the NSF and IMA, most attendees received full funding to participate (including the lecturers) which included reimbursement for hotel, travel, and living expenses. Below we list short summaries of the lectures presented by the young guest researchers themselves:

on **Ismail**: "It was a real pleasure to listen to [his] lectures based on an his approach to Basic Hypergeometric Series which he developed partly with Dennis Stanton and other collaborators. What I found most useful and interesting was the way Mourad motivated each and every result and talked about how he thinks about the details, drawing attention to the key results and ideas. An invaluable opportunity to watch the master in action!"

on **Rosengren**: "[He] laid bare the beauty of elliptic hypergeometric series identities and showed the simple ideas underlying some of the most forbidding formulas on display in the summer school. I appreciated the clear and intuitive introduction to the notation and basic ideas relating to elliptic functions. The large number of exercises and the beautiful and clear exposition of the notes will help many students and researchers quickly understand the language of this area."

on **Koelink**: "[His] lectures reviewed connections between scalar (and matrix) valued orthogonal polynomials and Jacobi matrices. It turns out that spectral analysis can give some information about the polynomials in consideration. There were presented examples of

this phenomenon. The material was presented in an elementary and interesting way, and definitely will be useful to me. "

on **Durán**: "[He] gave a very well structured course, starting with some basic concepts about Classical Orthogonal Polynomials, then introducing the Krall polynomials and the Darboux transformations, and he ended up by connecting all the pieces of the puzzle to come with all of them to the exceptional polynomials. The course had also some well selected exercises which allowed us to understand all the concepts better."

on **Zeng**: "I was amazed to see how the classic results on orthogonal polynomials can be developed using purely combinatorial tools. Starting with combinatorial interpretation of building blocks like moments, recurrence relations, as well as their interplay with continued fractions, the instructor masterfully walked us through the historical developments due to Foata, Viennot, etc., all the way up to the most current approach due to Ismail–Kasraoui–Zeng, which borrows the idea of separation of variables from PDE."

Topic #4 ——— OP – SF Net 23.4 ——— July 15, 2016

From: Tom Koornwinder (T.H.Koornwinder@uva.nl) and Walter Van Assche (Walter.VanAssche@wis.kuleuven.be)
Subject: *Orthogonal polynomials in MATLAB* by Walter Gautschi

New book by Walter Gautschi
   Orthogonal polynomials in MATLAB: Exercises and Solutions
SIAM, 2016, x+337 pp.

Techniques for generating orthogonal polynomials numerically have appeared only recently, within the last 30 or so years. Orthogonal Polynomials in MATLAB: Exercises and Solutions describes these techniques and related applications, all supported by MATLAB programs, and presents them in a unique format of exercises and solutions designed by the author to stimulate participation. Important computational problems in the physical sciences are included as models for readers to solve their own problems.

The preface can be read on the SIAM website. The references cited in the preface are:

[24] Walter Gautschi: Orthogonal Polynomials: Computation and Approximation, Oxford Science Publications, Oxford University Press, 2004,

[27] Walter Gautschi: Orthogonal polynomials, quadrature and approximation: computational methods and software (in MATLAB), in "Orthogonal Polynomials and Special Functions: Computation and Applications" (F. Marcellán, W. Van Assche, eds.) Lecture Notes in Mathematics 1883, Springer, Berlin, 2006, pp. 1–77.

Note: there is a 30% reduction in the price for SIAM members.

For more information, see:
http://bookstore.siam.org/se26.

From: Martin Muldoon (muldoon@yorku.ca)
Subject: *My Search for Ramanujan* by Ken Ono & Amir Aczel

New book by Ken Ono and Amir D. Aczel:
   My Search for Ramanujan: How I Learned to Count
Springer, 2016, xvi+238 pp.

According to the publisher:

- A passionate personal account of a mathematician who followed in the footsteps of the enigmatic Indian genius Srinivasa Ramanujan.

- Provides a deeply moving account of spirituality and self-discovery; doubt and vindication.

- Retraces the life, career, and legacy of Ramanujan and those who have followed.

