OP-SF NET - Volume 21, Number 4 - July 15, 2014

Editors:

Diego Dominici dominicd@newpaltz.edu Martin Muldoon muldoon@yorku.ca

The Electronic News Net of the SIAM Activity Group on Orthogonal Polynomials and Special Functions http://math.nist.gov/opsf/

Please send contributions to: poly@siam.org Subscribe by mailing to: poly-request@siam.org or to: listproc@nist.gov

Topics:

- 1. CALL FOR NOMINATIONS Gábor Szegő Prize
- 2. OPSFA13, Gaithersburg, MD, USA 2015
- 3. Conference to honour Mourad Ismail
- 4. Conference to honour Roderick Wong
- 5. SIAM and AMS Fellows
- 6. Report on "Constructive Functions 2014"
- 7. Report on Conference on "Random Matrices and Jacobi Operators"
- 8. Preprints in arXiv.org
- 9. About the Activity Group
- 10. Submitting contributions to OP-SF NET and SIAM-OPSF (OP-SF Talk)

Calendar of Events:

July 14-18, 2014

XXXth International Colloquium on Group Theoretical Methods in Physics, Ghent, Belgium http://www.group30.ugent.be/

July 21-25, 2014

VIII Pan American Workshop in Applied and Computational Mathematics/Computational Science and Engineering, Barranquilla, Colombia http://www.csrc.sdsu.edu/panam2014/index.html

August 13-21, 2014

International Congress of Mathematicians, Seoul, Korea http://www.icm2014.org

August 25-29, 2014

Exact Solvability and Symmetry Avatars, Conference held on the occasion of Luc Vinet's 60th birthday, Centre de Recherches Mathématiques, Montreal Canada

http://www.crm.umontreal.ca/2014/Vinet60/index_e.php

September 7-12, 2014

Exceptional Orthogonal Polynomials and exact solutions in Mathematical Physics, Segovia, Spain 21.2 #2

http://www.icmat.es/congresos/2014/xopconf/

September 18, 2014

Recent advances in Orthogonal Polynomials and its Interactions with Integrable Systems, University of Kent, Canterbury, UK http://www.kent.ac.uk/smsas/events/OrthogonalPolynomials.html

October 16-18, 2014

13th Annual Conference (ICSFA 2014) of Society for Special Functions & their Applications (SSFA) Thapar University, Patila, India. http://www.ssfaindia.webs.com/conf.htm

October 18-19, 2014

American Mathematical Society, Eastern Section Meeting, including Special Session on "Special Functions and their Applications" (organized by Mourad Ismail and Nasser Saad), Halifax, Nova Scotia, Canada http://www.ams.org/meetings/sectional/2223_program.html

October 25-29, 2014

"International Conference on Orthogonal Polynomials, Integrable Systems and Their Applications" on the occasion of Professor Mourad Ismail's 70th Birthday, Shanghai Jiao Tong University and Shaoxing University http://math.sjtu.edu.cn/conference/icopista/index.html

December 1-5, 2014

International Conference on Applied Mathematics in honour of Professor Roderick S. C. Wong's 70th Birthday, City University of Hong Kong http://www6.cityu.edu.hk/rcms/icam2014/

December 11-20, 2014

Foundations of Computational Mathematics, Montevideo, Uruguay (including workshops on Approximation Theory and on Special Functions and Orthogonal Polynomials)

http://www.fing.edu.uy/~jana/www2/focm_2014.html

June 1-5, 2015

13th International Symposium on Orthogonal Polynomials, Special Functions and Applications (OPSFA13), Gaithersburg, Maryland, USA http://www.siam.org/meetings/opsfa13/

August 10-14, 2015

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

Topic #1 ------ OP-SF NET 21.4 ----- July 15, 2014

From: Walter Van Assche Walter.VanAssche@wis.kuleuven.be Subject: CALL FOR NOMINATIONS - Gábor Szegő Prize

The Gábor Szegő Prize will be awarded by the SIAM Activity Group on Orthogonal Polynomials and Special Functions (SIAG/OPSF) at the 13th International Symposium on Orthogonal Polynomials, Special Functions, and Applications (OPSFA 2015), to be held June 1-5, 2015, at National Institutes of Standards and Technology (NIST), in Gaithersburg, Maryland, USA.

