O P–S F N E T – Volume 26, Number 4 – July 15, 2019

Topics:

1. Message from the SIAG/OPSF Chair
2. Announcement: Candidates Identified for '20–'22 SIAG/OPSF Officer Elections
3. Announcement: The UC3M CONEX-Plus Programme
4. Announcement: PhD position at Inria Méditerranée, University Côte d'Azur, France
5. Announcement: Postdoc in Validated Computation of Special Functions at NIST
6. Report on: Conference in Honor of Bruce Berndt's 80th Birthday by **Atul Dixit**
7. Report on: Intl. Conference on Number Theory and Graph Theory by **Atul Dixit**
8. Report on: X Jaén Conference on Approximation Theory by **Miguel Piñar**
9. Special Issue on: Recent Trends on Orthogonal Polynomials in *Mathematics*
10. Preprints in arXiv.org
11. Submitting contributions to OP-SF NET and SIAM-OPSF (OP-SF Talk)
12. Thought of the Month by **Titchmarsh**

Calendar of Events:

July 15–19, 2019
International Congress on Industrial and Applied Mathematics (ICIAM 2019)
    Minisymposium on "Multivariate Orthogonal Polynomials: Theory and Applications",
      Organized by Paco Marcellán, Teresa E. Pérez and Yuan Xu,
    Minisymposium on "Integrable systems and discrete dynamics",
      Organized by Nalini Joshi, David Gómez-Ullate Oteiza and Nobutaka Nakazono,
Campus de Blasco Ibáñez, Universitat de València, València, Spain
https://iciam2019.org

July 22–26, 2019
International Symposium on Orthogonal Polynomials, Special Functions & Applications
  (OPSFA-15)
RISC, Johannes Kepler University, Linz, Austria
http://www.risc.jku.at/conferences/opsfa2019/

1

September 1–7, 2019

The 2nd International Conference on Symmetry
Special Session on "Special Functions and Orthogonal Polynomials",
Organized by Howard S. Cohl and Roberto S. Costas-Santos,
Centro de Ciencias de Benasque Pedro Pascual, Benasque, Spain
http://benasque.org/2019symmetry

September 14–15, 2019

AMS Fall Central Sectional Meeting
 Special Session on "Special Functions and Orthogonal Polynomials"
University of Wisconsin–Madison, Madison, Wisconsin, USA
http://www.ams.org/meetings/sectional/2267_program.html

July 6–10, 2020

SIAM Annual Meeting, held jointly with CAIMS
 (Canadian Applied and Industrial Mathematics Society)
Sheraton Centre Toronto Hotel, Toronto, Ontario, Canada
https://www.siam.org/Conferences/CM/Main/an20

July 13–17, 2020

33rd International Colloquium on Group Theoretical Methods in Physics (Group33)
Cotonou, Benin
http://www.cipma.net/group33-cotonou-benin

Topic #1 —— OP – SF Net 26.4 —— July 15, 2019

From: Walter Van Assche (walter.vanassche@kuleuven.be)
Subject: Message from the SIAG/OPSF Chair

Dear members of SIAG/OPSF,

I am writing this message from the International Congress on Industrial and Applied Mathematics (ICIAM2019) in València, Spain, where some of our members have organized a mini symposium. This is a big conference with 4000 participants and 3400 talks, and it is organized every four years. But honestly, I am more looking forward to our smaller OPSFA conference (Orthogonal Polynomials, Special Functions and Applications) in Hagenberg (near Linz, Austria) next week. Many members of our activity group will be present and the talks, both plenary and contributed, will tell us exactly what the interesting developments in our field are. Once more the Gábor Szegő prize will be awarded to an early career researcher in our field.

In May our activity group submitted a charter renewal form to SIAM asking to renew the activity group for another three years. Last week Carol Woodward, Vice President-at-Large of SIAM, and Jim Crowley, Executive Director of SIAM, informed me that the committee evaluating the charter renewals is a bit worried about two aspects: the declining membership (see Figure 1) and the engagement of our activity group in SIAM. On December 31, 2018 our activity group had 148 members, 42 of which are student members. A few years ago we had 177 members. This maximum was obtained right after OPSFA-13 which was organized by SIAM at NIST in Gaithersburg, Maryland. Out of the 21 activity groups in SIAM, we are the second smallest (Geometric Design is the smallest). Most activity groups have between 500 and 2500 members, so we are indeed a small activity group. However, as a small activity

group we are surprisingly active, in particular internationally with 50% of the members not working in the USA and many activities in Europe, Asia and Africa.