The son of a prominent Japanese mathematician who came to the United States after World War II, Ken Ono was raised on a diet of high expectations and little praise. Rebelling against his pressure-cooker of a life, Ken determined to drop out of high school to follow his own path. To obtain his father's approval, he invoked the biography of the famous Indian mathematical prodigy Srinivasa Ramanujan, whom his father revered, who had twice flunked out of college because of his single-minded devotion to mathematics.

Ono describes his rocky path through college and graduate school, interweaving Ramanujan's story with his own and telling how at key moments, he was inspired by Ramanujan and guided by mentors who encouraged him to pursue his interest in exploring Ramanujan's mathematical legacy. Picking up where others left off, beginning with the great English mathematician G.H. Hardy, who brought Ramanujan to Cambridge in 1914, Ono has devoted his mathematical career to understanding how in his short life, Ramanujan was able to discover so many deep mathematical truths, which Ramanujan believed had been sent to him as visions from a Hindu goddess. And it was Ramanujan who was ultimately the source of reconciliation between Ono and his parents.

Ono's search for Ramanujan ranges over three continents and crosses paths with mathematicians whose lives span the globe and the entire twentieth century and beyond. Along the way, Ken made many fascinating discoveries. The most important and surprising one of all was his own humanity.

For more information, see:
http://www.springer.com/us/book/9783319255668.

From: Mama Foupouagnigni (mfoupouagnigni@aims-cameroon.org)
Subject: Call for Applications for Research Chair in Cameroon

The Alexander von Humboldt Foundation is calling for applications for a research chair in "Mathematics and its Applications" funded by the German Federal Ministry of Education

and Research. This German Research Chair is going to be established at the African Institute for Mathematical Sciences in Cameroon.

The call addresses highly qualified academics from any country who conduct application-related research in mathematics and its applications, have experience in training students and doctoral candidates, and possess recognizable leadership potential.

The call for this chair containing a detailed description of the position, the benefits coming along with it, and the expected qualification of candidates can be found at:
https://www.humboldt-foundation.de/web/research-chair-aims-cameroon.html

The application deadline is August 1, 2016.

Topic #7 ——— OP – SF Net 23.4 ——— July 15, 2016

From: Francisco Marcellán Español (pacomarc@ing.uc3m.es)
Subject: PhD position at Universidad Carlos III de Madrid, Spain

There is one open position for a PhD student, with financial support from the grant MTM2015-65888-C4-2-P of Ministerio de Economía y Competitividad (MINECO) of Spain. This position is to be incorporated in the team on Applied Mathematical Analysis (GAMA) of the Department of Mathematics, Universidad Carlos III de Madrid, Spain. The grant will cover a four-year period for such a PhD student with the requirement of a Masters degree in any area of Mathematics.

Title: Orthogonality, Approximation theory and Applications in mathematical Physics.

Leading researchers: Guillermo López Lagomasino and Francisco Marcellán

The research topics are related to the group's work on orthogonal polynomials, approximation theory and applications in Mathematical Physics. The description of the research project can be found in the web page of the research team:

http://gama.uc3m.es

We are waiting for the official call from MINECO concerning the salary and conditions of these PhD contracts. It will be open in the next weeks.

For more information and conditions concerning the application, send an e-mail with a CV resume and motivation letter to Professor Guillermo López Lagomasino (lago@math.uc3m.es) as soon as possible before July 25, 2016.

Topic #8 ——— OP – SF Net 23.4 ——— July 15, 2016

From: Jacob Christiansen (stordal@maths.lth.se) and Henrik Pedersen (henrikp@math.ku.dk)
Subject: Announcement: Workshop on OPSF in Copenhagen, Denmark

Workshop on Orthogonal Polynomials and Special Functions,
    Copenhagen, Denmark, November 16-17, 2016.

Venue: The H.C. Ørsted Institute (HCØ), University of Copenhagen, Denmark.

Scope: The aim of the workshop is to bring together experts in areas related to orthogonal polynomials and special functions to exchange knowledge.

Invited Speakers:

Peter Clarkson, University of Kent, UK
Alexander Goncharov, Bilkent University, Turkey
Stanislas Kupin, Université de Bordeaux, France
Thorsten Neuschel, Université catholique de Louvain, Belgium
Klaus Schiefermayr, University of Applied Sciences Upper Austria, Austria
Franck Wielonsky, Aix Marseille Université, France

Deadlines: Registration and submission of abstract: October 15, 2016.