The prize was established in 2010 and will be awarded biennially by SIAG/OPSF to an early-career researcher for outstanding research contributions 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.

Previous recipients of the Szegő Prize are Tom Claeys (Université Catholique de Louvain, Louvain-la-Neuve, Belgium) and Jacob Stordal Christiansen (Lund University, Sweden.

The prize will 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 career stage.

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 OPSFA 2015. Travel funds will be made available to reimburse the recipient for reasonable travel expenses and local accommodation costs incurred in attending the award ceremony and giving the talk. The recipient's OPSFA conference registration will be waived.

Nominations should be addressed to Professor Walther Van Assche, Chair, Gábor Szegő Prize committee and sent with attachments to szego_prize@siam.org by November 1, 2014. A valid nomination requires 1.) A letter of nomination signed by two members of the SIAG/OPSF and 2.) the nominee's CV. The letter should indicate 3.) the paper(s) cited for the work being recognized, explain the significance of the work, and (in the case of multiple authors) indicate the contribution of the nominee.

Preferably also send a copy of the submission to the chair of the selection committee <walter.vanassche@wis.kuleuven.be>. If you are not a member of SIAM/OPSF and know a suitable candidate for the prize, but have difficulty

finding two SIAM/OPSF members willing to sign the nomination, please contact one of the SIAG officers for suggestions about names of members.

Topic #2 ------ OP-SF NET 21.4 ----- July 15, 2014

From: Diego Dominici dominicd@newpaltz.edu Subject: OPSFA13, Gaithersburg, MD, USA 2015

Dear Colleagues,

We are pleased to invite you to participate in the 13th International Symposium on Orthogonal Polynomials, Special Functions and Applications (OPSFA13), which will be held at the National Institutes of Standards and Technology (NIST), Gaithersburg, MD, USA on June 1-5, 2015.

Please see http://www.siam.org/meetings/opsfa13/ for more information.

Those interested in organizing a minisymposium should submit a proposal to the conference program committee by no later than November 3, 2014. Organizers will select the topics to be addressed, obtain speakers for those topics, decide with each speaker on the title of his/her presentation, and provide other information as needed. See http://www.siam.org/meetings/guidelines/mini_guide.php for some guidelines.

The due date for abstracts of all contributed and minisymposium presentations will be February 2, 2015.

The application deadline for SIAM Student Travel and Post-doc/Early Career Travel Awards is January 20, 2015.

Proceedings of the conference will be published in a special issue of SIGMA http://www.emis.de/journals/SIGMA/OPSFA2015.html
The starting date for paper submissions is January 1, 2015. The deadline for paper submissions is January 31, 2016.

Please forward this announcement to your colleagues and researchers who might be interested.

Yours Sincerely,

Conference Co-Chairs

Daniel W. Lozier, National Institute of Standards and Technology, USA

Diego Dominici, State University of New York at New Paltz, USA

Topic #3 ----- OP-SF NET 21.4 ----- July 15, 2014

From: OP-SF NET Editors

Subject: Conference to honour Mourad Ismail

During the period October 25-29, 2014, an "International Conference on Orthogonal Polynomials, Integrable Systems and Their Applications" will be held at Shanghai Jiao Tong University and Shaoxing University on the occasion of Professor Mourad Ismail's 70th Birthday.

The topics of the Conference are:

- (1) Analytical and numerical methods related to integrability and orthogonality;
- (2) Asymptotic methods;
- (3) Hamiltonian systems (finite and infinite dimensional case);
- (4) Integrable combinatorics;
- (5) Integrable systems;
- (6) Orthogonal polynomials;
- (7) Special functions and Painlevé equations;
- (8) Symmetry and supersymmetry.