As for the engagement in SIAM: we are not very visible at SIAM conferences, such as the SIAM annual meeting. This has a lot to do with the high registration fee but also with the nature of a lot of our research: 80% of our membership is from academia (compared to 7% from industry), and of those, 72% are from Mathematics departments (compared to 12.5% from Engineering and 12.5% from Physics). We are a bit of an outsider in a Society for Industrial and Applied Mathematics. Our activity group is working on a track at the SIAM annual meeting of 2020 in Toronto, which will make us more visible.
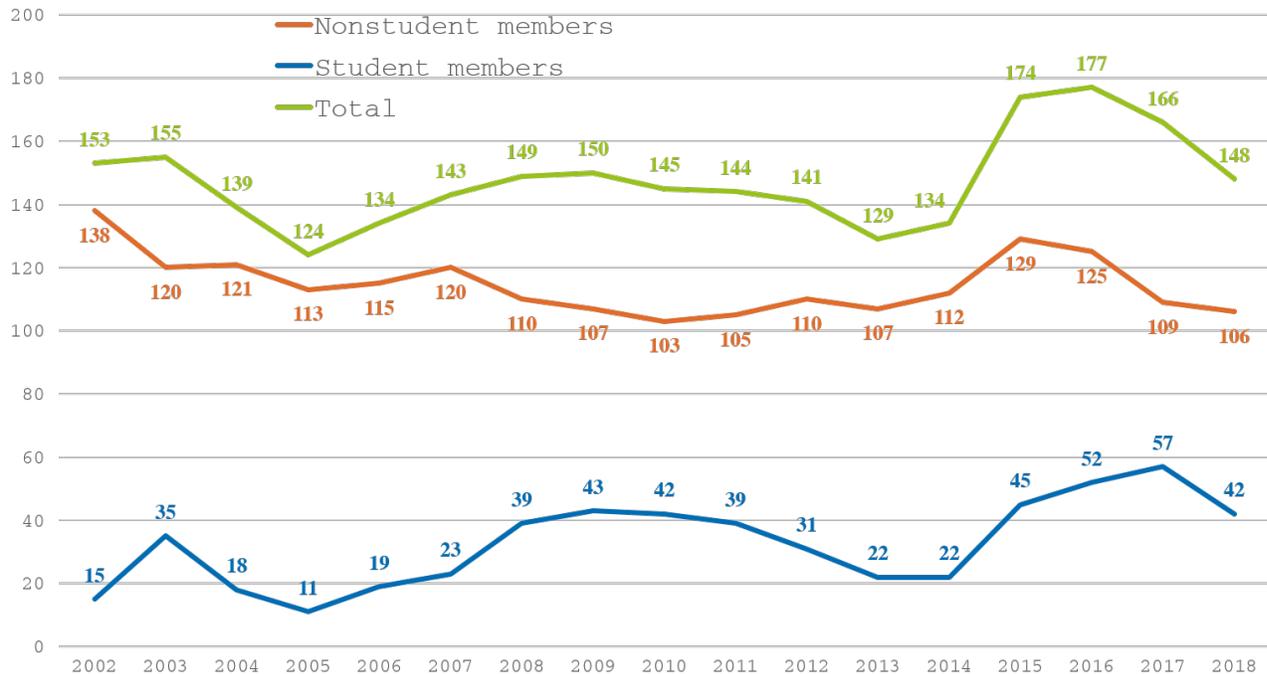
Figure 1: SIAG/OPSF Membership

Nevertheless, it was decided that the charter of our activity group will only be renewed for one year. During that year the new officers of the activity group (who will start January 1, 2020 and for which there is an election later this year, see Topic #2) will have to come up with plans on how to increase the membership and how to make the activity group more visible within SIAM. I feel a bit awkward to end my second term as your chair with this news. On one hand our SIAG/OPSF attained its maximum membership during my first term, but now it is back at the size we had in 2002 and 2009. I am confident, however, that the new officers will be able to convince SIAM that the charter of our activity group should be renewed for another three years.

I hope to see many of you in Hagenberg next week.

Walter Van Assche, chair

Topic #2 ——— OP – SF Net 26.4 ——— July 15, 2019

From: Paco Marcellán (pacomarc@ing.uc3m.es)
Subject: Announcement: Candidates Identified for '20–'22 SIAG/OPSF Officer Elections

The Nomination Committee of our SIAG/OPSF has proposed the following list of candidates for officer positions of the Board for the next term.

