OP-SFNET - Volume 21, Number 2 - March 15, 2014

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. Lee Lorch 1915-2014
- 2. Segovia Workshop on Exceptional Orthogonal Polynomials
- 3. Recordings from Barry Simon master class
- 4. ADSA Siafarikas memorial issue
- 5. Preprints in arXiv.org
- 6. About the Activity Group
- 7. Submitting contributions to OP-SF NET and SIAM-OPSF (OP-SF Talk)

Calendar of Events:

April 11-13, 2014

American Mathematical Society, Central Section Meeting, including Special Sessions on "Applications of Special Functions in Combinatorics and Analysis" (organized by Atul Dixit and Timothy Huber) and "Complex Function Theory and Special Functions" (organized by Roger W. Barnard and others), Lubbock, Texas, USA

http://www.ams.org/meetings/sectional/2211_program.html

April 11-13, 2014

Kent Spectral Theory Conference, Canterbury, England http://www.kent.ac.uk/smsas/events/spectral-theory.html

May 19-23, 2014

Workshop on Random Matrices and Jacobi Operators, Mittag-Leffler Institute, Djursholm, Sweden http://www.mittag-leffler.se/?q=0519

May 26-30, 2014

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

June 17-20, 2014

Fourth Iberoamerican Workshop on Orthogonal Polynomials and Applications (EIBPOA 2014), Bogotá, Colombia www.matematicas.unal.edu.co/newsite/fcweb/index.php?id=179&L=1

June 23-26, 2014

Fifth Jaen Conference on Approximation Theory, Computer Aided Geometric Design, Numerical Methods and Applications, Úbeda, Spain. http://ucua.ujaen.es/ajlopez/jca/dates.php

July 7-11, 2014

SIAM Annual Meeting, Chicago, Illinois, USA http://www.siam.org/meetings/an14/

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

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/

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

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

Topic #1 ------ OP-SF NET 21.2 ------ March 15, 2014

From: Martin Muldoon muldoon@yorku.ca Subject: Lee Lorch 1915-2014

Lee Lorch died in Toronto on February 28, 2014 at the age of 98. He was known as a mathematician who made life-long contributions to ending segregation in housing and education and to the improving the position of women and minorities in mathematics.

Born in New York City on September 20, 1915, Lorch was educated at Cornell University (1931-35) and at the University of Cincinnati (1935-41) where he completed his PhD under the supervision of Otto Szász, with a thesis "Some



Problems on the Borel Summability of Fourier Series". He worked for the National Advisory Committee for Aeronautics (the predecessor of NASA) in 1942-42 and served in the US Army in India and the Pacific in 1943-46. While In India, he took time to contact local mathematicians and his second publication appeared in the Bulletin of the Calcutta Mathematical Society (1945).

Some of Lorch's early mathematical work, arising from the subject of his thesis dealt with the magnitude and asymptotics of the Lebesgue constants, known to form a

divergent sequence in the case of Fourier Series. He studied the corresponding question when convergence is replaced by various kinds of summability (Fejér had considered Cesàro summability) in several papers including joint work with Donald J. Newman (whom he had known as an undergraduate at CUNY in the late 1940s). Later, he looked at corresponding questions for Jacobi series.

At the same time, Lee and his wife Grace were involved in the struggle against discrimination in housing (in New York), for equal treatment for Blacks in mathematical meetings, and for school integration in the US South. Resistance to these objectives and anti-communist hysteria led to his dismissal from or non-renewal in four academic positions in the period 1949-1957. This led to his taking up an offer from the University of Alberta in1959 from which he moved to York University (Toronto) in 1968,

His mathematical activity continued, during the 1950s, helped by summer visits to the San Francisco Bay Area where he had contact with some of the leading mathematicians (including Gabor Szegő) at Stanford and Berkeley. During this period, he began a continuing collaboration with Peter Szego, much of it related to differential equations and special functions. In Acta Math. 109 (1963), 55-73, Lorch and Szego showed that for |v| > 1/2, the first differences of the positive zeros of a general Bessel (cylinder) function of order v form a completely

monotonic sequence and conjectured that the second differences would form such a sequence for |v| < 1/2. I was able to prove this for $1/3 \le |v| < 1/2$ in 1977 but, as far as I know, the question is still unsettled for |v| < 1/3.

In recent years, Lee Lorch was honoured by a number of universities and other organizations. The photo above was taken at an awards ceremony during the Joint Mathematics Meetings in New Orleans in 2007. Further biographical information, especially about his anti-discrimination activities can be found at http://en.wikipedia.org/wiki/Lee_Lorch and the links provided there.