The invited speakers are:

Alexander Aptekarev, Keldysh Inst., Russia

Laurent Baratchart, INRIA, Sophia Antipolis, France

Claude Brezinski, University of Sciences and Technologies of Lille, France

Cewen Cao, Zhen Zhou Univeristy, China

Li-chen Chen, Soochow University, Taiwan

Yang Chen, University of Macau, Macau

Edmund Yik-Man Chiang*, HKUST, Hong Kong

Peter A. Clarkson, University of Kent, UK

Dan Dai, Hong Kong City Univ. Hong Kong

Maxim Derevyagin*, Technical University of Berlin, Germany

Antonio Duran, University of Seville, Spain

Baofeng Feng, The University of Texas-Pan American, USA

Michael Gekhtman, University of Notre Dame, USA

Tamara Grava*, SISSA, Italy

Alberto Grunbaum, UC Berkley, USA

John Harnad*, Concordia University, Canada

Andrew Hone*, University of Kent, UK

Alexander Its*, Indiana University, USA

Nalini Joshi, The University of Sydney, Australia

Valery A. Kalyagin, National Research University Higher School of Economics, Russia

Dmitrii Karp, Far Eastern Federal Univ., Russia

Erik Koelink, Radboud Universiteit Nijmegen, Netherlands

Arno Kuijlaars*, KU Leuven, Belgium

Guillermo Lopez Lagomasino, Universidad Carlos III de Madrid, Spain

Ivh-Hao Lee, Academia Sinica, Taiwan Qingping Liu, China University Of Mining and Technology, China Alexey Lukashov, Fatih University, Turkey Wen-Xiu Ma, University of South Florida, USA Francisco Marcellan, Universidad Carlos III de Madrid, Spain Yoshimasa Nakamura, Kyoto University, Japan Frank Nijhoff*, University of Leeds, UK Changzheng Qu, Ningbo University, China Eric Rains*, California Institute of Technology, USA Michela Redivo-Zagliam, University of Padova, Italy Simon Ruijsenaars, University of Leeds, United Kingdom Dennis Stanton, University of Minnesota, USA Jacek Szmigielski, University of Saskatchewan, Canada Vilmos Totik*, University of Szeged, Hungary and University of South Florida Satoshi Tsujimoto*, Kyoto University, Japan Walter Van Assche, Katholieke Universiteit Leuven, Belgium Pierre Van Moerbeke, Université Catholique de Louvain, Belgium Luc Vinet, University of Montreal, Canada Franck Wielonsky, Université Aix-Marseille, France Youjin Zhang, Tsinghua University, China Alexei Zhedanov*, Donetsk Institute for Physics and Technology, Ukraine

*): provisionally confirmed or still under consideration

The organizers are

Xing-Biao Hu (LSEC, Chinese Academy of Science)
Sen-Yue Lou (East China Normal University)
Mikhail Tyaglov (Shanghai Jiao Tong University)
Guo-Fu Yu (Shanghai Jiao Tong University)
Jun Yu (Shao Xing University)
Ruiming Zhang (Northwest A & F University)
Zuo-Nong Zhu (Shanghai Jiao Tong University)

Further information is available at the Conference web site http://math.sjtu.edu.cn/conference/icopista/index.html

Topic #4 ----- OP-SF NET 21.4 ----- July 15, 2014

From: OP-SF NET Editors

Subject: Conference to honour Roderick Wong

The following information is from the web site: http://www6.cityu.edu.hk/rcms/icam2014/

An International Conference on Applied Mathematics, in honour if Professor Roderick S. C. Wong's 70th Birthday will be held at the City University of Hong Kong, during the period December 1-5, 2014

The objectives of the conference are to review and discuss some of the latest trends in various fields of applied mathematics. In particular, with a special emphasis on Asymptotics and Special Functions, Partial Differential Equations, Computational Mathematics, Approximation Theory, Mathematical Physics, Mathematical Biology and Financial Mathematics.