Chair: Peter Clarkson, Edward B. Saff.
Vice Chair: Peter D. Miller, Luc Vinet.
Secretary: Teresa E. Pérez, Maxim Derevyagin.
Program Director: Andrei Martínez–Finkelshtein, Nicholas Witte.

Descriptions and responsibilities for each position can be found at the following link.

The timing for the SIAG/OPSF elections will continue as follows:

1. Ballots will be posted online and the elections will start on September 1st, 2019;
2. The election will be completed on November 30th, 2019;
3. The new officers will start on January 1st, 2020.

The SIAG/OPSF Nomination Committee consists of Paco Marcellán (chair), Kathy Driver, Tom H. Koornwinder, Sarah Post and Yuan Xu.

Topic #3 ——— OP – SF Net 26.4 ——— July 15, 2019

From: Paco Marcellán (pacomarc@ing.uc3m.es)
Subject: Announcement: The UC3M CONEX-Plus Programme

I have proposed a topic on Multivariate Orthognal Polynomials and applications in Boundary Value Problems in the CONEX–Plus Programme at Universidad Carlos III de Madrid (UC3M) and welcome applicants. The deadline for application is September 30, 2019.

Figure 2: The CONEX–Plus Programme

The CONEX-Plus Programme is a training and incoming mobility programme that aims to accelerate the career development of a cohort of international Experienced Researchers (ERs) at UC3M within the framework of the Marie Sklodowska–Curie Actions (MSCA) CO-FUND scheme.

Building on the excellence of UC3M, the CONEX-Plus programme will train the next generation of research leaders in their respective areas, whilst at the same time supporting the Strategic Plan 2016 – 2022 from UC3M and contributing to the Spanish research and innovation landscape.

CONEX-Plus will offer 30 fellowships, by means of 2 international public calls, in July and December 2019, to ERs with up to 6 years of postdoctoral experience.

Fellows will undertake a three-year project freely chosen by them within the objectives and subjects outlined in the Research and Innovation Strategy for Smart Specialisation (RIS3) of the Madrid Autonomous Region. The link of the programme with the priorities of the RIS3, extended both to Spanish and European priorities, will improve the fellows employability and career prospects both in and outside academia.

Projects will be implemented in one of the 27 departments at the UC3M and through a compulsory Secondment in a high level non-academic organization, and be supported by 2 Supervisors.

A Career Development Plan (CDP) will be set up, to guide the fellows to achieve their scientific and career development objectives.

The CONEX-Plus training and career development programme is based on the so-called triple 'i' dimension: International aspects, intersectoral exposure and interdisciplinarity. All fellows will benefit through the training programme with dedicated modules on relevant transferable skills and Industry Training Blocks.

UC3M holds the European Commission's HR Excellence in Research award. This recognises the University's commitment to supporting the personal, professional and career development of its researchers and acknowledges its full alignment with the principles of the European Charter and Code for Researchers.

CONEX-Plus is funded by UC3M, the European Commission through the Marie-Sklodowska Curie COFUND Action (Grant Agreement No 801538) and Banco Santander.

Topic #4 ──── OP – SF Net 26.4 ──── July 15, 2019

From: Evelyne Hubert (evelyne.hubert@inria.fr)
Subject: Announcement: PhD position at Inria Méditerranée, University Côte d'Azur, France

Dear Colleagues,

I have an opening for a PhD position within the European network POEMA to start in the fall of 2019. I would be very grateful if you would pass the information to your talented & self-motivated students who will have completed their Master degree by then.

The PhD topic concerns: multivariate orthogonal polynomials; cubatures and their applications to global optimization.

The project requires a taste for both algebra and analysis, and computational skills are a plus. Additional directions for this PhD are described in
http://www-sop.inria.fr/members/Evelyne.Hubert/POEMA/ESR10.pdf.

The position is very attractive, in terms of salary and working conditions. The main working place is Inria Méditerranée, France National Institute for Applied Mathematics and Computer Science in the vicinity of Nice. Two internships, one in Norway, one in the UK, as well as

several schools and meetings with the network will provide an stimulating 3 year experience with an international set of 15 PhD students throughout western Europe.

Candidates are to contact me by e-mail, with CV, records of grades and Master thesis (if available). In addition, your personal recommendation would be very valued. There is a mobility requirement which encourages candidates from outside of France.

Thanks.
Evelyne Hubert, Research Director at Inria,
E-mail: Evelyne.Hubert@inria.fr
Web-page: http://www-sop.inria.fr/members/Evelyne.Hubert.

