O P - S F N E T - Volume 20, Number 3 - May 15, 2013

Editors:

Diego Dominici Martin Muldoon

dominicd@newpaltz.edu muldoon@yorku.ca

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

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

Topics:

- 1. More news than usual
- 2. Frank W. J. Olver, 1924-2013
- 3. Jacob Christiansen receives the 2013 Gábor Szegő prize
- 4. OP-SF at SIAM Annual Meeting
- 5. Activity Group Charter Renewal
- 6. Copenhagen Workshop
- 7. Approximation Theory and Harmonic Analysis on Spheres and Balls
- 8. Book by Ernst on q-calculus
- 9. Articles in memory of A. A. Karatsuba
- 10. Preprints in arXiv.org
- 11. About the Activity Group
- 12. Submitting contributions to OP-SF NET and SIAM-OPSF (OP-SF Talk)

Calendar of Events:

May 20-24, 2013

International Conference on Approximation Theory and Applications, Hong Kong, China.

http://www6.cityu.edu.hk/ma/maicata

June 3-7, 2013

International Linear Algebra Society (ILAS) 2013 meeting, Providence Rhode Island, USA, including an invited minisymposium on Matrices and Orthogonal Polynomials organized by J.S. Geronimo, F. Marcellán and L. Reichel

http://ilas2013.com

June 9 -13, 2013

Tenth Advanced Course in Operator Theory and Complex Analysis, Sevilla, Spain

http://congreso.us.es/ceacyto/2013/

June 9 -15, 2013

International Conference Constructive Theory of Functions - 2013 Sozopol, Bulgaria http://www.math.bas.bg/mathmod/CTF-2013/index.html

June 12-15, 2013

The Third International Conference: Nonlinear Waves --- Theory and Applications, Beijing, China http://lsec.cc.ac.cn/~icnwta3/

June 18-21, 2013

International Conference on Quantum groups and quantum integrable systems, Kiev, Ukraine http://qgqis2013.bitp.kiev.ua/

June 23-27, 2013

IV Jaen Conference on Approximation Theory Ubeda, Jaen, Spain, June 23rd-27th, 2013 http://www.ujaen.es/revista/jja/jca/index.php

July 1- 5, 2013

The 6th Pacific RIM Conference on Mathematics, including Session on "Special Functions and Orthogonal Polynomials", Sapporo City, Japan

19.5 #5

http://www.math.sci.hokudai.ac.jp/sympo/130701/sessions.html

July 1- 5, 2013

Erdős Centennial Conference, Budapest, Hungary http://www.renyi.hu/conferences/erdos100/

July 8-12, 2013

SIAM Annual Meeting, San Diego, California, USA (including several sessions related to orthogonal polynomials and special functions"

20.3 #4

http://www.siam.org/meetings/an13/

July 8-12, 2013

Discrete Integrable Systems - A Follow-up Meeting Isaac Newton Institute for Mathematical Sciences 8-12 July 2013 http://www.newton.ac.uk/programmes/DIS/disw05

July 10-12, 2013

Special functions and special numbers (on the occasion of the 60th birthday of Frits Beukers), Utrecht, The Netherlands http://www.staff.science.uu.nl/~corne102/beukers60/Conference.html

July 15-19, 2013

Workshop "Elliptic Integrable Systems and Hypergeometric Functions", Leiden, The Netherlands 19.5 #6 www.lorentzcenter.nl/lc/web/2013/541/info.php3?wsid=541&venue=Oort

July 15-19, 2013

Conference "Symmetries of Discrete Systems and Processes", Decin, Czech Republic http://spmdd.fjfidecin.cz/conference-details

July 21-26, 2013

PODE Progress on Difference Equations, Bialystok, Poland http://katmat.pb.bialystok.pl/pode13/

August 25-31, 2013

Formal and Analytic Solutions of Differential, Difference and Discrete Equations. Bedlewo, Poland http://bcc.impan.pl/13Formal&Analytic/

August 28-30, 2013

Workshop on Special Functions and their Application, Copenhagen, Denmark 20.3 #6

http://www.math.ku.dk/~henrikp/wosfa

September 16-20, 2013

The Third Najman Conference on Spectral Problems for Operators and Matrices, Biograd, Croatia

http://web.math.pmf.unizg.hr/najman_conference/index.html

September 21-27, 2013

Conference of Numerical Analysis and Applied Mathematics 2013 (ICNAAM 2013), in Rhodes, Greece http://www.icnaam.org

October 23-24, 2013

Second International Conference of Mathematics and its Applications Basra City, Iraq

Contact: Ahmad Zainy Al-Yasry http://www.azainy.com/

December 6-7, 2013

Conference on the occasion of Richard Askey's 80th birthday, Madison, 20.2 #2 Wisconsin, USA. http://www.math.umn.edu/~stanton/askey80

December 16-20, 2013

XXIVth International Workshop on Operator Theory and its Applications, Bangalore, India

http://math.iisc.ernet.in/~iwota2013/

January 20-24, 2014

OrthoQuad2014. An International Symposium on Orthogonality, Quadrature and Related Topics In Memory of Pablo González Vera, Puerto de la Cruz, Tenerife, Canary Islands, Spain. http://gama.uc3m.es/pablo/

May 26-30, 2014

Constructive Functions 2014. On honor of Ed Saff's 70th birthday. Vanderbilt University, Nashville, Tennessee, USA. http://www.math.vanderbilt.edu/~constructive2014/

Topic #1 ----- OP-SF NET 20.3 ----- May 15, 2013

From: OP-SF NET Editors Subject: More news than usual

On April 29, Daniel Lozier reported to the SIAM-OPSF list that Frank Olver died on April 23, 2013 at the age of 88. During the following days, several people added their own comments and memories of Frank both with respect to his achievements and his influence on their own work. Frank's son, Peter Olver, wrote an informative obituary that is available at the University of Maryland IPST website http://www.ipst.umd.edu/. With Peter's permission, we reproduce it as Topic #2 below.

At about the same time, we heard the sad news that Herbert Stahl, well-known for his contributions to approximation theory and related areas died in Berlin on April 22, 2013. We hope to include more information on Professor Stahl in our next issue.