Organizing Committee:

Dan Dai, City University of Hong Kong Hui-Hui Dai, City University of Hong Kong (Co-Chair) Ya Yan Lu, City University of Hong Kong Tong Yang, City University of Hong Kong (Co-Chair) Ding-Xuan Zhou, City University of Hong Kong

The list of plenary speakers, updated to June 10, 2014 is:

Michael Berry, Bristol University, UK Kung-Ching Chang, Peking University, China Gui-giang Chen, University of Oxford, UK Philippe G. Ciarlet, CityU, Hong Kong Weinan E, Princeton University, USA Avner Friedman, The Ohio State University, USA Leslie Greengard, New York University, USA Thomas Yizhao Hou, California Institute of Technology, USA Mourad Ismail, University of Central Florida, USA Dany Leviatan, Tel Aviv University, Israel Ta-tsien Li, Fudan University, China Fang-Hua Lin, New York University, USA Zhi-ming Ma, Chinese Academy of Sciences, China Keith Moffatt, University of Cambridge, UK James D. Murray, University of Oxford, UK / Princeton University, USA / Washington University, USA Peter Olver, University of Minnesota, USA George C. Papanicolaou, Stanford University, USA Vladimir Rokhlin, Yale University, USA Vilmos Totik, University of South Florida, USA / University of Szeged, Hungary Jinchao Xu, Penn State University, USA

Further information is available at the web site: http://www6.cityu.edu.hk/rcms/icam2014/

Topic #5 ----- OP-SF NET 21.4 ----- July 15, 2014

From: Tom Koornwinder T.H.Koornwinder@uva.nl

Topic: SIAM and AMS Fellows

[This was sent to SIAM-OPSF on May 19, 2014]

Bernd Sturmfels (University of California, Berkeley) was elected as a SIAM fellow, class of 2014, for advancing symbolic and numerical techniques for solving systems of nonlinear polynomial equations and inequalities and connecting computational algebraic geometry with applications. See http://fellows.siam.org/index.php?sort=year&value=2014. He has written a few papers on hypergeometric functions, although his focus is elsewhere.

Peter Paule (Research Institute for Symbolic Computation, Johannes Kepler University, Linz) was elected as AMS fellow, class of 2014, for contributions to classical combinatorics, computer algebra, and symbolic computation in combinatorics. See http://www.ams.org/profession/ams-fellows/new-fellows. He has published some papers on special functions, while much of his work is relevant for special functions.

Topic #6 ----- OP-SF NET 21.4 ----- July 15, 2014

From: Walter Van Assche Walter.VanAssche@wis.kuleuven.be Subject: Report on "Constructive Functions 2014"

Quite a few of our colleagues are celebrating a significant birthday this year and often this is accompanied by a conference. Dick Askey's 80th birthday was celebrated in December 2013, Ed Saff's 70th birthday in May 2014, Mourad Ismail's 70th in October 2014, and Roderick Wong's 70th in December 2014. Martin Muldoon already reported on Askey's 80th birthday in OP-SF NET 21.1, the January 2014 issue of this newsletter. Here I will report on Saff's 70th birthday conference, which was held at Vanderbilt University in Nashville, Tennessee from May 26 to May 30, 2014.

There were 11 plenary speakers and various contributed talks (20 minutes) in parallel sessions, covering Ed Saff's research interests: rational approximation, logarithmic potential theory, distribution of points on spheres and other manifolds, computational function theory, etc. A special feature was that there were also four evening "School Lectures" by Barry Simon (Orthogonal Polynomials on Finite Gap Sets), Henry Cohn (Discrete Minimal Energy Problems), Arno Kuijlaars (Riemann-Hilbert Problems for Orthogonal and Multiple Orthogonal Polynomials), and Nick Trefethen (Ten Things You Should Know About Quadrature). Of the plenary lectures, I particularly enjoyed the opening lecture of Vilmos Totik on how small a polynomial can be on a compact