For more information, see:
http://www.math.ku.dk/~henrikp/w2016.

Topic #9 —————— OP – SF Net 23.4 —————— July 15, 2016

From: Howard Cohl (howard.cohl@nist.gov)
Subject: NIST NRC Postdoctoral Research Associateships in OPSF for U.S. Citizens

I wish to announce a Postdoctoral Research Associateship opening in Orthogonal Polynomials and Special Functions through the National Research Council (NRC) at NIST in Gaithersburg, Maryland, U.S.A. Applicants must be U.S. citizens.

NIST NRC proposal reviews are conducted two times each year, and review results are available to applicants six to eight weeks following the application deadline. The next realistic application deadline is February 1, 2017. Interested individuals should contact me at howard.cohl@nist.gov for further information before submitting an application.

The annual base salary for NIST NRC Postdoctoral Research Associateships who started in 2016 is $67,588 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
http://www.nist.gov/itl/math/mcsd-postdoctoral-opportunities.cfm

This opening 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 #10 —————— OP – SF Net 23.4 —————— July 15, 2016

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 during May and June 2016.

http://arxiv.org/abs/1605.00049
Some new perspectives on dd-orthogonal polynomials
Abdessadek Saib

http://arxiv.org/abs/1605.00172
On the number of Singular Vector Tuples of Hyper-Cubical Tensors
Shalosh B. Ekhad, Doron Zeilberger

http://arxiv.org/abs/1605.00291
Variation on a theme of Nathan Fine. New weighted partition identities
Alexander Berkovich, Ali Kemal Uncu

http://arxiv.org/abs/1605.00361
Monte Carlo with Determinantal Point Processes
Rémi Bardenet, Adrien Hardy

http://arxiv.org/abs/1605.00393
Spectral analysis of two doubly infinite Jacobi matrices with exponential entries
Mourad E. H. Ismail, František Štampach

http://arxiv.org/abs/1605.00691
A Multi-species ASEP(q, j) and q-TAZRP with Stochastic Duality
Jeffrey Kuan

http://arxiv.org/abs/1605.00704
Singular Values of Products of Ginibre Random Matrices
N.S. Witte, P.J. Forrester

http://arxiv.org/abs/1605.00708
Persymmetric Jacobi matrices, isospectral deformations and orthogonal polynomials
Vincent Genest, Satoshi Tsujimoto, Luc Vinet, Alexei Zhedanov

http://arxiv.org/abs/1605.01145
The Beilinson Conjectures for CM Elliptic Curves via Hypergeometric Functions
Ryojun Ito

http://arxiv.org/abs/1605.01196
Solvability of the Hankel determinant problem for real sequences
Andrew Bakan, Christian Berg

http://arxiv.org/abs/1605.01400
Conditional measures of determinantal point processes
Alexander I. Bufetov

http://arxiv.org/abs/1605.01820
On a representation of Humbert's double hypergeometric series Φ_3 in a series of Gauss's $_2F_1$ function
Arjun K. Rathie, Victor V. Manako, Harsh Vardhan Harsh

http://arxiv.org/abs/1605.01850
Symmetries of the Coefficients of Three Term Relations for the Hypergeometric Functions
Yuka Suzuki

http://arxiv.org/abs/1605.01899
Mixed type multiple orthogonal polynomials associated with the modified Bessel functions
and products of two coupled random matrices
Lun Zhang

http://arxiv.org/abs/1605.02171
Absolutely Convex, Uniformly Starlike and Uniformly Convex Harmonic Mappings
Saminathan Ponnusamy, Anbareeswaran Sairam Kaliraj, Victor V. Starkov

http://arxiv.org/abs/1605.02280
On The Dunkl Intertwining Opereator
Mostafa Maslouhi

http://arxiv.org/abs/1605.02354
Converse theorems: from the Riemann zeta function to the Selberg class
Alberto Perelli

http://arxiv.org/abs/1605.02508
On the L_2 Markov Inequality with Laguerre Weight
Geno Nikolov, Alexei Shadrin