Congratulations to Jacob Christiansen who received the 2013 Gábor Szegő prize during the recent OPSFA-12 in Sousse, Tunisia. Se Walter Van Assche's account in Topic #3.

Thanks to the efforts of some of our members and others, the SIAM Annual Meeting, to be held in San Diego in July, has many sessions featuring topics related to orthogonal polynomials and special functions. Some of these are listed in Topic #4.

Our relations with our parent organization SIAM continue to be important. This year, our Charter comes up again for renewal. In Topic #5, Paco Marcellán presents a draft renewal application and invites from members.

Topic #2 ----- OP-SF NET 20.3 ----- May 15, 2013

From: Peter Olver Subject: Frank W. J. Olver, 1924-2013

Frank William John Olver, Professor Emeritus in the Institute for Physical Science and Technology and Department of Mathematics at the University of Maryland, and Faculty Appointee of the National Institute of Standards and Technology, passed away on April 23, 2013, at the age of 88.

Born in 1924 in Croydon, UK, Frank showed deep interest in mathematics and proved himself a mathematical talent at a young age. He obtained a first class honors in mathematics for his bachelor's degree from the University of London in 1944. He received a master's degree in 1948 and completed the D.Sc. in mathematical analysis in 1961.

After completing his undergraduate studies at age 19, Frank was assigned to the British Admiralty Computing Service where he was first introduced to numerical analysis. It was at that time his research direction in special functions

began to take shape. Soon after the war, he joined the Mathematics Division of the National Physical Laboratory (NPL), Teddington, UK, as Scientific Officer, and became one of the founding members of the Mathematics Division of the Laboratory from 1945-1961. There, he met his first wife, Grace E. Olver (née Smith). They were married in 1948, and had three children, Peter (1952-), Linda (1953-1965), and Sally (1955-).

During 1957-58, Frank visited the National Bureau of Standards in Washington DC, which subsequently became the National Institute of Standards and Technology



(NIST), to help work on the well-known and highly cited Handbook of Mathematical Functions by Abramowitz and Stegun. In 1961, he moved permanently to NIST, now in Gaithersburg, MD. He retired in 1986, but continued to be active in mathematics at NIST until his death. In 1969, he became a Research Professor at the University of Maryland where he worked and taught for 23 years until he retired in 1992 at the age of 68 and was appointed Professor Emeritus.

Frank's first book, Asymptotics and Special Functions, published in 1974 by Academic Press, became a standard reference in the fields of asymptotics and special functions. In 2000, a two-volume commemorative collection of selected papers of Frank was published. The 1074-page collection consisted of 56 papers covering his most important contributions in the areas of asymptotic analysis, special functions, and numerical analysis, from 1949 to 1999. One review of the collection, said "the papers exemplify a redoubtable mathematical talent, the work of a man who has done more than almost anyone else in the 20th century to bestow on the discipline of applied mathematics the elegance and rigor that its earliest practitioners such as Gauss and Laplace would have wished for it." Frank was very active in the Society for Industrial and Applied Mathematics (SIAM). He helped found the SIAM Journal on Mathematical Analysis and served as its first managing editor, from 1970-1975. He was also a long time member of the American Mathematical Society (AMS) and the Mathematical Association of America (MAA).

Frank's "life-time achievement" was serving as mathematics editor for the NIST Handbook of Mathematical Functions, which was published by Cambridge University Press in 2010, and its web counterpart, the NIST Digital Library of Mathematical Functions (DLMF), the updated, expanded, and online version of the old Abramowitz and Stegun Handbook. The NIST Handbook took 10 years to complete, and now serves as the authoritative reference volume for the special functions of mathematics and its many applications. In April 2011, the NIST coorganized a conference on "Special Functions in the 21st Century: Theory & Applications" in Washington DC in recognition of his seminal contributions to the advancement of special functions, especially in the area of asymptotic analysis and as Mathematics Editor of the DLMF. In appreciation of his work on the DLMF, Frank was awarded the Gold Medal of the US Department of Commerce, the highest honorary award granted by the Department in 2011. In the same year, the Digital Library of Mathematical Functions was chosen as one of 10 Government Computer News Award Winners for "Outstanding Information Technology Achievement in Government".

Frank is survived by his wife of 23 years, Claire, brother Terence, two children, Peter and Sally, their spouses Cheri and Neal, and five grandchildren, Parizad, Krista, Sheehan, Brian, and Noreen.

Peter Olver

Topic #3 ----- OP-SF NET 20.3 ----- May 15, 2013

From: Walter Van Assche Subject: Jacob Christiansen receives the 2013 Gábor Szegő prize

On Monday March 25, 2013, at the beginning of the 12th International Symposium on Orthogonal Polynomials, Specials Functions and Applications (OPSFA-12) in Sousse, Tunisia, the second Gábor Szegő prize winner was announced by Paco Marcellán, chair of the prize selection committee. Recall that the first Gábor Szegő prize was awarded in 2011 to Tom Claeys of Université Catholique de Louvain, Belgium; see OP_SF NET, Topic #2. The second prizewinner was announced as follows:

On the basis of our evaluation of the originality, independence and importance of his work, the Gábor Szegő Prize Committee, consisting of K. Driver, C. Dunkl,

T. H. Koornwinder, F. Marcellán (Chair) and W. Van Assche, is proud to award the Gábor Szegő prize for 2013 to Jacob Stordal Christiansen.

Jacob Christiansen obtained his PhD at the University of Copenhagen in October 2004, with Christian Berg as his supervisor. The title of his thesis was "Indeterminate moment problems within the Askey-scheme". Since then he has been a postdoc at Katholieke Universiteit Leuven (1 year) and a Harry Bateman Research Instructor at CalTech (3 years). Starting in November 2008 he was an Assistant Professor (Steno Research Fellow) at the University of Copenhagen. In September 2012 he joined the Centre for Mathematical Sciences in Lund University, Sweden, as an Associate Professor.