set if its leading coefficient or its value at a point is given, Igor Pritsker's talk on zeros of random polynomials, Guillermo López Lagomasino's talk on row sequences of Padé and Hermite-Padé approximation, and Alexander (Sasha) Aptekarev's talk on Steklov's problem: what is the size of orthogonal polynomials (on the unit circle) for which the weight is bounded from below by $\delta/(2\pi)$? As usual Andrei Martinéz' talk (on the symmetry property for equilibrium measures) was clear and entertaining and won the prize for talk with the best transitions. The other plenary speakers all covered various areas of Ed's interest: continued fractions with random coefficients (Lisa Lorentzen). multiscale radial basis function approximation (lan Sloane), orthogonal polynomials in the complex plane and the recovery of supports of measures in the complex plane (Nikos Stylianopoulos), approximation theory seen through Chebfun (Nick Trefethen), random matrices and multiple orthogonal polynomials (Arno Kuijlaars), and inverse potential problems in higher dimension (Laurent Baratchart). The contributed talks were organized in topical sessions: students of Ed Saff, orthogonal polynomials, special functions and differential equations, approximation theory, polynomials and matrices, cubature and approximation, discrete minimum energy, numerical analysis, number theory and polynomials, spectral theory, wavelets and frames, polynomial asymptotics, approximation, potential theory, function theory, and applied analysis. The level of the contributed talks and the number of interesting titles made it quite difficult to choose between talks in parallel sessions.

The social program surely also deserves to be mentioned. It included a reception at the Wildhorse Saloon (including country music and inline dancing, but not so inline when the conference participants entered the dance floor), an excellent conference dinner with cocktails, a fire alarm, recollections by some of Ed Saff's friends and collaborators, a crowded dance floor, a closing beer party with Peter Dragnev and Laurent Baratchart on the guitar, and vocal support by many of the participants (a good illustration of simultaneous approximation of well known songs). All in all, an excellent conference: the organizers did a perfect job.

Topic #7 ----- OP-SF NET 21.4 ----- July 15, 2014

From: Jeff Geronimo geronimo@math.gatech.edu
Subject: Report on Conference on "Random Matrices and Jacobi Operators"

A conference on "Random Matrices and Jacobi Operators" was held at the Mittag-Leffler Institute, Djursholm, Sweden, during the period May 19-23, 2014. It was organized by Maurice Duits and Jonathan Breuer and went along very well due to the superb management of Maria Weiss. Some of the talks have been posted and can viewed at the link http://www.mittag-leffler.se/?q=0519 The talks mostly broke down into two main areas: Random matrices and Jacobi Operators. Two of the most interesting talks given on the last day were presented in a collaboration between Tom Claeys and Igor Krasovsky regarding

the critical asymptotics of Toeplitz matrices around a transition point. They obtained a formula at the transition point in terms of a solution of a particular Painleve equation which gives a resolution, positively, of a conjecture of Dyson made over 50 years ago. Tom Claeys was the winner of the first Szego Prize.

Topic #8 ------ OP-SF NET 21.4 ----- July 15, 2014

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

The following preprints related to the fields of orthogonal polynomials and special functions were posted or cross-listed to one of the subcategories of arXiv.org, mostly during May and June 2014.

http://arxiv.org/abs/1401.5368

On the equivalence of two fundamental theta identities, T.H. Koornwinder

http://arxiv.org/abs/1405.0796

Multiplicity free induced representations and orthogonal polynomials Maarten van Pruijssen

http://arxiv.org/abs/1405.1918

Generalizations of generating functions for higher continuous hypergeometric orthogonal polynomials in the Askey scheme Michael A. Baeder, Howard S. Cohl, Hans Volkmer

http://arxiv.org/abs/1405.2812

An integral identity with applications in orthogonal polynomials Yuan Xu

http://arxiv.org/abs/1406.0364

Computing recurrence coefficients of multiple orthogonal polynomials Galina Filipuk, Maciej Haneczok, Walter Van Assche

http://arxiv.org/abs/1406.0719

Para-orthogonal polynomials on the unit circle satisfying three term recurrence formulas

