O P-S F N E T - Volume 24, Number 3 - May 15, 2017

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

http://math.nist.gov/opsf

OP-SF Net is distributed through OP-SF Talk.
Subscribe to OP-SF Talk at http://lists.siam.org/mailman/listinfo/siam-OPSF.
Please send contributions to the OP-SF Net editors.

Editors:
Howard S. Cohl howard.cohl@nist.gov
Sarah Post spost@hawaii.edu

Topics:

Calendar of Events:

June 5-9, 2017
International Conference on Special Functions: Theory, Computation, and Applications
City University of Hong Kong, Hong Kong
http://www6.cityu.edu.hk/rcms/icsf2017/index.htm

June 12-16, 2017
Symmetries of Discrete Systems and Processes,
Czech Technical University, Děčín branch, Czech Republic
http://decin4.fjfi.cvut.cz

June 26-30, 2017
OPSF-S7 Summer School on Orthogonal Polynomials and Special Functions,
University of Kent, Canterbury, UK
https://blogs.kent.ac.uk/opsf-summerschool

July 2-6, 2017
VIII Jaen Conference on Approximation Theory,
Úbeda, Jaén, Spain

https://www.ujaen.es/revista/jja/jca

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

July 9–15, 2017
The XVIIth International Conference on Symmetry Methods in Physics,
Yerevan State University, Yerevan, Armenia
http://theor.jinr.ru/∼symphys/2017

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

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

September 18–22, 2017
Integrable systems, symmetries, and orthogonal polynomials
(Celebrating Peter Clarkson's and Liz Mansfield's 60th birthdays)
Instituto de Ciencias Matemáticas (ICMAT) Madrid, Spain.
https://www.icmat.es/RT/optrim/conference/index.php

Topic #1 ——— OP - SF Net 24.3 ——— May 15, 2017

From: Martin Muldoon (muldoon@yorku.ca)
Subject: Obituary: Dharma P. Gupta, 1928–2016

Dharma Prakash Gupta, was born on July 27, 1928 in Thakurdwara, Uttar Pradesh, India. He earned a B.Sc. (1948), Ph.D. (1959) and D.Sc. (1972) from the University of Allahabad. He was a Fellow of the Institute of Mathematics and its Applications (UK) and served as President of the Allahabad Mathematical Society. He held positions in India until 1977 and then in Libya where he was Professor and Head of the Department of Engineering Science at the University of Technology, Brega, 1980–1988.

Much of Gupta's early research dealt with ultraspherical series, including questions of summability, together with similar work on Jacobi, Laguerre and Bessel series. In 1988 he moved to Canada, where he had family connections and for a few years had part-time teaching positions at the University of Toronto, York University and Lakehead University. He continued his research work, mostly in collaboration with David Masson and Mourad Ismail, related to orthogonal polynomials, contiguous relations and continued fractions.

In his later years, Professor Gupta returned to India with frequent summer visits to Toronto, where I had the pleasure of collaborating with him on some work related to zeros of special functions. With declining health, his visits became less frequent. He died in Allahabad on June 1, 2016.

From: Carlos Beltrán (beltranc@unican.es)
Subject: Report on the OPCOP 2017 Conference, April 19-22, Castro Urdiales, Spain

The conference Optimal Point Configurations and Orthogonal Polynomials (OPCOP 2017) took place from April 19th to April 22nd at the Centro Internacional de Encuentros Matemáticos (CIEM), Castro Urdiales, Spain.

The main goal of the conference was to explore the deep connections between orthogonal polynomials and the problem of distributing points in manifolds. A good number of mathematicians from Europe and America presented at the conference. Some presenters described very recent results, and others presented perspectives on the areas involved. The presence of young Ph.D. students and postdocs showed that the topics of the conference have created a good deal of interest among young people.

Besides the scheduled talks, an open problem session took place where the participants presented to their colleagues some unresolved questions. This showed a perspective for the future of some of the research topics involved.