At present, his CV lists 16 research publications of which five are in Constructive Approximation, one in Advances in Mathematics, one in Transactions of the American Mathematical Society, and one in Communications in Mathematical Physics, which can all be considered as very good journals. The papers mentioned in his nomination are

• Finite gap Jacobi matrices I. The isospectral case, Constr. Approx. 32 (2010), 1-65. (with B. Simon and M. Zinchenko)

• Finite gap Jacobi matrices II. The Szegő class, Constr. Approx. 33 (2011), 365-403. (with B. Simon and M. Zinchenko)

Szegő's theorem on Parreau-Widom sets, Adv. Math. 229 (2012), 1180-1204.
A moment problem and a family of integral evaluations, Trans. Amer. Math. Soc. 358 (2006), 4071-4097. (with M.E.H. Ismail)

as well as the paper

• Finite gap Jacobi matrices III. Beyond the Szegő class, Constr. Approx. 35 (2012), 259-272. (with B. Simon and M. Zinchenko)

since it is the continuation of the papers mentioned in the nomination.

His PhD thesis work on moment problems, resulting in several well cited papers including his 2006 paper with Ismail, was already very interesting work in a classical subject, with applications for the evaluation of certain integrals. But his really outstanding work started when he extended his interest to operator theory, in particular Jacobi matrices, which resulted in a very nice set of papers



Jacob Christiansen in Kunhegyes, Hungary (June 2005)

on finite gap Jacobi matrices. This is the result of his postdoctoral position at the California Institute of Technology (2005–2008) where he was able to work with B. Simon. This set of papers (117 pages of intricate mathematics) is a very profound and fairly complete analysis of this class of Jacobi matrices. According to Barry Simon's letter "Jacob took to it like a fish to water and soon Jacob was giving me tutorials on the subject.".

The even more difficult problem of infinitely many gaps was worked out for Parreau- Widom sets and in our opinion this is his strongest paper so far.

Out of the 16 papers he wrote five as a single author, including his best paper (in Adv. Math.).

His co-authors include Barry Simon, Mourad Ismail and Erik Koelink, who are very well known in the OPSF community, and Malcolm Brown who is better known in the field of differential equations.

Jacob is very much present in the OPSF community as a participant at many of the OPSF conferences and other conferences and workshops within this area. He was one of the local organizers of the Seventh International Symposium on Orthogonal Polynomials, Special Functions and Applications in Copenhagen (August 18–22, 2003) and one of the editors of the proceedings, published in J. Comput. Appl. Math. 178 in 2005. He was an invited plenary speaker at the international conference on Asymptotics and Special Functions in Hong Kong (May-June, 2011).

As the recipient of the Gábor Szegő prize, Jacob was invited to give a plenary talk at the OPSFA-12 meeting. He chose to talk about Szegő's Theorem, which certainly was a very appropriate topic for the occasion.

Topic #4 ----- OP-SF NET 20.3 ----- May 15, 2013

From: OP-SF NET Editors Subject: OP-SF at SIAM Annual meeting

The program for the SIAM Annual Meeting, to be held July 8-12 in San Diego, California, USA, includes several items related to Orthogonal Polynomials and Special Functions.

The program is subject to change. For the latest version, see http://www.siam.org/meetings/an13/

Yuan Xu will give an invited address on "Orthogonal Polynomials and Cubature Rules"

The following Minisymposia are included in the program (speakers' names in italics):

Orthogonal Polynomials: Connections and Applications Organizers: Andrei Martinez-Finkelshtein, Ed Saff Equilibrium Measure and Phase Transitions in the Random Matrix Models Andrei Martinez-Finkelshtein, Evgenii Rakhmanov, Ramon Orive Generalized Hurwitz Matrices, Multiple Interlacing, and Forbidden Sectors of the Complex Plane Olga Holtz, Sergey Khrushchev, Olga Kushel, Mikhail Tyaglov Asymptotics of Carleman Polynomials for Level Curves of the Inverse of a Shifted Zhukovsky Transformation Peter Dragnev, Erwin Miña-Díaz, Michel Northington V Zeros of Entire Fourier Transforms, Lee-Yang Measures and the Riemann Hypothesis Via Orthogonal Polynomials

Dimitar K. Dimitrov

Painlevé Equations - Nonlinear Special Functions Sponsored by SIAG/OPSF Organizer: Peter Clarkson

Semi-Classical Orthogonal Polynomials and the Painlevé Equations Peter Clarkson Applications of Painlevé Functions to Nonlinear Wave Equations Robert J. Buckingham Asymptotic Behavior of Rational Solutions to the Inhomogeneous Painlevé-II Equation Peter D. Miller Numerical Nonlinear Steepest Descent and Painlevé Transcendents Sheehan Olver

Symbolic Computation and Special Functions Sponsored by SIAG/OPSF Organizer: Manuel Kauers, Veronika Pillwein

Ramanujan and Symbolic Computation George E. Andrews Creative Telescoping for Rational Functions using the Griffiths-Dwork method Alin Bostan Recent Results for the Lambert W Function and its Relatives David Jeffrey and Rob Corless, Differential Equations, Belyi Maps, and Modular Curves Mark van Hoeij Efficient Implementation of the Hardy-Ramanujan-Rademacher Formula Fredrik Johansson Symbolic Computation and Modular Forms Peter Paule A Solution of Sun's \$520 Challenge Concerning 520/pi Armin Straub

Special Functions: Applications and Numerical Aspects Sponsored by SIAG/OPSF Organizers: Nico M. Temme, Amparo Gil, Javier Segura **Numerical Methods for Special Functions** Nico M. Temme, Amparo Gil and Javier Segura **Toward an On-Demand Data Service for Special Functions** Daniel Lozier, Annie Cuyt Stieltjes-Wigert Polynomials and the q-Airy Function Roderick Wong Special Function Integrals by the Method of Brackets Karen Kohl The Wright Function and Fractional Diffusion Problem *Renato Spigler*, Moreano Concezzi Existence and Uniqueness of Tronguee Solutions of the Third and Fourth Painleve Equations Dan Dai Saddle Points, Special Functions and Electromagnetic Pulse Propagation *Natalie Cartwright* Some New Techniques in the Approximation of Special Functions José López, Ester Pérez Sinusía Asymptotics of Orthogonal Polynomials Organizer: Doron S. Lubinsky