Cleonice F. Bracciali, Alagacone Sri Ranga, Anbhu Swaminathan

http://arxiv.org/abs/1406.0762

Sobolev orthogonal polynomials on product domains L. Fernández, F. Marcellán, T. E. Pérez, M. A. Piñar, Y. Xu

http://arxiv.org/abs/1406.1806

Orthogonal polynomials with respect of a class of Fisher-Hartwig symbols Philippe Rambour (LM-Orsay)

http://arxiv.org/abs/1406.2768

Solvable Discrete Quantum Mechanics: q-Orthogonal Polynomials with |q|=1 and Quantum Dilogarithm
Satoru Odake, Ryu Sasaki

http://arxiv.org/abs/1405.2871

The Appell hypergeometric expansions of the solutions of the general Heun equation

A.M. Ishkhanyan

http://arxiv.org/abs/1405.4178

Zeros of a certain class of Gauss hypergeometric polynomials Addisalem Abathun, Rikard B\ogvad

http://arxiv.org/abs/1406.2881

Duality relations for hypergeometric series Frits Beukers, Frédéric Jouhet

http://arxiv.org/abs/1406.3004

Even and odd generalized hypergeometric coherent states Won Sang Chung, Mahouton Norbert Hounkonnou, Sama Arjika

http://arxiv.org/abs/1406.3772

A new integral formula for Heckman-Opdam hypergeometric functions Yi Sun

http://arxiv.org/abs/1406.7464

Intersection numbers and twisted period relations for the generalized hypergeometric function $\{_{m+1} F_m \}$ Yoshiaki Goto

http://arxiv.org/abs/1405.3723

On a Family of Integrals that extend the Askey-Wilson Integral M. Ito, N.S. Witte

http://arxiv.org/abs/1406.1628

Some transformation formulas associated with Askey-Wilson polynomials and Lassalle's formulas for Macdonald-Koornwinder polynomials A. Hoshino, M. Noumi, J. Shiraishi

http://arxiv.org/abs/1405.5318

Special polynomials related to the supersymmetric eight-vertex model. III. Painlevé VI equation Hjalmar Rosengren

http://arxiv.org/abs/1405.6516

An inequality of Hardy--Littlewood type for Dirichlet polynomials Andriy Bondarenko, Winston Heap, Kristian Seip

http://arxiv.org/abs/1405.0316

Some remarkable new Plethystic Operators in the Theory of Macdonald Polynomials

Francois Bergeron, Adriano Garsia, Emily Leven, Guoce Xin

http://arxiv.org/abs/1405.2195

On the theory of symmetric polynomials Mark Krein

http://arxiv.org/abs/1405.3610

Complete polynomials using 3-term and reversible 3-term recurrence formulas (3TRF and R3TRF)

Yoon Seok Choun

http://arxiv.org/abs/1405.3682

Suffridge's convolution theorem for polynomials with zeros in the unit disk Martin Lamprecht

http://arxiv.org/abs/1405.7727

Linear recurrence sequences via Bell polynomials Daniel Birmajer, Juan B. Gil, Michael D. Weiner

http://arxiv.org/abs/1406.2560

Coppersmith-Rivlin type inequalities and the order of vanishing of polynomials at 1

Tamas Erdelyi

http://arxiv.org/abs/1406.2843

Inequalities for Lorentz polynomials Tamas Erdelyi

http://arxiv.org/abs/1406.3329

Generalized characteristic polynomials and Gaussian cubature rules Yuan Xu

http://arxiv.org/abs/1406.3391

A product formula for certain Littlewood-Richardson coefficients for Jack and Macdonald polynomials Yusra Nagvi

http://arxiv.org/abs/1406.6193

Mehler-Heine type formulas for Charlier and Meixner polynomials Diego Dominici

http://arxiv.org/abs/1406.6719

The multivariate Hahn polynomials and the singular oscillator Vincent X. Genest, Luc Vinet