The organizing committee was formed by Carlos Beltrán (Universidad de Cantabria, Spain), Ujué Etayo (Universidad de Cantabria, Spain), Jordi Marzo (Universitat de Barcelona, Spain), and Joaquim Ortega-Cerdà (Universitat de Barcelona, Spain). This event was financed by both universities, as well as by the CIEM.

A list of the speakers and participants, as well as more information about the conference (including some slides of the talks) can be found at:
http://www.opcop2017.unican.es.

An image of the inauguration of OPCOP 2017 can be seen in Figure 1.

Figure 1: The inauguration of OPCOP 2017. From left to right: Joaquim Ortega-Cerdà, Carlos Beltrán, Paco Marcellán, Ujué Etayo and Jordi Marzo.

From: Cleonice F. Bracciali (cleonice@ibilce.unesp.br)
Subject: Report on VI EIBPOA (May 9-12, 2017), Uberaba, Brazil

The VI Iberoamerican Workshop on Orthogonal Polynomials and Applications (VI EIBPOA) took place at the "Universidade Federal do Triângulo Mineiro" (UFTM) in Uberaba, Minas

Gerais State, Brazil, from May 9-12, 2017.

The aim of the EIBPOA conferences are to encourage research in the fields of approximation theory, special functions, orthogonal polynomials and applications among graduate and undergraduate students as well as young researchers from Latin America, Spain and Portugal. The previous EIBPOA conferences were held in Bogotá, Colombia in 2011, in Colima, México in 2012, São José do Rio Preto, Brazil in 2013, again in Bogotá, Colombia in 2014, and México Distrito Federal, México in 2015.

The local organizers of VI EIBPOA included Daniel O. Veronese (UFTM), Heron M. Felix (UFTM), Rafaela F. Afonso (UFTM), Mirela V. Mello (UESC), and Cleonice F. Bracciali (UNESP).

As in previous EIBPOA conferences, it consisted of 6 plenary talks, presented by:

- Lidia Fernandez (Universidad de Granada, Spain),
- Zélia da Rocha (Universidade do Porto, Portugal),
- Kerstin Jordaan (University of South Africa, South Africa),
- Guilherme Silva (University of Michigan, USA),
- A. Sri Ranga (Universidade Estadual Paulista at São José do Rio Preto, Brazil),
- Maxim Yattselev (Indiana University-Purdue University Indianapolis, USA),

and 2 short courses presented by

- Luis E. Garza (Universidad de Colima, México),
- Ana Paula Peron (Universidade de São Paulo at São Carlos, Brazil),

as well as contributed talks and poster presentations.

The total number of participants was 48 (with half of them being graduate and undergraduate students). A list of the participants, more information about the conference, as well as information about the 12 short communications can be found at:
http://eibpoa2017.weebly.com.

Figure 2: VI EIBPOA.

The event was financed by the Brazilian funding agencies UFTM, CAPES, CNPq, and FAPEMIG, and also received support from SBMAC, the Brazilian Society of Applied and Computational Mathematics.

Topic #4 ——— OP - SF Net 24.3 ——— May 15, 2017

From: Paco Marcellán (pacomarc@ing.uc3m.es)
Subject: Thematic Program on OPSF, Approximation Theory and MP (9-11/'17) in Madrid

During September to November 2017, a thematic program on orthogonal polynomials and special functions in approximation theory and mathematical physics will take place in the Instituto de Ciencias Matemáticas (ICMAT), Campus de Cantoblanco, Universidad Autónoma de Madrid, Spain. ICMAT is a mathematical research institute that has been recognized with the prestigious Severo Ochoa Award from the Spanish Minstry of Economy, Industry and Competitiveness. One of the activities supported by the Severo Ochoa grant is the organization of thematic programs with a duration of three months.

The aim of the present thematic program is to promote research on orthogonal polynomials, special functions and their connection with related fields such as approximation theory, Fourier analysis, operator theory, random matrices, number theory, numerical analysis, integrable systems in mathematical physics, etc., with an emphasis on the attraction of young researchers.