On Order Derivatives of Bessel Functions Mark Dunster The Generalized Christoffel Functions and Extremal Problems Eli Levin

Universality Limits for Random Matrices and Orthogonal Polynomials Doron S. Lubinsky

Spectral Transforms and Orthogonal Polynomials Brian Simanek

Multivariate Orthogonal Polynomials Sponsored by SIAG/OPSF Organizers: Jeffrey S. Geronimo, Francisco Marcellán, Yuan Xu

Polynomials with No Zeros on a Face of the Bidisk

Greg Knese

Christoffel Functions and Universality Limits for Multivariate Orthogonal Polynomials

Doron S. Lubinsky

The C-Function Expansion of the Multivariable Basic Hypergeometric Function

Jasper Stokman

On Koornwinder Bivariate Orthogonal Polynomials Miguel Pinar

Topic #5 ----- OP-SF NET 20.3 ------ May 15, 2013

From: Francisco J. Marcellán pacomarc@ing.uc3m.es Subject: Activity Group Charter Renewal

Dear members of the SIAG on Orthogonal Polynomials and Special Functions,

Please find below a draft of the application for Charter Renewal of our SIAG for the 3 year operating period beginning 1/1/2014. Your suggestions and comments in order to improve it are welcome. The deadline to send me these contributions is May 27 at noon. I will submit the final version to SIAM on May 31. Thanks in advance. Francisco Marcellán Chair SIAG/OPSF

<u>Charter Renewal Application - SIAG Orthogonal Polynomials and Special</u> <u>Functions</u>

This CHARTER RENEWAL APPLICATION applies to the SIAM Activity Group on Orthogonal Polynomials and Special Functions (OPSF). The SIAM Activity Group (or OPSF) to which this renewal applies was originally formed under the aegis of SIAM on July 15, 1990 by the SIAM Council and July 19, 1990 by the SIAM Board of Trustees with its initial operating period beginning January 1, 1990 and ending December 31, 1992. Its charter has been renewed by the Council and Board seven times thereafter. This SIAG has 141 members, including 31 student members, as of 12/31/2012.

According to its Rules of Procedure, the objective(s) of the SIAG are:

To promote basic research in areas of orthogonal polynomials and special functions; To further the application of this subject in other parts of mathematics, and in science and industry; To encourage and support the exchange of information, ideas, and techniques between workers in this field, and other mathematicians and scientists.

The group is concerned with the following topics and their applications: general systems of orthogonal polynomials - asymptotic analysis, three-term recurrence relations and Markov processes, numerical quadrature, Julia sets, least-squares of orthogonal polynomials - harmonic analysis, approximation theory,

representations of compact groups, quantum mechanics, combinatorics, coding and design theory; orthogonal polynomials in several variables - lie groups, tomography, optics, wave functions in crystals; special functions - for example, Bessel, gamma, theta, spheroidal wave, etc., solutions of partial differential equations, harmonic analysis of noncompact groups, statistical mechanics, integral transforms, number theory. Within the framework of SIAM, the SIAG will conduct activities that implement its purposes.

Its purposed functions were:

To organize activities in orthogonal polynomials and special functions. The SIAG is expected to:

1) Organize minisymposia at the SIAM Annual Meeting on years where there is no SIAG conference.

2) Organize a track of at least six minisymposia at the SIAM Annual Meeting at least once every five years. The VP for Programs and the VP at Large will coordinate the scheduling with the SIAG Chair.

Other activities include:

3) Dissemination of information about upcoming conferences and sponsoring special sessions at SIAM meetings. Also, the group will assist researchers in the use of symbolic computer calculations by publicizing available software for special functions. Another goal is to establish working relationships with the various SIAM journals, especially the one on mathematical analysis, with the view of sporadically sponsoring some invited or contributed articles.

4) With the approval of the SIAM Program Committee, the SIAG may organize special sessions at SIAM meetings, and conduct special one- or two-day meetings immediately before or after a regular SIAM meeting. Other SIAG meetings may be organized only with the approval of the SIAM President and Vice President for Programs.

SIAG meetings, workshops, and conferences may be organized only with the approval of the SIAM President and the SIAM Vice President for Programs.

Award the: <u>SIAG/OPSF Gábor Szegö Prize</u>

The SIAG has complemented SIAM's activities and supported its proposed functions. The answers to the questions below indicate how this was accomplished and what the officers propose as the future directions for the SIAG.

1. List all current officers of the activity group (including advisory board, if relevant).

Chair: Francisco Marcellán, Universidad Carlos III de Madrid, Spain.

Vice Chair: Jeffrey S. Geronimo, Georgia Institute of Technology, Atlanta, GA, USA. Secretary: Peter A. Clarkson, University of Kent, United Kingdom. Program Director: Diego Dominici, State University of New York, New Paltz, NY, USA.

2. How is the field covered by the activity group doing? Is it growing, is the focus shifting? What have been the significant advances over the last [two/three] years?

The field of orthogonal polynomials and special functions (OPSF) has experienced much important activity during the last few years due to the contributions of individuals, many of them SIAG members, but others coming from outside areas, for example Random Matrices, Integrable Systems, and Number Theory. New techniques from Riemann Hilbert analysis, operator theory, rational approximation, asymptotic analysis, potential theory are contributing to the knowledge and influence of OPSF. Monographs and specialized meetings offer a good opportunity to reach people with different backgrounds and this allows our field to move in areas other than Classical Analysis. One problem which is discussed below is that most of the important contributions have not appeared in the SIAM Journal of Mathematical Analysis.

The popular monographs by B. Simon, M. E. H. Ismail, and P. Deift, among others, as well as the very recent NIST Handbook of Mathematical Functions edited by Frank Olver, Dan Lozier et al, all with contributions from members of our field, constitute a good sample of the growing impact of OPSF. Finally, the broad areas covered by the large number of events which are announced in our Electronic News Net also show the significant advances and impact of the activities around OPSF.

3. How is the activity group doing? Is it remaining vibrant? Is the size of the SIAG stable or increasing? How is the SIAG keeping up with the changes in the field? How are the broader interests of SIAM reflected in the activities of the SIAG?