http://arxiv.org/abs/1406.6880

Monomial to ultraspherical basis transformation and the zeros of polynomials Matthew Chasse

http://arxiv.org/abs/1406.0432

Divisors and specializations of Lucas polynomials Tewodros Amdeberhan, Mahir Bilen Can, Melanie Jensen

http://arxiv.org/abs/1406.0969

Asymptotic behavior and zero distribution of polynomials orthogonal with respect to Bessel functions
Alfredo Deaño. Arno B.I. Kuiilaars. Pablo Román

http://arxiv.org/abs/1406.1054

On formal Schubert polynomials Kirill Zainoulline

http://arxiv.org/abs/1406.1444

A unified matrix approach to the representation of Appell polynomials Lidia Aceto, Helmuth R. Malonek, Graça Tomaz

http://arxiv.org/abs/1406.4600

Gröbner Bases for Linearized Polynomials Margreta Kuijper, Anna-Lena Trautmann

http://arxiv.org/abs/1405.2745

Quadrirational Yang-Baxter maps and the affine-E8 Painleve lattice James Atkinson, Yasuhiko Yamada

http://arxiv.org/abs/1406.3008

Bilinear equations on Painleve tau functions from CFT M. A. Bershtein, A. I. Shchechkin

http://arxiv.org/abs/1406.0826

Large-degree asymptotics of rational Painleve-II functions. II Robert J. Buckingham, Peter D. Miller

http://arxiv.org/abs/1405.0507

Applications of Neutrix Calculus to Special Functions in Conjunction with Polygamma Functions Emin Özçağ

http://arxiv.org/abs/1406.1320

Comments on "Exactification of Stirling's approximation for the logarithm of the gamma function"

R B Paris

http://arxiv.org/abs/1405.3423

On the asymptotic expansion of $\Gamma(x)$, Lagrange's inversion theorem and the Stirling coefficients

R. B. Paris

http://arxiv.org/abs/1406.7407

Paperfolding infinite products and the gamma function Jean-Paul Allouche

Topic #9 ----- OP-SF NET 21.4 ----- July 15, 2014

From: OP-SF NET Editors

Subject: About the Activity Group

The SIAM Activity Group on Orthogonal Polynomials and Special Functions consists of a broad set of mathematicians, both pure and applied. The Group also includes engineers and scientists, students as well as experts. We have around 115 members scattered about in more than 20 countries. Whatever your specialty might be, we welcome your participation in this classical, and yet modern, topic. Our WWW home page is: http://math.nist.gov/opsf/

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

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

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

http://math.nist.gov/~DLozier/OPSFnet/

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

SIAM has several categories of membership, including low-cost categories for students and residents of developing countries. In addition, there is the

possibility of reduced rate membership for the members of several societies with which SIAM has a reciprocity agreement; see

http://www.siam.org/membership/individual/reciprocal.php

For current information on SIAM and Activity Group membership, contact:

Society for Industrial and Applied Mathematics 3600 University City Science Center Philadelphia, PA 19104-2688 USA

phone: +1-215-382-9800 email: service@siam.org WWW: http://www.siam.org

http://www.siam.org/membership/outreachmem.htm

Topic #10 ----- OP-SF NET 21.4 ----- July 15, 2014

From: OP-SF NET Editors

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

To contribute a news item to OP-SF NET, send email to one of the OP-SF Editors dominicd@newpaltz.edu or muldoon@yorku.ca .

Contributions to OP-SF NET 21.5 should be sent by September 1, 2014.

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

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

WWW home page of this Activity Group:

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

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

The elected Officers of the Activity Group (2014-2016) are:

Chair: Walter Van Assche Vice Chair: Jeff Geronimo

Program Director: Diego Dominici

Secretary: Yuan Xu

The appointed officers are:

Diego Dominici, OP-SF NET co-editor and OP-SF Talk moderator

Martin Muldoon, OP-SF NET co-editor

Bonita Saunders, Webmaster and OP-SF Talk moderator