Topic #2 ------ OP-SF NET 21.2 ------ March 15, 2014

From: OP-SF NET Editors Subject: Segovia Workshop on Exceptional Orthogonal Polynomials

A workshop "Exceptional Orthogonal Polynomials and exact solutions in Mathematical Physics" will be held in Segovia, Spain from September 7 (arrival day) to September 12, 2014.

From the workshop web site:

This workshop aims to bring together physicists and mathematicians working in exceptional orthogonal polynomials and related topics.

Exceptional orthogonal polynomials are dense families of orthogonal polynomials that satisfy a Sturm-Liouville problem. They differ from classical polynomials in that their degree sequence contains a finite number of gaps. Darboux transformations are intimately connected with the derivation of such families, and so is the notion of bispectrality and other tools that appear in the theory of integrable systems.

In mathematical physics, these functions allow to write exact solutions to rational extensions of classical quantum potentials. From the point of view of special functions and orthogonal polynomials, they are polynomial systems formed by solutions to Fuchsian linear equations that belong to the Heine-Stieltjes class. Similar constructions in the theory of integrable systems allow to construct rational solutions to nonlinear integrable PDEs.

There has been a remarkable activity in the past five years along these lines, and we feel the moment is ripe for a first meeting of many of the researchers who have contributed to this development. The aim of the workshop is to bring together members of several mathematical communities such as: integrable systems, mathematical physics and the theory of orthogonal polynomials, to discuss the overlapping problems that these new developments have posed. Speakers: Alexander P. Veselov, Loughborough University, United Kingdom Robert Milson, Dalhousie University, Canada Antonio Durán, Universidad de Sevilla, Spain Alexei Zhedanov, Donetsk Institute for Physics and Technology, Ukraine (to be confirmed) Ryu Sasaki, Kyoto University, Japan Luc Vinet, Centre de Recherches Mathématiques, Canada Peter Clarkson, University of Kent, United Kingdom Manuel Mañas, Universidad Complutense, Spain Boris Shapiro, Stockholm University, Sweden (to be confirmed) Lance Littlejohn, Baylor University, United States

Organizers: David Gómez-Ullate, Francisco Marcellán, Miguel Angel Rodríguez

Web site: http://www.icmat.es/congresos/2014/xopconf/ Contact: xopcpnf@icmat.es

Topic #3 ------ OP-SF NET 21.2 ------ March 15, 2014

From: OP-SF NET Editors Subject: Recordings from Barry Simon master class

"Spectral Theory of Orthogonal Polynomials" a master class by Barry Simon, (CalTech) with guest lectures by Andrei Martínez Finkelshtein (Universidad de Almería), Jacob Stordal Christiansen (Lund University) and Jonathan Breuer (Hebrew University of Jerusalem) was held in Aarhus, Denmark during the period February 17-20, 2014.

Video-recordings of the lectures can be seen at http://qgm.au.dk/video/mc/spectral-theory/

Topic #4 ------ OP-SF NET 21.2 ------ March 15, 2014

From : OP-SF NET Editors Subject: ADSA Siafarikas memorial issue

In September 2012 an International Conference on Differential Equations, Difference Equations and Special Functions (ICDDESF), was held in Patras, Greece and was dedicated to the memory of Professor Panayiotis D. Siafarikas. A special issue (Vol 8, no, 2 (2013) of "Advances in Dynamical Systems and Applications"

containing papers based on some of the talks given during the Conference has

appeared on line at: http://campus.mst.edu/adsa/index_files/adsa82.htm

This site provides open access to the papers:

Ondřej Došlý, Evangelos K. Ifantis, Chrysi G. Kokologiannaki, Andrea Laforgia, Lance Littlejohn, Martin Muldoon and Eugenia N. Petropoulou, **Preface**, pages 157-167.

Evangelos K. Ifantis, Chrysi G. Kokologiannaki and Eugenia N. Petropoulou, **Panayiotis D. Siafarikas: His Life and Work**, pages 169-179.

Mohamed J. Atia, Lance L. Littlejohn and Jessica Stewart, Spectral Theory of X_1-Laguerre Polynomials, pages 181-192.

Ondřej Došlý, **Symplectic Difference Systems: Natural Dependence on a Parameter**, pages 193-201.

John R. Graef, Lingju Kong and Min Wang, Multiple Solutions to a Periodic Boundary Value Problem for a Nonlinear Discrete Fourth Order Equation, pages 203-215.

Katelyn Grayshan and A. Alexandrou Himonas, **Equations with Peakon Traveling Wave Solutions**, pages 217-232.