The program is jointly organized by ICMAT and the Spanish Orthonet network involving 14 Spanish research teams working in the field of orthogonal polynomials and special functions, and covering a wide range of topics ranging from the fundamentals of orthogonality, to applications in diverse fields and numerical aspects of approximation.

The program includes the following activities:

- September 18-22: Integrable Systems, Symmetries, and Orthogonal Polynomials,
  Celebrating Peter Clarkson's and Liz Mansfield's 60th birthday,
- October 23-27: II Orthonet School,
  School on Orthogonal Polynomials in Approximation Theory and Mathematical Physics,
- October 16-November 19: Research in Groups,
- September 23 - December 15: Seminar Cycle,
- November 17-19: IV Orthonet Workshop.

For more information, please see https://www.icmat.es/RT/optrim/index.php.

Topic #5 ——— OP - SF Net 24.3 ——— May 15, 2017

From: Alfredo Deaño (A.Deano-Cabrera@kent.ac.uk)
Subject: 2-year Postdoctoral Research Associate at University of Kent, U.K.

School of Mathematics, Statistics and Actuarial Science, University of Kent, U.K.

A postdoctoral research associate is sought for Dr Alfredo Deaño's 2-year EPSRC First Grant project "Painlevé equations: analytical properties and numerical computation." The aim of this project is to explore analytical, asymptotic and computational properties of Painlevé equations in the complex plane, with special emphasis on special function solutions.

This project requires the participation of a postdoctoral researcher with a strong research track record, as well as relevant skills and experience in one or more areas appropriate to the project (special functions, asymptotic and complex analysis, numerical techniques). Part of the project involves programming in Mathematica and MATLAB, so experience in this direction is highly desirable.

The deadline for applications is May 31st 2017 and interviews are expected to be held on June 13th 2017. The position will be available starting September 2017 (negotiable).

More details about the position can be found here.

Full details about teaching and research in the School can be found on our website: https://www.kent.ac.uk/smsas.

Informal enquiries are encouraged and should be directed to A.Deano-Cabrera@kent.ac.uk.

Topic #6 ——— OP - SF Net 24.3 ——— May 15, 2017

From: Dimitar K. Dimitrov (dimitrov@ibilce.unesp.br)
Subject: Postdoc position with Dimitar Dmitrov at State University of São Paulo, Brazil

The Thematic Project 2016/09906-0 "Harmonic Analysis, Approximation Theory, Special Functions and Applications" receives, up to May 30, 2017, applications for one Post-Doctoral position with a fellowship by the State of São Paulo research foundation FAPESP.

The specific aim of the project associated with the Post-Doctoral Fellowship is to study the relation between the entire functions from the Laguerre-Pólya class and properties of modular forms.

The candidates must have a PhD in mathematics or related areas, obtained after 2010, and have a scientific record compatible with their professional experience.

The applicants must send a letter of interest and motivation (up to 2 pages) and a complete CV (up to 3 pages) to: dimitrov@ibilce.unesp.br.

The position is open for two years for candidates from all over the world and the successful one will receive a monthly fellowship of BRL 6.819,30 and a "Technical Reserve" equivalent to 15% of the value of the annual fellowship to cover expenses related to the scientific activities.

For more details on the postdoctoral position see this link.

Note that you can select "English" instead of "Português" at the top of the web site.

Topic #7 ——— OP - SF Net 24.3 ——— May 15, 2017

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 March and April 2017. This list has been separated into two categories.