Topic #5 ——— OP – SF Net 26.4 ——— July 15, 2019

From: Bonita Saunders (Bonita.Saunders@nist.gov)
Subject: Announcement: Postdoc in Validated Computation of Special Functions at NIST

A two-year postdoctoral research opportunity in validated computation of special functions is available at the National Institute of Standards and Technology (NIST) in Gaithersburg, MD through the US National Research Council (NRC) Associateship Program. Applicants must be US citizens. The application deadline date is August 1, 2019.

NIST's Applied and Computational Mathematics Division (ACMD) is developing an online system for generating validated tables of special function values with an error certification computed to user-specified precision. A typical user might be a researcher or software developer testing his own code or confirming the accuracy of results obtained from a commercial or publicly available package. The goal is to create a standalone system, but also link to and from the NIST Digital Library of Mathematical Functions (DLMF).

The project, DLMF Standard Reference Tables on Demand (DLMF Tables), is a collaborative effort with the University of Antwerp Computational Mathematics Research Group (CMA) led by Annie Cuyt. A beta site based on CMA's MpIeee, a multiprecision IEEE 754/854 compliant C++ floating point arithmetic library, is already available at http://dlmftables.uantwerpen.be/. The successful candidate will have the opportunity to advance our current efforts in the field of validated computing through the continued research and development of multiple precision function software providing guaranteed error bounds at arbitrary precision. The associate will also help expand DLMF Tables into a full-fledged site, as well as investigate the enhancement of existing multiprecision libraries for possible inclusion in DLMF Tables.

Before formally applying, candidates should contact Bonita.Saunders@nist.gov to discuss this appointment. For additional information on NIST ACMD postdoc opportunities see https://www.nist.gov/itl/math/postdoctoral-opportunities.

Topic #6 ——— OP – SF Net 26.4 ——— July 15, 2019

From: Atul Dixit (adixit@iitgn.ac.in)
Subject: Report on: Conference in Honor of Bruce Berndt's 80th Birthday by **Atul Dixit**

The conference 'Analytic and Combinatorial Number Theory: The Legacy of Ramanujan' in honor of Professor Bruce C. Berndt's 80th birthday was held at the University of Illinois at Urbana-Champaign from June 6-9, 2019. Bruce Berndt is one of the world's foremost authorities on Ramanujan and his Mathematics. He has not only edited Ramanujan's Notebooks

and produced five volumes on the same, but has also edited, jointly with Professor George E. Andrews, Ramanujan's Lost Notebook, producing five more volumes on it. It took him about 45 years to complete this monumental task. He was awarded the prestigious Leroy P. Steele Prize for Mathematical Exposition in 1996 for making the startling discoveries of Ramanujan accessible to the mathematical world. This conference was to commemorate Berndt's outstanding achievements and service all these years and was also held to honor his retirement from the University of Illinois. During his 52 years on the faculty of the Illinois Mathematics Department, Professor Berndt supervised 36 PhD students (and is currently supervising one more) and 10 postdocs, many of whom attended this conference.

This meeting, organized by Scott Ahlgren, George Andrews, Atul Dixit, Michael Filaseta, Kevin Ford, A. J. Hildebrand, Timothy Huber, Bruce Reznick, and Ae Ja Yee, received an overwhelming response with over 200 registrations and more than 100 scheduled talks and was the largest number theory conference hosted at the university since the 'Millenial Conference on Number Theory' back in May 2000. The opening talk by George E. Andrews, another authority on Ramanujan's work, was on proving some conjectures by George Beck on ranks of partitions. There were several talks encompassing Analytic Number Theory, Special Functions, Combinatorics, q–Series, and Modular Forms. Professor Berndt gave a public lecture titled 'Ramanujan: The Ultimate Superhero' on the first day of the conference. The Mathematics Library hosted a special display of books that Bruce Berndt authored and journals for which he has served as an editor. Springer–Verlag and World Scientific had book displays at the venue, and representatives of these publishers were present for part of the conference.

The banquet honoring Bruce Berndt was held on the third day of the conference (June 8) at the Alice Campbell Alumni Center. It featured speeches by his family members, some of his students and postdocs, and by Rochelle Kronzek from World Scientific. It also included a musical performance by Professor Ken Stolarsky and his team.