http://arxiv.org/abs/1605.02509
On the asymptotic behavior of jacobi polynomials with varying parameters
Oleg Szehr, Rachid Zarouf

http://arxiv.org/abs/1605.02604
On a mollifier of the perturbed Riemann zeta–function
Patrick Kühn, Nicolas Robles, Dirk Zeindler

http://arxiv.org/abs/1605.02728
Integrals and Series Representations of q–Polynomials and Functions: Part II Schur Poly-
nomials and the Rogers–Ramanujan Identities
Mourad E. H. Ismail, Ruiming Zhang

http://arxiv.org/abs/1605.02776
Chebychev interpolations of the Gamma and Polygamma Functions and their analytical
properties
Karl Dieter Reinartz

http://arxiv.org/abs/1605.02915
Elliptic pfaffians and solvable lattice models
Hjalmar Rosengren

http://arxiv.org/abs/1605.02931
Elliptic Bessel processes and elliptic Dyson models realized as temporally inhomogeneous
processes
Makoto Katori

http://arxiv.org/abs/1605.02940
Zeros of polynomials of derivatives of zeta functions
Takashi Nakamura

http://arxiv.org/abs/1605.03117
A new integral-series identity of multiple zeta values and regularizations
Masanobu Kaneko, Shuji Yamamoto

http://arxiv.org/abs/1605.03217
The Nevanlinna-type parametrization for the operator Hamburger moment problem
Sergey M. Zagorodnyuk

http://arxiv.org/abs/1605.03276
Inhomogeneous Jacobi matrices on trees
Ryszard Szwarc

http://arxiv.org/abs/1605.03369
On the relation between Airy integral and Bessel functions revisited
Mehdi Tabrizi, Ebrahim Maleki Harsini

http://arxiv.org/abs/1605.03503
Efficient algorithms for the inversion of the cumulative central beta distribution
A. Gil, J. Segura, N. M. Temme

http://arxiv.org/abs/1605.03630
Periods and Superstring Amplitudes
S. Stieberger

http://arxiv.org/abs/1605.03830
Coherent pairs of measures and Markov-Bernstein inequalities
André Draux

http://arxiv.org/abs/1605.04275
Universality limits for generalized Jacobi measures
Tivadar Danka

http://arxiv.org/abs/1605.04480
Optimal Mock Jacobi Theta Functions
Miranda C. N. Cheng, John F. R. Duncan

http://arxiv.org/abs/1605.04617
Transformation theory and Christoffel formulas for matrix biorthogonal polynomials on the real line
Carlos Álvarez-Fernández, Gerardo Ariznabarreta, Juan C. García-Ardila, Manuel Mañas, Francisco Marcellán

http://arxiv.org/abs/1605.04780
Multiplier Sequences and Real-rootedness of Local h-polynomials of Cluster Subdivisions
Philip B. Zhang

http://arxiv.org/abs/1605.05181

A new characterization of ultraspherical, Hermite, and Chebyshev polynomials of the first kind
Mohammed Mesk, Mohammed Brahim Zahaf

The ABC's of affine Grassmannians and Hall-Littlewood polynomials
Avinash J. Dalal, Jennifer Morse

Explorations in the theory of partition zeta functions
Ken Ono, Larry Rolen, Robert Schneider

Recurrence approach and higher rank polynomial algebras for superintegrable monopole systems
Md Fazlul Hoque, Ian Marquette, Yao-Zhong Zhang

Dynamical Theory of Scattering, Exact Unidirectional Invisibility, and Truncated $\mathfrak{z}\, e^{-2ik_0 x}$ potential
Ali Mostafazadeh

Analogues of the Ramanujan-Mordell Theorem
Shaun Cooper, Ben Kane, Dongxi Ye

Integrals Involving Rudin-Shapiro Polynomials and Sketch of a Proof of Saffari's Conjecture
Shalosh B. Ekhad, Doron Zeilberger

A conformally invariant variational problem for time-like curves
Olimjon Eshkobilov, Emilio Musso

Summations associated with Gamma exponentiated exponential Weibull distribution
Dragana Jankov Maširević, Tibor K. Pogány