http://arxiv.org/abs/1703.00100
Asymptotic behaviour of the fifth Painlevé transcendents in the space of initial values
Nalini Joshi, Milena Radnović

http://arxiv.org/abs/1703.00106
Covering and separation of Chebyshev points for non-integrable Riesz potentials
Alexander Reznikov, Edward B. Saff, Alexander Volberg

http://arxiv.org/abs/1703.00653
Large Deviations and the Lukic Conjecture
Jonathan Breuer, Barry Simon, Ofer Zeitouni

http://arxiv.org/abs/1703.00763
Hankel determinants of harmonic numbers and related topics
Johann Cigler

http://arxiv.org/abs/1703.02228
A short survey of recent results on Buschman-Erdelyi transmutations
S.M. Sitnik

http://arxiv.org/abs/1703.02232
On fractional powers of Bessel operators
E.L. Shishkina, S.M. Sitnik

http://arxiv.org/abs/1703.02349
Universality for conditional measures of the sine point process
Arno B.J. Kuijlaars, Erwin Miña-Díaz

http://arxiv.org/abs/1703.02415
Counting Permutations that Avoid Many Patterns
Yonah Biers-Ariel, Haripriya Chakraborty, John Chiarelli, Bryan Ek, Andrew Lohr, Jinyoung Park, Justin Semonsen, Richard Voepel, Mingjia Yang, Anthony Zaleski, Doron Zeilberger

http://arxiv.org/abs/1703.02633
Euler's factorial series and global relations
Tapani Matala-aho, Wadim Zudilin

http://arxiv.org/abs/1703.03224
A Family of Crouzeix-Raviart Finite Elements in 3D
Patrick Ciarlet Jr., Charles F. Dunkl, Stefan A. Sauter

http://arxiv.org/abs/1703.03498
Elliptic Painlevé equations from next-nearest-neighbor translations on the $E_8^{(1)}$ lattice
Nalini Joshi, Nobutaka Nakazono

http://arxiv.org/abs/1703.04931
Some Open Problems in Random Matrix Theory and the Theory of Integrable Systems. II
Percy Deift

http://arxiv.org/abs/1703.05057
Lattice Walks in the Octant with Infinite Associated Groups
Manuel Kauers, Rong-Hua Wang

http://arxiv.org/abs/1703.05349
Gamma and Factorial in the Monthly
Jonathan M. Borwein, Robert M. Corless

http://arxiv.org/abs/1703.06473
A directional uncertainty principle for periodic functions
A. Krivoshein, E. Lebedeva, J. Prestin

http://arxiv.org/abs/1703.06495
Acceleration of Convergence of Some Infinite Sequences $\{A_n\}$ Whose Asymptotic Expansions Involve Fractional Powers of n
Avram Sidi

http://arxiv.org/abs/1703.07262
Motzkin Numbers: an Operational Point of View
Marcello Artioli, Giuseppe Dattoli, Silvia Licciardi, Simonetta Pagnutti

http://arxiv.org/abs/1703.07507
Enumeration of artitions with prescribed successive rank parity blocks
Seunghyun Seo, Ae Ja Yee

http://arxiv.org/abs/1703.08435
Moments of the Hermitian Matrix Jacobi process
Luc Deleaval, Nizar Demni

http://arxiv.org/abs/1703.09251
Binomial Polynomials mimicking Riemann's Zeta Function
Mark W. Coffey, Matthew C. Lettington

http://arxiv.org/abs/1703.09751
Fourth order Superintegrable systems separating in Cartesian coordinates I. Exotic quantum potentials
Ian Marquette, Masoumeh Sajedi, Pavel Winternitz

http://arxiv.org/abs/1703.10031
Asymptotic Enumeration of Compacted Binary Trees
Antoine Genitrini, Bernhard Gittenberger, Manuel Kauers, Michael Wallner

http://arxiv.org/abs/1704.00020
Elliptic well-poised Bailey transforms and lemmas on root systems
Gaurav Bhatnagar, Michael J. Schlosser

http://arxiv.org/abs/1704.01145
Conical: an extended module for computing a numerically satisfactory pair of solutions of the differential equation for conical functions
T. M. Dunster, A. Gil, J. Segura, N. M. Temme

http://arxiv.org/abs/1704.01234
Zeros of Dirichlet Polynomials via a Density Criterion
Willian D. Oliveira

http://arxiv.org/abs/1704.01777
Noether resolutions in dimension 2
Isabel Bermejo, Eva García-Llorente, Ignacio García-Marco, Marcel Morales