Topic #7 ——— OP – SF Net 26.4 ——— July 15, 2019

From: Atul Dixit (adixit@iitgn.ac.in)
Subject: Report on: Intl. Conference on Number Theory and Graph Theory by **Atul Dixit**

An International Conference on Number Theory and Graph Theory was held from June 27–29, 2019 at the University of Mysore, India, to commemorate the 62nd birthday of Professor Chandrasekhar Adiga and his superannuation from University of Mysore. Chandrasekhar Adiga is one of the foremost mathematicians from India working on Ramanujan's mathematical results. He by himself, and also along with his PhD advisor, Professor S. Bhargava, has written many important papers in basic hypergeometric series and theta functions. Professor Adiga's research interests include q–series, Special Functions, Number Theory, Combinatorics and Algebraic Graph Theory. He has guided 23 PhD students (including 5 foreign nationals). Professor Adiga is a recipient of the Hardy–Ramanujan Award (1999) and the Srinivasa Ramanujan Memorial Award by the Indian Mathematical Society (2004).

The organizing secretary of the conference was Professor K. R. Vasuki, University of Mysore. The conference received a huge response both from within India and abroad with several experts in number theory and graph theory giving talks. A felicitation ceremony honoring Professor Adiga was held on the first day of the conference. It consisted of speeches from the colleagues and students of Professor Adiga. Other highlights included a cultural performance by students of the university.

From: Miguel Piñar (mpinar@ugr.es)
Subject: Report on: X Jaén Conference on Approximation Theory by **Miguel Piñar**

The X Jaén Conference on Approximation Theory took place in Úbeda, Jaén, Spain, from July 1st to July 4th, 2019. Úbeda is a wonderful place and, apart from the scientific interest, the conference provides the participants (and their accompanying people) the possibility to visit World Heritage Sites and taste a wide culinary variety, where one of the main ingredients is "extra virgin" olive oil.

Figure 3: Participants after the gala dinner.

The organizers (Francisco-Javier Muñoz-Delgado, Daniel Cárdenas-Morales, Antonio-Jesús López-Moreno and Paqui Molina-Alba) did fantastic work during these four days running this conference and we all had excellent opportunities for discussion. As usual in this series of conferences, talks took place only in the mornings, leaving the rest of the day for discussions and social activities.

On the first day, the program included a great plenary talk by Elena E. Berdysheva "Metric approximation of set-valued functions of bounded variation" and short talks by J. Szabados, G. Mastroianni, V. Leonessa, and M. Cappelletti Montano. On the second day, Andriy Prymak gave a very interesting plenary talk "Polynomial approximation on C^2 domains" and there were also short talks by Feng Dai, H. Maskhar, J. J. Merino and myself. On Wednesday, a full day visit to Alcalá la Real and "La Mota" castle was scheduled. The last day of the conference had a plenary talk by A. Sri Ranga "A class of orthogonal polynomials on the unit circle and related special functions" and three shorter talks by Kamen Ivanov, Misael E. Marriaga, and F. Weiscz. A visit to Quesada completed the day. There was also a poster session.

In my opinion, the organizers did a great job keeping us all together during the four days and taking special care of both scientific and social activities. Many thanks for their kind hospitality.

From: Edmundo José Huertas Cejudo (edmundo.huertas@uah.es)
Subject: Special Issue on: Recent Trends on Orthogonal Polynomials in *Mathematics*

The journal Mathematics (impact factor 1.105) will publish a special issue entitled:
Recent Trends on Orthogonal Polynomials: Approximation Theory and Applications.

The guest editors for this special issue are Edmundo J. Huertas Cejudo and Paco Marcellán.

Orthogonal polynomials are essential tools for the solution of many problems in the spectral theory of differential and difference equations, Painlevé equations (discrete and continuous versions), numerical methods in quadrature on the real line and the unit circle, as well as cubature formulas on multidimensional domains, with applications ranging from Number Theory to Approximation Theory, Combinatorics to Group representation, integrable systems, random matrices, and linear system theory to signal processing.

The aims of the Special Issue are:

1. to show some recent trends in the research on orthogonal polynomials, with a special emphasis on their analytic properties and approximation theory;

2. to emphasize their impact in Mathematical Physics, mainly in integrable systems and Painlevé equations (discrete and continuous cases), as they are strongly related to the coefficients of three term relations satisfied by a sequence of orthogonal polynomials and time-dependent measures supported on the real line.

Scope: Orthogonal polynomials on the real line; Orthogonal polynomials on the unit circle; Matrix orthogonal polynomials; Multiple orthogonal polynomials; Multivariate orthogonal polynomials; Sobolev orthogonal polynomials; Integrable systems; Random matrices; Quadrature and cubature formulas; Rational approximation; Approximation with splines; Wavelets.