From a quantitative perspective, the membership of our SIAG remains stable. With the proposed actions listed in below (including the Szegö Prize) we hope to increase the number of members especially young researchers and people from emerging economies. Activities aimed at these groups in this direction should not only attract more people and increase our activity inside SIAM both numerically and qualitatively.

4. Please list conferences/workshops the activity group has sponsored or cosponsored over the past three years, and give a brief (one sentence or phrase) indication of the success or problems with each.

4.1.- SIAG /OPSF has been involved in the organization of several meetings. Among them we would like to emphasize one held in Washington DC in April 2011 on Special Functions in the 21st century: Theory and Applications (dedicated to Frank W. J. Olver).

4.2.- Several members of our SIAG were involved in the Scientific Committee of the International Conference on Asymptotics and Special Functions, Hong Kong , June 2011.

4.3.- Two minisimposia on Special Functions and Orthogonal Polynomials and Asymptotic analysis and high oscillations, respectively, were organized by members of our SIAG in the framework of the congress of Foundations of Computational Mathematics held in Budapest in July 2011.

4.4.- Our SIAG has strongly supported the successful organization of the 11th OPSFA in Leganés, Spain (August 2011) and the 12th OPSFA at Sousse, Tunisia (March 2013). At the first meeting, 250 people attended and a volume of AMS Contemporary Mathematics Series containing the invited lectures has been edited by G. L. Lagomasino, and J. Arvesú. A regular issue of Journal of Approximation Theory will appear in August 2013 with some selected contributions. In the second meeting, 200 people attended and the contributions will be published as a regular issue of the journal Integral Transforms and Special Functions with C. Berg, C. Dunkl, and F. Marcellán as Guest Editors.

The Chair of SIAG is a permanent member of the Steering Committee organizing these meetings. Presentations The next OPSFA will be organized by NIST in Washington D. C. in July 2015.

5. Please indicate the number of minisymposia directly organized by the activity group at the last two SIAM annual meetings. When did the SIAG last organize a track at an annual meeting or meet jointly with the SIAM Annual Meeting?

Our SIAG will organize a track at the 2013 SIAM Annual meeting to be held in San Diego, CA, in July 2013.

The Program Director of our SIAG is a member of the Organizing Committee. Furthermore, six mini-symposia have been submitted for approval

MS39 Orthogonal polynomials: connections and applications

MS42 Painleve Equations - Nonlinear Special Functions

MS62 Symbolic Computation and Special Functions - Part I of II

MS75 Symbolic Computation and Special Functions - Part II of II

IC8 Orthogonal Polynomials and Cubature Rules, Yuan Xu, University of Oregon, USA

MS81 Multivariate orthogonal polynomials

MS103 Special Functions: Applications and Numerical Aspects - Part I of II

MS119 Special Functions: Applications and Numerical Aspects - Part II of II

MS134 Asymptotics of Orthogonal Polynomials

6. Please indicate other activities sponsored by the activity group, to include newsletters, prizes and web sites. Have each of these been active and successful?

6.1.-The Electronic News Net of the SIAM Activity Group on OPSF appears every two months and constitutes one of the most important ways to disseminate information about scientific events, related to the aims of our SIAG, updated papers and contributions as well as opinions about our activity. It is received by all our membership and we have an interesting feedback with comments and suggestions concerning our activities.

6.2.-The OP-SF Talk has be transferred from NIST to SIAM in order to stimulate la visibility of our SIAG. We have a web page (<u>http://www.siam.org/activity/opsf/</u>) where recent information and the archives of our SIAG can be read.

6.3.- One of the most relevant facts in this period was the statement of the Gabor Szegö Prize to award every two years an early-career researchers for outstanding research, as determined by the prize committee, in the area of orthogonal polynomials and special functions. The first winner was Tom Claeys (Université Catholique de Louvain, Belgium) and the receipt of the prize held with occasion of the 11th OPSFA. The second one was Jacob S. Christiansen (University of Lund, Sweden) and he received the prize in the opening ceremony of the 12th OPSFA. The number of applications (8) in this last edition shows the impact of this prize in our community.

6.4.- Our SIAG has supported the three editions of the Latin-American School on Orthogonal Polynomials and Applications held at Bogotá ,Colombia, in 2011, Colima, Mexico, in 2012, and Sao Jose do Rio Preto, Brazil, in 2013. The number of participants in each of them was around 60 young researchers interested on the topics covered by our SIAG.

7. What activities are planned and proposed for the next period of the charter? Please describe scheduled and suggested future activities in detail.

7.1- To improve the support from SIAM to the OPSF meetings held every two years and to increase participation and the quality of contributions. These meetings are an important tradition in our community and a very good place to explain our activity and our relevance. The award ceremony for the Gabor Szegö Prize, includes an invited lecture by the award winner. This prize is stimulating the activity of young researchers.

7.2.- To Organize mini-symposia at the SIAM Annual Meeting in years where there is not an OPSFA conference. An important question is to have financial support from funding agencies as well as from SIAM.

7.3.- To promote the organization of Summer Schools in emerging countries. We have started this process in Latin-America, but our ambition is to promote such a kind of activities in Africa and South East Asia, where

we have identified individuals, teams and institutions interested in our area. The financial support for such events constitutes a critical point. The suggested interval of two years seems to be realistic.

7.4.- We plan to increase our membership by informing researchers in our area of our SIAG activities through the mailing list, OPSF-Talk. Currently, the majority of our members are from the US and Europe but we wish to expand in Latin-America, Africa and Asia.

8. How can SIAM help the activity group achieve its goals?

8.1.- The dissemination of relevant contributions in areas where OPSF play an important role.

8.2.- To emphasize the links between different other SIAM activity groups in areas of joint interest.

8.3.- The organization of mini-symposia in the SIAM Annual Meetings where the emphasis on applications of OPSF to other areas such as engineering, biomathematics, cryptography, computer science to encourage feedback from researchers outside OPSF.

8.4.- The support to young researchers interested in our domain using the OPSF Summer Schools in order to create a critical mass and enhance the links between the different teams.

8.5.- The designation of liaison persons of our SIAG with related scientific organizations; for example Society for Special Functions and Applications (SSFA) in India, the Mathematical Physics interest group of the Institute of Physics as well as inside other organizations related to our interest areas, from either an applied or computational perspective. On the other hand, there are already informal links with electronic journals such as SIGMA because of memberships on editorial boards.