http://arxiv.org/abs/1704.02859
Spiral determinants
Gaurav Bhatnagar, Christian Krattenthaler

http://arxiv.org/abs/1704.03539
Orthogonal polynomials and Smith normal form
Alexander R. Miller, Dennis Stanton

http://arxiv.org/abs/1704.04309
Stochastic six-vertex model in a half-quadrant and half-line open ASEP
Guillaume Barraquand, Alexei Borodin, Ivan Corwin, Michael Wheeler

http://arxiv.org/abs/1704.04851
Rational solutions of the Painlevé-II equation revisited
Peter D. Miller, Yue Sheng

http://arxiv.org/abs/1704.05191
Overpartitions with bounded part differences
Shane Chern, Ae Ja Yee

http://arxiv.org/abs/1704.06636
Partition-Theoretic Formulas for Arithmetic Densities
Ken Ono, Robert Schneider, Ian Wagner

http://arxiv.org/abs/1704.06891
Higher depth quantum modular forms, multiple Eichler integrals, and $\mathfrak{sl}_3$ false theta functions
Kathrin Bringmann, Jonas Kaszian, Antun Milas

http://arxiv.org/abs/1704.06950
Self-Adjoint Operators in Extended Hilbert Spaces $H \oplus W$: An Application of the General GKN-EM Theorem
Lance Littlejohn, Richard Wellman

http://arxiv.org/abs/1704.07125
Higher Markov and Bernstein inequalities and fast decreasing polynomials with prescribed zeros
Sergei Kalmykov, Béla Nagy

http://arxiv.org/abs/1704.08406
Elliptic hypergeometric functions associated with root systems
Hjalmar Rosengren, S. Ole Warnaar

Other Relevant OP-SF E-Prints

http://arxiv.org/abs/1703.00742
The first moment of cusp form $L-$functions in weight aspect on average
Olga Balkanova, Dmitry Frolenkov

http://arxiv.org/abs/1703.01027
Recent Developments on the Moment Problem
Gwo Dong Lin

http://arxiv.org/abs/1703.01126
Finite Blaschke products with prescribed critical points, Stieltjes polynomials, and moment problems
Gunter Semmler, Elias Wegert

http://arxiv.org/abs/1703.01215
p-adic analogues of hypergeometric identities
Guo-Shuai Mao, Hao Pan

http://arxiv.org/abs/1703.01268
Solution of the nonrelativistic wave equation in the tridiagonal representation approach
A. D. Alhaidari

http://arxiv.org/abs/1703.01379
Four-dimensional Painlevé-type equations associated with ramified linear equations III: Garnier systems and Fuji-Suzuki systems
Hiroshi Kawakami

http://arxiv.org/abs/1703.01385
Truncated Bernoulli-Carlitz and truncated Cauchy-Carlitz numbers
Takao Komatsu

http://arxiv.org/abs/1703.01414
The Zetafast algorithm for computing zeta functions
Kurt Fischer

http://arxiv.org/abs/1703.01600
L^p estimates for an oscillating Dunkl multiplier
Béchir Amri, Mohamed Gaidi

http://arxiv.org/abs/1703.01625
Generalized photon-added associated hypergeometric coherent states: characterization and relevant properties
K. Sodoga, I. Aremua, M. N. Hounkonnou

http://arxiv.org/abs/1703.01629
Photon-added coherent states for shape invariant systems
Komi Sodoga, Mahouton Norbert Hounkonnou, Isiaka Aremua

http://arxiv.org/abs/1703.01903
Generalization of Special Functions and its Applications to Multiplicative and Ordinary Fractional Derivatives
Ali Ozyapici, Yusuf Gurefe, Emine Missirli

http://arxiv.org/abs/1703.01907
Evaluation of some non-elementary integrals of sine, cosine and exponential integrals type
Victor Nijimbere

http://arxiv.org/abs/1703.01912
Fractional calculus and generalized Mittag-Leffler type functions
Christian Lavault

http://arxiv.org/abs/1703.02022
Hypergeometric SLE and Convergence of Critical Planar Ising Interface
Hao Wu