Zeros of random linear combinations of entire functions with complex Gaussian coefficients
Aaron Yeager

One-dimensional Schrödinger equation with non-analytic potential $V(x) = -g^2 \exp(-|x|)$ and its exact Bessel-function solvability
Ryu Sasaki, Miloslav Znojil

A matrix method for Fractional Sturm-Liouville problems on bounded domain
Paolo Ghelardoni, Cecilia Magherini

http://arxiv.org/abs/1605.07848
Quantum Field Theory Applications of Heun Type Functions
T. Birkandan, M. Hortaçsu

http://arxiv.org/abs/1605.08224
Chebyshev polynomial coefficient bounds for a subclass of bi-univalent functions
Sahsene Altinkaya, Sibel Yalcin

http://arxiv.org/abs/1605.08273
The novel reseraches toward the proof of the Goldbach's conjecture by the novel functions, the novel conjecture, the Riemann zeta function, and the novel experimental computations
Ahmad Sabihi

http://arxiv.org/abs/1605.08568
Computation of highly oscillatory Bessel transforms with algebraic singularities
Zhenhua Xu, Shuhuang Xiang

http://arxiv.org/abs/1605.08638
Approximate implicitization using linear algebra
Oliver J. D. Barrowclough, Tor Dokken

http://arxiv.org/abs/1605.08654
Asymptotic Limit of Continuous Dual Hahn Polynomial
A.D. Alhaidari, E.O. Ifidon, T.J. Taiwo

http://arxiv.org/abs/1605.08725
Uniqueness of dynamical zeta functions and symmetric products
Eduardo Blanco Gomez, Luis Hernandez-Corbato, Francisco R. Ruiz del Portal

http://arxiv.org/abs/1605.08904
Error functions, Mordell integrals and an integral analogue of partial theta function
Atul Dixit, Arindam Roy, Alexandru Zaharescu

http://arxiv.org/abs/1605.09179
New super congruences involving Bernoulli and Euler polynomials
Zhi-Hong Sun

http://arxiv.org/abs/1605.09200
Some Unified Integrals Associated with Generalized Bessel-Maitland Function
M.S. Abouzaid, A.H. Abusufian, K.S. Nisar

http://arxiv.org/abs/1605.09280
Linear partial divided-difference equation satisfied by multivariate orthogonal polynomials on quadratic lattices
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B. M. McCoy, J-M. Maillard

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Takashi Nakamura

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

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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 (OPSF Talk), a listserv, as a free public service; membership in SIAM is not required. OPSF NET is transmitted periodically through a post to OP-SF Talk. The OP-SF Net Editors are Howard Cohl (howard.cohl@nist.gov), Kerstin Jordaan (kerstin.jordaan@up.ac.za), and Sarah Post (spost@hawaii.edu).

Back issues of OP-SF NET can be obtained at the websites:
https://staff.fnwi.uva.nl/t.h.koornwinder/opsfnet
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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, 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:

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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 e-mail to one of the OP–SF Editors
howard.cohl@nist.gov, kerstin.jordaan@up.ac.za, or spost@hawaii.edu.
Contributions to OP–SF NET 23.5 should be sent by September 1, 2016.

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 as well as news about new appointments, promotions, research visitors, awards and prizes. 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 e-mail to siam–opsf@siam.org.

WWW home page of this Activity Group:
http://math.nist.gov/opsf
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The elected Officers of the Activity Group (2014–2016) are:
     Walter Van Assche, Chair
     Jeff Geronimo, Vice Chair
     Diego Dominici, Program Director
     Yuan Xu, Secretary

The appointed officers are:
     Howard Cohl, OP–SF NET co-editor
     Kerstin Jordaan, OP–SF NET co-editor
     Sarah Post, OP–SF NET co-editor
     Diego Dominici, OP–SF Talk moderator
     Bonita Saunders, Webmaster and OP–SF Talk moderator

Thought of the month

"To be a scholar of mathematics you must be born with talent, insight, concentration, taste, luck, drive and the ability to visualize and guess. "

Paul. R. Halmos, *I Want to be a Mathematician*, Washington: MAA Spectrum, 1985.