8.6.- To increase the participation of recognized members of our SIAG in journals edited by SIAM, like Journal Mathematical Analysis. A number of years ago Richard Askey and George Andrews were on the Editorial Board and this journal was one of the main journals publishing articles in our area.

9. How can the activity group help SIAM in its general role of promoting applied mathematics and computational science?

9.1. We can contribute in the monthly SIAM News with articles related to the applications and computational aspects of OPSF.

9.2. Inside the OPSF worldwide community and, more precisely, in the events organized by our SIAG, we can emphasize the links between OPSF

and applied mathematics and computational science through plenary lectures as well as minisymposia or special sessions.

9.3. We would like to open our Newsletter to non specialists in OPSF in order to formulate questions and problems where OPSF are an useful tool.

This SIAG requests that the SIAM Council and Board of Trustees renew its charter for a 3 year operating period beginning 1/1/2014.

Signed

Francisco Marcellán, SIAG Chair

May 15, 2013.

Topic #6 ----- OP-SF NET 20.3 ----- May 15, 2013

From: Henrik Laurberg Pedersen henrikp@life.ku.dk Subject: Copenhagen workshop

Dear colleague, we hereby send you information on the Workshop on Special Functions and their Applications (WoSFA) in Copenhagen, August 28 - August 30, 2013

Invited speakers (all confirmed)

Árpád Baricz, Romania Ahmed Fitouhi, Tunisia Stamatis Koumandos, Cyprus José Luis López, Spain Stephan Ruscheweyh, Germany Gopala Krishna Srinivasan, India Matti Vuorinen, Finland Changgui Zhang, France

Special functions have widespread applications in other areas of mathematics and often new perspectives in special functions are motivated by such connections.

The workshop will focus on theoretical and computational aspects of special functions and their applications and use in various areas in mathematics. The topics include classical special functions going back to Euler and their generalizations, inequalities, asymptotic analysis, the role of special functions in complex analysis and geometric function theory, differential equations,

probability, approximation theory, and orthogonal polynomials.

The symposium takes place at the University of Copenhagen. The number of contributed talks are limited.

For more information, registration and submission of abstracts see:

http://www.math.ku.dk/~henrikp/wosfa

Hoping to see you in Copenhagen.

Christian Berg and Henrik Laurberg Pedersen

Topic #7 ----- OP-SF NET 20.3 ----- May 15, 2013

From: OP-SF NET Editors

Subject: Approximation Theory and Harmonic Analysis on Spheres and Balls

The following information is from the web site:

http://www.springer.com/mathematics/analysis/book/978-1-4614-6659-8

Feng Dai and Yuan Xu, Approximation theory and harmonic analysis on spheres and balls Springer-Verlag, 2013, xviii +440 pp., ISBN 978-1-4614-6659-8 Available as eBook

- Contains up-to-date research in approximation theory and harmonic analysis on balls and spheres
- Provides useful research material for both experts and advanced graduate students

This monograph records progress in approximation theory and harmonic analysis on balls and spheres, and presents contemporary material that will be useful to analysts in this area. While the first part of the book contains mainstream material on the subject, the second and the third parts deal with more specialized topics, such as analysis in weight spaces with reflection invariant weight functions, and analysis on balls and simplexes. The last part of the book features several applications, including cubature formulas, distribution of points on the sphere, and the reconstruction algorithm in computerized tomography.

This book is directed at researchers and advanced graduate students in analysis. Mathematicians who are familiar with Fourier analysis and harmonic analysis will understand many of the concepts that appear in this manuscript: spherical harmonics, the Hardy-Littlewood maximal function, the Marcinkiewicz multiplier theorem, the Riesz transform, and doubling weights are all familiar tools to researchers in this area. Content Level » Research

Keywords » Littlewood-Paley theory - analysis on the sphere - approximation theory - harmonic analysis - modulus of smoothness - multiplier theorem - spherical harmonics

Topic #8 ----- OP-SF NET 20.3 ----- May 15, 2013

From: OP-SF NET Editors Subject: Book by Ernst on q-calculus

The following information is from the web site: http://www.springer.com/birkhauser/mathematics/book/978-3-0348-0430-1

Thomas Ernst A comprehensive treatment of \$q\$-calculus Birkhäuser, 2012, xvi+491 pp. ISBN 978-3-0348-0430-1

Available as eBook

- Covers many topics on q-calculus, i.e., special functions, combinatorics, q-difference equations and q-Bernoulli numbers
- Detailed coverage of the historical development of q-calculus
- Summarizes the domains of moderns physics for which q-calculus is applicable, i.e. particle physics and supersymmetry
- Introduction of a new logarithmic notation for q-calculus that supersedes the older Gaspar-Rahman notation

To date, the theoretical development of q-calculus has rested on a non-uniform basis. Generally, the bulky Gasper-Rahman notation was used, but the published works on q-calculus looked different depending on where and by whom they were written. This confusion of tongues not only complicated the theoretical development but also contributed to q-calculus remaining a neglected mathematical field. This book overcomes these problems by introducing a new and interesting notation for q-calculus based on logarithms. For instance, q-hypergeometric functions are now visually clear and easy to trace back to their hypergeometric parents. With this new notation it is also easy to see the connection between q-hypergeometric functions and the q-gamma function, something that until now has been overlooked.

The book covers many topics on q-calculus, including special functions, combinatorics, and q-difference equations. Beyond a thorough review of the historical development of q-calculus, it also presents the domains of modern physics for which q-calculus is applicable, such as particle physics and supersymmetry, to name just a few.

Content Level » Research

Keywords » q-Appell function - q-Bernoulli numbers - q-gamma function - qhypergeometric functions - tilde operator

Topic #9 ----- OP-SF NET 20.3 ----- May 15, 2013

From: Ekaterina Karatsuba karacuba@mi.ras.ru Subject: Articles in memory of A. A. Karatsuba

I would like to inform you that the issues of Proceedings of the Steklov Institute of Mathematics in memory of A.A. Karatsuba (31.01. 1937-- 28.09.2008) have appeared. They include papers by many authors, A.A. Karatsuba's pupils, friends and colleges --- at least one author of every paper knew A.A. Karatsuba personally --- from number theory and related fields, including computational aspects) dedicated to A.A. Karatsuba's 75th birthday.