http://arxiv.org/abs/1703.02410
Finding formulas using multipliers with inverse square potential on $\mathbb{R}^+$
Mohamed Vall Ould Moustapha

http://arxiv.org/abs/1703.02454
Polynomial solution of quantum Grassmann matrices
Miguel Tierz

http://arxiv.org/abs/1703.02776
Riemann-Hilbert problems for the resolved conifold
Tom Bridgeland

http://arxiv.org/abs/1703.02954
Higher Ramanujan equations II: periods of abelian varieties and transcendence questions
Tiago J. Fonseca

http://arxiv.org/abs/1703.03314
On a Class of Polynomials Generated by $F(xt - R(t))$
Mohammed Mesk, Mohammed Brahim Zahaf

http://arxiv.org/abs/1703.03922
Certain composition formulae for the fractional integral operators
Praveen Agarwal, Priyanka Harjule

http://arxiv.org/abs/1703.04039
Orthogonal polynomials inspired by the tridiagonal representation approach
A. D. Alhaidari

http://arxiv.org/abs/1703.04243
Jacobi polynomials on the Bernstein ellipse
Haiyong Wang, Lun Zhang

http://arxiv.org/abs/1703.04817
Representations for the derivative at zero and finite parts of the Barnes zeta function
José M. B. Noronha

http://arxiv.org/abs/1703.04934
Extension of Mittag-Leffler function
G. Rahman, K. S. Nisar, S. Mubeen, M. Arshad

http://arxiv.org/abs/1703.05434
On p-adic multiple Barnes-Euler zeta functions and the corresponding log gamma functions
Su Hu, Min-Soo Kim

http://arxiv.org/abs/1703.05521
Simple zero property of some holomorphic functions on the moduli space of tori
Zhijie Chen, Ting-Jung Kuo, Chang-Shou Lin

http://arxiv.org/abs/1703.06428
Indefinite Integrals of Spherical Bessel Functions
Jolyon K. Bloomfield, Stephen H. P. Face, Zander Moss

http://arxiv.org/abs/1703.06624
A point interaction for the discrete Schrödinger operator and generalized Chebyshev polynomials
D. R. Yafaev

http://arxiv.org/abs/1703.06757
Analytical evaluation and asymptotic evaluation of Dawson's integral and related functions in mathematical physics
Victor Nijimbere

http://arxiv.org/abs/1703.06830
Positive L^p-bounded Dunkl-type generalized translation operator and its applications
D. V. Gorbachev, V. I. Ivanov, S. Yu. Tikhonov

http://arxiv.org/abs/1703.06942
A further look at time-and-band limiting for matrix orthogonal polynomials
M. Castro, F. A. Grünbaum, I. Pacharoni, I. Zurrián

http://arxiv.org/abs/1703.07058
On Jacobian group and complexity of I-graph $I(n, k, l)$ through Chebyshev polynomials
Ilya Mednykh

http://arxiv.org/abs/1703.07665
Le canard de Painlevé
K. Uldall Kristiansen, S. J. Hogan

http://arxiv.org/abs/1703.07979
Finite-Part Integration of the Generalized Stieltjes Transform and its dominant asymptotic behavior for small values of the parameter
Christian D. Tica, Eric A. Galapon

http://arxiv.org/abs/1703.08177
Expansions of the solutions of the general Heun equation in terms of the incomplete Beta functions
T. A. Shahverdyan, V. M. Red'kov, A. M. Ishkhanyan

http://arxiv.org/abs/1703.08601
A note on some constants related to the zeta-function and their relationship with the Gregory coefficients
Iaroslav V. Blagouchine, Marc-Antoine Coppo

http://arxiv.org/abs/1703.08670
Chebyshev, Legendre, Hermite and other orthonormal polynomials in $D-$dimensions
Mauro M. Doria, Rodrigo C. V. Coelho

http://arxiv.org/abs/1703.08753
Three term relations for basic hypergeometric series
Yuka Suzuki