The special issue title is:
 Recent Trends on Orthogonal Polynomials: Approximation Theory and Applications.
The deadline for manuscript submissions is: 1 November 2019.
The webpage for the special issue is can be found here: link.
To submit a manuscript to this special issue, go to this link.

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 2019. This list has been separated into two categories.

OP-SF Net Subscriber E-Prints

http://arxiv.org/abs/1905.00009
Asymptotics of a sum of modified Bessel functions with non-linear argument
R. B. Paris

http://arxiv.org/abs/1905.00483
Generalizations of Menchov–Rademacher theorem and existence of wave operators in Schrodinger evolution
Sergey Denisov, Liban Mohamed

http://arxiv.org/abs/1905.00717
On double q-Laplace transform and applications
P. Njionou Sadjang

http://arxiv.org/abs/1905.02629
Random Self–Similar Trees: A mathematical theory of Horton laws
Yevgeniy Kovchegov, Ilya Zaliapin

http://arxiv.org/abs/1905.03216
A Dimension–Free Hermite–Hadamard Inequality via Gradient Estimates for the Torsion Function
Jianfeng Lu, Stefan Steinerberger

http://arxiv.org/abs/1905.03618
On point–mass Riesz external fields on the real axis
David Benko, Peter Dragnev, Ramon Orive

http://arxiv.org/abs/1905.04131
Nielsen's beta function and some infinitely divisible distributions
Christian Berg, Stamatis Koumandos, Henrik L. Pedersen

http://arxiv.org/abs/1905.04276
Orthogonal sequences constructed from quasi–orthogonal ultraspherical polynomials
Oksana Bihun, Kathy Driver

http://arxiv.org/abs/1905.04673
High–order derivatives of the Bessel functions with an application
R. B. Paris

http://arxiv.org/abs/1905.04692
Color–position symmetry in interacting particle systems
Alexei Borodin, Alexey Bufetov

http://arxiv.org/abs/1905.04869
Orthogonal Polynomials, Asymptotics and Heun Equations
Yang Chen, Galina Filipuk, Longjun Zhan

http://arxiv.org/abs/1905.04907
Riemann–Hilbert approach to a generalised sine kernel
R. Gharakhloo, A. R. Its, K. K. Kozlowski

http://arxiv.org/abs/1905.05986
Edge Disjoint Caterpillar Realizations
István Miklós, Geneva Schlafly, Yuheng Wang, Zhangyang Wei

http://arxiv.org/abs/1905.06487
Spectra of random regular hypergraphs
Ioana Dumitriu, Yizhe Zhu

http://arxiv.org/abs/1905.07204
Large-parameter asymptotic expansions for the Legendre and allied functions
Gergő Nemes, Adri B. Olde Daalhuis

http://arxiv.org/abs/1905.07206
On the computation and inversion of the cumulative noncentral beta distribution function
A. Gil, J. Segura, N. M. Temme

http://arxiv.org/abs/1905.07450
Transport and Interface: an Uncertainty Principle for the Wasserstein distance
Amir Sagiv, Stefan Steinerberger

http://arxiv.org/abs/1905.07587
Fourier series in orthogonal polynomials on a cone of revolution
Yuan Xu

http://arxiv.org/abs/1905.07827
On the Average Maximal Number of Balls in a Bin Resulting from Throwing r Balls into n Bins T times
Amir Behrouzi-Far, Doron Zeilberger

http://arxiv.org/abs/1905.09024
Dunkl-Supersymmetric Orthogonal Polynomials
Yu Luo, Satoshi Tsujimoto, Luc Vinet, Alexei Zhedanov

http://arxiv.org/abs/1905.09223
Bispectral Laguerre type polynomials
Antonio J. Durán, Manuel D. de la Iglesia

http://arxiv.org/abs/1905.09493
Riesz distributions and Laplace transform in the Dunkl setting of type A
Margit Rösler

http://arxiv.org/abs/1905.10046
Invariant subspaces of biconfluent Heun operators and special solutions of Painlevé IV
Yik-Man Chiang, Chun-Kong Law, Guo-Fu Yu

http://arxiv.org/abs/1905.10420
Convolution identities for Dunkl orthogonal polynomials from the $\mathfrak{osp}(1|2)$ Lie superalgebra
Erik Koelink, Jean-Michel Lemay, Luc Vinet

http://arxiv.org/abs/1905.11400
Vibrations of an elastic bar, isospectral deformations, and modified Camassa-Holm equations
Xiang-Ke Chang, Jacek Szmigielski

http://arxiv.org/abs/1905.11195
Asymptotics for Recurrence Coefficients of $X1$-Jacobi Polynomials and Christoffel Function
Á. P. Horváth