There are 24 articles in http://link.springer.com/journal/11501/276/1/page/1 Proceedings of the Steklov Institute of Mathematics Volume 276, Issue 1, April 2012

There are 9 articles in -http://link.springer.com/journal/11501/280/2/suppl/page/1 Proceedings of the Steklov Institute of Mathematics Volume 280, Issue 2 Supplement, April 2013 including one about the scientific achievements of A.A. Karatsuba: http://link.springer.com/article/10.1134%2FS0081543813030012

Topic #10 ----- OP-SF NET 20.3 ----- May 15, 2013

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 March and April 2013.

http://arxiv.org/abs/1303.1674

Groebner basis and singular locus of Lauricella's hypergeometric differential equations Hiromasa Nakayama

Connections between the Generalized Marcum Q-Function and a class of Hypergeometric Functions D. Morales-Jimenez, F. J. Lopez-Martinez, E. Martos-Naya, J. F. Paris, A. Lozano

http://arxiv.org/abs/1303.6790

A classification of the irreducible algebraic A-hypergeometric functions associated to planar point configurations Esther Bod

http://arxiv.org/abs/1304.5830

Contiguous relations and summation and transformation formulas for basic hypergeometric series Feng Gao, Victor J. W. Guo

http://arxiv.org/abs/1304.0858

Hypergeometric solutions to the symmetric q-Painlevé equations Kenji Kajiwara, Nobutaka Nakazono

http://arxiv.org/abs/1303.2479

Orthogonality with respect to a Jacobi differential operator and applications Jorge Alberto Borrego Morell, Héctor Pijeira Cabrera

http://arxiv.org/abs/1303.2825

Orthogonal polynomials, a short introduction Tom H. Koornwinder

http://arxiv.org/abs/1303.4518

An Approximate Approach to E-optimal Designs for Weighted Polynomial Regression by Using Tchebycheff Systems and Orthogonal Polynomials Takuma Takeuchi, Hiroto Sekido

http://arxiv.org/abs/1303.5820

Recurrence Relations of the Multi-Indexed Orthogonal Polynomials Satoru Odake

http://arxiv.org/abs/1303.0627 A few remarks on orthogonal polynomials Paweł J. Szabłowski

http://arxiv.org/abs/1304.3493

Generating functions of orthogonal polynomials in higher dimensions Hendrik De Bie, Dixan Peña Peña, Frank Sommen

http://arxiv.org/abs/1304.4482 Jointly orthogonal polynomials Giovanni Felder, Thomas Willwacher

Row-strict Quasisymmetric Schur Functions, Characterizations of Demazure Atoms, and Permuted Basement Nonsymmetric Macdonald Polynomials Jeffrey Ferreira

http://arxiv.org/abs/1303.4327

Homogeneous division polynomials for Weierstrass elliptic curves linbi lin

http://arxiv.org/abs/1303.6587

Form Sequences to Polynomials and Back, via Operator Orderings T. Amdeberhan, V. De Angelis, A. Dixit, V. H. Moll, C. Vignat

http://arxiv.org/abs/1303.6590

The Zagier polynomials. Part II: Arithmetic properties of coefficients Mark W. Coffey, Valerio De Angelis, Atul Dixit, Victor H. Moll, Armin Straub, Christophe Vignat

http://arxiv.org/abs/1303.2279

On the Sendov conjecture and the critical points of polynomials Zaizhao Meng

http://arxiv.org/abs/1304.1762

Fractal properties of Bessel functions Luka Korkut, Domagoj Vlah, Vesna Zupanovic

http://arxiv.org/abs/1303.7389

Tower tableaux and Schubert polynomials Olcay Coskun, Müge Taşk\in

http://arxiv.org/abs/1303.3669

The Scattering amplitude for one parameter family of shape invariant potentials related to Xm Jacobi polynomials Rajesh Kumar Yadav (BHU), Avinash Khare (IISER-Pune), Bhabani Prasad Mandala (BHU)

http://arxiv.org/abs/1304.1602 Hall-Littlewood polynomials and characters of affine Lie algebras Nick Bartlett, S. Ole Warnaar

http://arxiv.org/abs/1304.2486 Multivariable Tangent and Secant q-derivative Polynomials Dominique Foata, Guo-Niu Han

http://arxiv.org/abs/1304.3295

The superalgebra of supersymmetric guantum mechanics and Charlier polynomials E.I. Jafarov, J. Van der Jeugt

Sets of uniqueness for uniform limits of polynomials in several complex variables K. Makridis, V. Nestoridis

http://arxiv.org/abs/1304.6538

On some noncommutative symmetric functions analogous to Hall-Littlewood and Macdonald polynomials Jean-Christophe Novelli, Lenny Tevlin, Jean-Yves Thibon

http://arxiv.org/abs/1304.7967

Noetherian quotients of the algebra of partial difference polynomials and Grobner bases of symmetric ideals Vladimir P. Gerdt, Roberto La Scala

http://arxiv.org/abs/1304.0269

On \$q\$-analogues of two-one formulas for multiple harmonic sums and multiple zeta star values Khodabakhsh Hessami Pilehrood, Tatiana Hessami Pilehrood

http://arxiv.org/abs/1304.1917

A Galois-theoretic proof of the differential transcendence of the incomplete Gamma function Carlos E. Arreche

http://arxiv.org/abs/1304.2472

Dualities for absolute zeta functions and multiple gamma functions Nobushige Kurokawa, Hiroyuki Ochiai

http://arxiv.org/abs/1304.3321

p-adic Gamma function and traces of Frobenius of elliptic curves Rupam Barman, Neelam Saikia

http://arxiv.org/abs/1303.3911

Spectral parameter power series for perturbed Bessel equations Raul Castillo Perez, Vladislav V. Kravchenko, Sergii M. Torba

http://arxiv.org/abs/1304.2904

On fundamental harmonic analysis operators in certain Dunkl and Bessel settings Alejandro J. Castro, Tomasz Z. Szarek

http://arxiv.org/abs/1303.0773

Perturbed Laguerre Unitary Ensembles, Painlevé V and Information Theory Estelle Basor, Yang Chen, Matthew R. McKay

http://arxiv.org/abs/1304.7982

Painleve Test and the Resolution of Singularities for Integrable Equations Jishan Hu, Min Yan