http://arxiv.org/abs/1703.08794
Exact Green Function for Neutral Pauli-Dirac Particle with Anomalous Magnetic Momentum in Linear Magnetic Field
Abdeldjalil Merdaci, Ahmed Jellal, Lyazid Chetouani

http://arxiv.org/abs/1703.08852
Inequalities of Extended (p,q)-beta and confluent hypergeometric function
S. Mubeen, K. S. Nisar, G. Rahman, M. Arshad

http://arxiv.org/abs/1703.08863
Rapid computation of L-functions attached to Maass forms
Andrew R. Booker, Holger Then

http://arxiv.org/abs/1703.09215
Reduction of lattice equations to the Painlevé equations: $\mathrm{P_{IV}}$ and $\mathrm{P_V}$
Nobutaka Nakazono

http://arxiv.org/abs/1703.09401
Irreducibility of the monodromy representation of Lauricella's F_C
Yoshiaki Goto, Keiji Matsumoto

http://arxiv.org/abs/1703.10362
Regulators of K_2 of Hypergeometric Fibrations
Masanori Asakura

http://arxiv.org/abs/1703.10370
Higher Chow cycles on Jacobian of Fermat curves and hypergeometric functions
Subham Sarkar

http://arxiv.org/abs/1704.00294
Heun-type solutions for Schwarzschild metric with electromagnetic fields
T. Birkandan, M. Hortaçsu

http://arxiv.org/abs/1704.00635
Super Rogers–Szegö polynomials associated with BC_N type of Polychronakos spin chains
B. Basu-Mallick, C. Datta

http://arxiv.org/abs/1704.01098
On a simple model of $X_0(N)$
Iva Kodrnja

http://arxiv.org/abs/1704.01237
Positive definite functions on complex spheres and their walks through dimensions
Eugenio Massa, Ana Paula Peron, Emilio Porcu

http://arxiv.org/abs/1704.01406
Extended Nikiforov–Uvarov method, roots of polynomial solutions, and functional Bethe ansatz method
C. Quesne

http://arxiv.org/abs/1704.01597
Fourier series of Gegenbauer–Sobolev polynomials
Óscar Ciaurri, Judit Mínguez

http://arxiv.org/abs/1704.01644
Positive Semidefiniteness of Matrices arising from Ramsey Theory
Joshua Cooper, Maxwell Forst

http://arxiv.org/abs/1704.01681
Randomized Verblunsky Parameters in Steklov's Problem
Keith Rush

http://arxiv.org/abs/1704.01764
The higher-order differential operator for the generalized Jacobi polynomials – new representation and symmetry
Clemens Markett

http://arxiv.org/abs/1704.01850
Approximate functional equations for the Hurwitz and Lerch zeta-functions
Takashi Miyagawa

http://arxiv.org/abs/1704.01901
A separation in modulus property of the zeros of a partial theta function
Vladimir Petrov Kostov

http://arxiv.org/abs/1704.02695
A proof of the (α, β)-inversion formula conjectured by Hsu and Ma
Jin Wang, Xinrong Ma

http://arxiv.org/abs/1704.02823
Configurations of FK Ising interfaces and hypergeometric SLE
Antti Kemppainen, Stanislav Smirnov

http://arxiv.org/abs/1704.03159
Elliptic hypergeometric sum/integral transformations and supersymmetric lens index
Andrew P. Kels, Masahito Yamazaki

http://arxiv.org/abs/1704.03498
New type of monogenic polynomials and associated spheroidal wavelets
Sabrine Arfaoui, Anouar Ben Mabrouk

http://arxiv.org/abs/1704.03512
Some Ultraspheroidal Monogenic Clifford Gegenbauer Jacobi Polynomials and Associated Wavelets
Sabrine Arfaoui, Anouar Ben Mabrouk

http://arxiv.org/abs/1704.04025
Symmetric identities of higher-order degenerate Euler polynomials
Dae san Kim, Taekyun Kim

http://arxiv.org/abs/1704.05273
Besov-Dunkl Spaces connected with generalized Taylor formula on the real line
Chokri Abdelkefi, Faten Rached