http://arxiv.org/abs/1905.12010
Parking Functions on Directed Graphs and Some Directed Trees
Westin King, Catherine Yan

http://arxiv.org/abs/1905.12312
Recurrence relations for Wronskian Laguerre polynomials
Niels Bonneux, Marco Stevens

http://arxiv.org/abs/1905.12579
Hypergeometric rational approximations to $\zeta(4)$
Raffaele Marcovecchio, Wadim Zudilin

http://arxiv.org/abs/1905.13176
On Sublevel Set Estimates and the Laplacian
Stefan Steinerberger

http://arxiv.org/abs/1906.03907
A sparse spectral method for Volterra integral equations using orthogonal polynomials on
the triangle
Timon S. Gutleb, Sheehan Olver

http://arxiv.org/abs/1906.04975
A new identity for a sum of products of the generalized hypergeometric functions
Dmitrii Karp, Alexey Kuznetsov

http://arxiv.org/abs/1906.05414
Fast, reliable and unrestricted iterative computation of Gauss-Hermite and Gauss-Laguerre
quadratures
A. Gil, J. Segura, N. M. Temme

http://arxiv.org/abs/1906.06257
The Inverse Eigenvalue Problem for Linear Trees
Tanay Wakhare, Charles R. Johnson

http://arxiv.org/abs/1906.06650
Consistency around a cuboctahedron
Nalini Joshi, Nobutaka Nakazono

http://arxiv.org/abs/1906.07384
Special hypergeometric motives and their L-functions: Asai recognition
Lassina Dembélé, Alexei Panchishkin, John Voight, Wadim Zudilin

http://arxiv.org/abs/1906.07410
Mock modular Eisenstein series with Nebentypus
Michael H. Mertens, Ken Ono, Larry Rolen

http://arxiv.org/abs/1906.07715
On another extension of coherent pairs of measures
K. Castillo, D. Mbouna

http://arxiv.org/abs/1906.07962
Sparse spectral and p-finite element methods for partial differential equations on disk slices and trapeziums
Ben Snowball, Sheehan Olver

http://arxiv.org/abs/1906.07999
Discrete Harmonic Analysis associated with Jacobi expansions III: the Littlewood-Paley-Stein g_k-functions and the Laplace type multipliers
Alberto Arenas, Óscar Ciaurri, Edgar Labarga

http://arxiv.org/abs/1906.08004
The convergence of discrete Fourier-Jacobi series
Alberto Arenas, Óscar Ciaurri, Edgar Labarga

http://arxiv.org/abs/1906.11162
Mapping Schrödinger equation into a Heun-type and identifying the corresponding potential function, energy and wavefunction
A. D. Alhaidari

http://arxiv.org/abs/1906.11169
General stationary solutions of the nonlocal nonlinear Schrödinger equation and their relevance to the PT-symmetric systems
Tao Xu, Yang Chen, Min Li, De-Xin Meng

http://arxiv.org/abs/1906.11499
Analytical Results for the Dynamics of Parabolic Level-Crossing Model
Chon-Fai Kam, Yang Chen

http://arxiv.org/abs/1906.11978
Some Observations on Lambert series, vanishing coefficients and dissections of infinite products and series
James McLaughlin

http://arxiv.org/abs/1906.11997
Mock Theta Function Identities Deriving from Bilateral Basic Hypergeometric Series
James McLaughlin

http://arxiv.org/abs/1906.12074
Recursion scheme for the largest β-Wishart-Laguerre eigenvalue and Landauer conductance in quantum transport
Peter J. Forrester, Santosh Kumar

http://arxiv.org/abs/1906.12305
Orthogonal polynomials in and on a quadratic surface of revolution
Sheehan Olver, Yuan Xu

http://arxiv.org/abs/1906.12339
Genus-zero and genus-one string amplitudes and special multiple zeta values
Don Zagier, Federico Zerbini