Discrete Painleve equations and discrete KdV equation over finite fields Masataka Kanki, Jun Mada, Tetsuji Tokihiro

http://arxiv.org/abs/1303.6119

Moments of the Dedekind zeta function and other non-primitive L-functions Winston Heap

http://arxiv.org/abs/1303.6505

On certain mean values of the double zeta-function Soichi Ikeda, Kaneaki Matsuoka, Yoshikazu Nagata

http://arxiv.org/abs/1303.7028

Zeta regularized products, Riemann zeta zeros and prime number spectra G. Menezes, B. F. Svaiter, N. F. Svaiter

http://arxiv.org/abs/1304.2472

Dualities for absolute zeta functions and multiple gamma functions Nobushige Kurokawa, Hiroyuki Ochiai

http://arxiv.org/abs/1304.2608

The Bowman-Bradley type theorem for finite multiple zeta values Shingo Saito, Noriko Wakabayashi

http://arxiv.org/abs/1304.3543

Zeros of Witten zeta functions and absolute limit Nobushige Kurokawa, Hiroyuki Ochiai

http://arxiv.org/abs/1304.3922

Secant Zeta Functions Matilde Lalín, Francis Rodrigue, Mathew Rogers

http://arxiv.org/abs/1303.2259

Moments of elliptic integrals and critical \$L\$-values M. Rogers, J. G. Wan, I. J. Zucker

http://arxiv.org/abs/1304.4509

Analytic Continuation of the Doubly-periodic Barnes Zeta Function Guglielmo Fucci, Klaus Kirsten

http://arxiv.org/abs/1304.7267

Polylogarithms, Multiple Zeta Values and Superstring Amplitudes Johannes Broedel, Oliver Schlotterer, Stephan Stieberger

http://arxiv.org/abs/1304.7194

A Direct Evaluation of the Periods of the Weierstrass Zeta Function Shaul Zemel

Asymptotic formulas for coefficients of inverse theta functions Kathrin Bringmann, Jan Manschot

http://arxiv.org/abs/1304.7659

On the Coble quartic and Fourier-Jacobi expansion of theta relations Francesco Dalla Piazza, Riccardo Salvati Manni

http://arxiv.org/abs/1304.3136

Effective Congruences for Mock Theta Functions Nickolas Andersen, Holley Friedlander, Jeremy Fuller, Heidi Goodson

http://arxiv.org/abs/1304.0684

A theory of theta functions to the quintic base Tim Huber

http://arxiv.org/abs/1304.0694

Differential equations for septic theta functions Tim Huber, Danny Lara

http://arxiv.org/abs/1304.0693

On cubic multisections of Eisenstein series Andrew Alaniz, Tim Huber

http://arxiv.org/abs/1303.2894

The gap probabilities of the tacnode, Pearcey and Airy point processes, their mutual relationship and evaluation M. Bertola, M. Cafasso

http://arxiv.org/abs/1303.2887

The period length of Euler's number e Kurt Girstmair

http://arxiv.org/abs/1303.1856

Euler's constant: Euler's work and modern developments Jeffrey C. Lagarias

http://arxiv.org/abs/1304.4012 Eulerian series as modular forms revisited Eric Mortenson

http://arxiv.org/abs/1304.1226

On Euler's "Misleading Induction", Andrews' "Fix", and How to Fully Automate them Shalosh B. Ekhad, Doron Zeilberger

http://arxiv.org/abs/1303.0885

Zeroless Arithmetic: Representing Integers ONLY using ONE Edinah K. Ghang, Doron Zeilberger

A Short Proof of a Ptolemy-Like Relation for an Even number of Points on a Circle Discovered by Jane McDougall Marc Chamberland, Doron Zeilberger

http://arxiv.org/abs/1303.5694

Singular value correlation functions for products of Wishart random matrices Gernot Akemann, Mario Kieburg, Lu Wei

http://arxiv.org/abs/1303.5838

Circular law for random matrices with unconditional log-concave distribution Radosław Adamczak, Djalil Chafai (LAMA)

http://arxiv.org/abs/1304.4368

Universal K-matrix distribution in beta=2 Ensembles of Random Matrices Yan V Fyodorov, Boris A Khoruzhenko, Andre Nock

Topic #11 ----- OP-SF NET 20.3 ----- May 15, 2013

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 130 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: http://staff.science.uva.nl/~thk/opsfnet http://math.nist.gov/~DLozier/OPSFnet/

SIAM-OPSF (OP-SF Talk), which was recently moved to a SIAM server, facilitates communication among members and friends of the Activity Group. To subscribe or to see a link the archive of all messages, go to http://lists.siam.org/mailman/listinfo/siam-OPSF and follow the instructions

under the sub-heading "Subscribing to SIAM-OPSF". To contribute an item to the discussion, send email to siam-opsf@siam.org. The moderators are Bonita Saunders (bonita.saunders@nist.gov) and Diego Dominici (dominicd@newpaltz.edu).

SIAM has several categories of membership, including low-cost categories for students and residents of developing countries. In addition, there is the possibility of reduced rate membership for the members of several societies with which SIAM has a reciprocity agreement; see http://www.siam.org/membership/individual/reciprocal.php For current information on SIAM and Activity Group membership, contact: Society for Industrial and Applied Mathematics 3600 University City Science Center Philadelphia, PA 19104-2688 USA phone: +1-215-382-9800 email: service@siam.org WWW : http://www.siam.org http://www.siam.org/membership/outreachmem.htm

Topic #12 ----- OP-SF NET 20.3 ----- May 15, 2013

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 20.4 should be sent by July 1, 2013.

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 (2011-2013) are: Chair: Francisco Marcellán Vice Chair: Jeff Geronimo Program Director: Diego Dominici Secretary: Peter Clarkson 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