http://arxiv.org/abs/1704.05403
Co-primeness preserving higher dimensional extension of $q-$discrete Painleve I, II equations
Naoto Okubo

http://arxiv.org/abs/1704.05834
On large gaps between zeros of L-functions from branches
André LeClair

http://arxiv.org/abs/1704.06158
Extreme values of the Riemann zeta function and its argument
Andriy Bondarenko, Kristian Seip

http://arxiv.org/abs/1704.06381
An inequality for Jacobi polynomials of form $P_n^{(\alpha_n,\beta_n)}(x)$
Zhulin He, Yuyuan Ouyang

http://arxiv.org/abs/1704.06859
Generalized Cesàro operators, fractional finite differences and Gamma functions
Luciano Abadia, Pedro J. Miana

http://arxiv.org/abs/1704.06930
Multiple Eisenstein series and $q-$analogues of multiple zeta values
Henrik Bachmann

http://arxiv.org/abs/1704.06981
Equations of hypergeometric type in the degenerate case
Jan Dereziński, Maciej Karczmarczyk

http://arxiv.org/abs/1704.07081
An elementary representation of the higher-order Jacobi-type differential equation
Clemens Markett

http://arxiv.org/abs/1704.07126
Some identities of degeenrate ordered Bell polynomials and numbers arising from umbral calculus
Taekyun Kim, Dae san Kim

http://arxiv.org/abs/1704.07135
Bernoulli-Carlitz and Cauchy-Carlitz numbers with Stirling-Carlitz numbers
Hajime Kaneko, Takao Komatsu

http://arxiv.org/abs/1704.07695
Exponential Riordan Arrays and Jacobi elliptic functions
Arnauld Mwafise, Paul Barry

http://arxiv.org/abs/1704.07912
Wiener-Hermite Polynomial Expansion for Multivariate Gaussian Probability Measures
Sharif Rahman

http://arxiv.org/abs/1704.07927
Three approaches to detecting discrete integrability
R. G. Halburd, R. J. Korhonen

http://arxiv.org/abs/1704.07948
Geometric properties of the shifted hypergeometric functions
Toshiyuki Sugawa, Li-Mei Wang

http://arxiv.org/abs/1704.08183
A Dunkl Analogue of Operators Including Two-variable Hermite polynomials
Rabia Aktaş, Bayram Çekim, Fatma Taşdelen

http://arxiv.org/abs/1704.08189
Properties of Ultra Gamma Function
Kuldeep Singh Gehlot

http://arxiv.org/abs/1704.08191
Note on extensions of the beta function
Mehar Chand

http://arxiv.org/abs/1704.08194
A formula for the nonsymmetric Opdam's hypergeometric function of type A_2
Béchir Amri, Mounir Bedhiafi

http://arxiv.org/abs/1704.08465
Computation of Induced Orthogonal Polynomial Distributions
Akil Narayan

http://arxiv.org/abs/1704.09000
Unified integral operator involving generalized Bessel-Maitland function
Waseem Ahmad Khan, K. S. Nisar

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 176 members (as of October 20, 2016) scattered about in 30 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 Howard Cohl (howard.cohl@nist.gov), 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
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, 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 e-mail 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
> e-mail: service@siam.org
> WWW : http://www.siam.org

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, or spost@hawaii.edu.
Contributions to OP-SF NET 24.4 should be sent by July 1, 2017.

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
Information on joining SIAM and this activity group: service@siam.org

The elected Officers of the Activity Group (2017-2019) are:
Walter Van Assche, Chair
Andrei Martínez-Finkelshtein, Vice Chair
Sarah Post, Program Director
Yuan Xu, Secretary

The appointed officers are:
Howard Cohl, 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

How can it be that mathematics, being after all a product of human thought independent of experience, is so admirably adapted to the objects of reality?

Albert Einstein, first raised and addressed by Einstein during a lecture on 27 January 1921 at the Prussian Academy of Sciences in Berlin.