Other Relevant OP-SF E-Prints

http://arxiv.org/abs/1905.00069
On the Utility of the Inverse Gamma Distribution in Modeling Composite Fading Channels
Pablo Ramírez-Espinosa, F. Javier Lopez-Martinez

http://arxiv.org/abs/1905.00208
Can tangle calculus be applicable to hyperpolynomials?
H. Awata, H. Kanno, A. Mironov, A. Morozov

http://arxiv.org/abs/1905.00236
Random walk to ϕ^4 and back
Daniel Höf

http://arxiv.org/abs/1905.00250
Lauricella's F_C with finite irreducible monodromy group
Yoshiaki Goto

http://arxiv.org/abs/1905.00978
Radial operators on polyanalytic Bargmann-Segal-Fock spaces
Egor A. Maximenko, Ana María Tellería-Romero

http://arxiv.org/abs/1905.01597
Enhanced zeta distributions and its functional equations
Kyo Nishiyama, Bent Ørsted, Akihito Wachi

http://arxiv.org/abs/1905.01821
A new transformation formula involving two ${}_8\psi_8$ series and a ${}_8\phi_7$ series
Chuanan Wei

http://arxiv.org/abs/1905.01876
New symmetries for the $U_q(sl_N)$ 6-j symbols from the Eigenvalue conjecture
Andrey Morozov, Alexey Sleptsov

http://arxiv.org/abs/1905.01914
Multivariate Bernoulli polynomials
Genki Shibukawa

http://arxiv.org/abs/1905.02131
Improved asymptotics for the Ablowitz-Segur solutions of the inhomogeneous Painlevé II equation
Piotr Kokocki

http://arxiv.org/abs/1905.02153
Orthodiagonal anti-involutive Kokotsakis polyhedra
Ivan Erofeev, Grigory Ivanov

http://arxiv.org/abs/1905.02179
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Alexander G. Rasin, Jeremy Schiff

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A. S. Detinko, D. L. Flannery, A. Hulpke

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Alina Al'bertovna Allahverdyan

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Zhipeng Liu, Axel Saenz, Dong Wang

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Alan Adolphson, Steven Sperber

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Xinge Zhang, James Bremer

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Milan Janjic

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C. Sourdis

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Cameron Franc, Geoffrey Mason

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Families of two-dimensional Coulomb gases on an ellipse: correlation functions and uni-
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Taro Nagao, Gernot Akemann, Mario Kieburg, Iván Parra

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The q-multiple gamma functions of Barnes-Milnor type
Hanamichi Kawamura

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Frédéric Chapoton

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Sam Northshield

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Jin Wang

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New decomposition formulas associated with the Lauricella multivariable hypergeometric functions
Tuhtasin Ergashev

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László Mérai, Alina Ostafe, Igor E. Shparlinski

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Kyle Johnson

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Classification of Real Solutions of the Fourth Painlevé Equation
Jeremy Schiff, Michael Twiton

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Aaditya Rangan, Marina Spivak, Joakim Andén, Alex Barnett

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The Fundamental Solution to One-Dimensional Degenerate Diffusion Equation, I
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Real zeros of random trigonometric polynomials with pairwise equal blocks of coefficients
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Zoran Ristivojevic

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Generalising the Wallis Product
Joshua W. E. Farrell

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Asymptotic Expansions for the multiple gamma functions of Barnes-Milnor type
Hanamichi Kawamura

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Mikhail Bershtein, Roman Gonin

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Amlan K. Halder, Andronikos Paliathanasis, P. G. L. Leach

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Daniele Dona, Harald A. Helfgott, Sebastian Zuniga Alterman

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Jimmy He

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Dapeng Zhan

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Discrete Painlevé equations from singularity patterns: the asymmetric trihomographic case
Basil Grammaticos, Alfred Ramani, Ralph Willox, Junkichi Satsuma

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Constant coefficient Laurent biorthogonal polynomials, Riordan arrays and moment sequences
Paul Barry

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On the Uniform Distribution (mod 1) of the Farey Sequence, quadratic Farey and Riemann sums with a remark on local integrals of $\zeta(s)$
Michel Weber

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Peter Nejjar

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Primitivo B. Acosta-Humánez, Maria Campo Donado, Alberto Reyes Linero, Jorge Rodríguez Contreras

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Carlos S. Kubrusly, Nhan Levan

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Mario DeFranco

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Peter Koroteev, Shamil Shakirov

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Johannes Broedel, Andre Kaderli

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Christophe Charlier, Jonatan Lenells, Julian Mauersberger

Topic #11 ——— OP – SF Net 26.4 ——— July 15, 2019

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 26.5 should be sent by September 1, 2019.

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:
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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

Topic #12 ——— OP – SF Net 26.4 ——— July 15, 2019

From: OP-SF Net Editors
Subject: Thought of the Month by **Titchmarsh**

It can be of no practical use to know that π is irrational, but if we can know, it surely would be intolerable not to know.

Titchmarsh, Edward Charles (1899–1963), In N. Rose, Mathematical Maxims and Minims, Raleigh NC: Rome Press, 1988.