Johnny Henderson and Rodica Luca, Existence and Multiplicity of Positive Solutions for a System of Higher-Order Multi-Point Boundary Value Problems, pages 233-245.

Mourad E. Ismail and Martin E. Muldoon, Higher Monotonicity Properties of q-gamma and q-psi Functions, pages 247-259.

Andrea Laforgia and Pierpaolo Natalini, On some Inequalities for the Gamma Function, pages 261-267.

G. Yu. Mehdiyeva, V. R. Ibrahimov and M. N. Imanova, A Method for Solving Nonlinear Volterra Integral Equations, pages 269-280.

Nikolas S. Papageorgiou and George Smyrlis, Multiple Solutions for Parametric Neumann Problems with Indefinite and Unbounded Potential, pages 281-293.

Zdeněk Pospíšil, Shape of a Travelling Wave in a Time-Discrete Reaction-Diffusion Equation, pages 295-302.

Marcos Rodrigues, Abdusslam Osman and Alan Robinson, **Partial Differential Equations for 3D Data Compression and Reconstruction**, pages 303-315. *Bianca-Renata Satco and Corneliu-Octavian Turcu*, **Hybrid Systems by Methods** of Time Scales Analysis, pages 317-326.

Javier Segura, **Some Analytical and Numerical Consequences of Sturm Theorems**, pages 327-347.

I.P.Stavroulakis, Oscillation Criteria for Delay and Advanced Difference Equations with General Arguments, pages 349-364.

Nico M. Temme, **Remarks on Slater's Asymptotic Expansions of Kummer Functions for Large Values of the α-Parameter**, pages 365-377.

Petr Tomášek, An Asymptotic Estimate for Linear Delay Differential Equations with Power Delayed Arguments, pages 379-386.

A. K. Tripathy, New Oscillation Criteria for Fourth-Order Difference Equations, pages 387-399.

Erik A. van Doorn, Weighted Sums of Orthogonal Polynomias Related to Birth-Death Processes with Killing, pages 401-412.

L. Villafuerte and J.-C. Cortés, Solving Random Differential Equations by Means of Differential Transform Methods, pages 413-425.

M. A. Xenos and E. E. Tzirtzilakis, **MHD Effects on Blood Flow in a Stenosis**, pages 427-437.

Topic #5 ------ OP-SF NET 21.2 ------ March 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 January and February 2014.

http://arxiv.org/abs/1401.0815

Additions to the formula lists in "Hypergeometric orthogonal polynomials and their \$q\$-analogues" by Koekoek, Lesky and Swarttouw Tom H. Koornwinder

http://arxiv.org/abs/1401.2970

New Convolution Identities for Hypergeometric Bernoulli Polynomials Hieu D. Nguyen, Long G. Cheong

Abstract "hypergeometric" orthogonal polynomials Alexei Zhedanov

http://arxiv.org/abs/1401.6928

Linear independent solutions and operational representations for hypergeometric functions of four variables Maged G. Bin-Saad, Anvar Hasanov

http://arxiv.org/abs/1402.2361

An explicit formula for Bell numbers in terms of Stirling numbers and hypergeometric functions Feng Qi

http://arxiv.org/abs/1402.3901

A connection formula of a divergent bilateral basic hypergeometric function Takeshi Morita

http://arxiv.org/abs/1402.3903

The Stokes phenomenon for the $q^-difference$ equation satisfied by the basic hypergeometric series ${}_3\varphi_1(a_1,a_2,a_3;b_1;q,x)$ Takeshi Morita

http://arxiv.org/abs/1401.2419

A vector equilibrium problem for the normal matrix model, and multiple orthogonal polynomials on a star Arno B.J. Kuijlaars, Abey López

http://arxiv.org/abs/1401.5434

Multi-variable orthogonal polynomials Abdallah Dhahri

http://arxiv.org/abs/1402.2971

Projected dynamics of kinetic equations with energy diffusion in spaces of orthogonal polynomials Jon Wilkening, Antoine Cerfon, Matt Landreman

http://arxiv.org/abs/1402.6256

Zeros of orthogonal polynomials generated by the Geronimus perturbation of measures Amílcar Branquinho, Edmundo J. Huertas, Fernando R. Rafaeli

http://arxiv.org/abs/1402.0773

On linearly related sequences of difference derivatives of discrete orthogonal polynomials R. Alvarez-Nodarse, J. Petronilho, N. C. Pinzon-Cortes, R. Sevinik-Adiguzel

http://arxiv.org/abs/1402.1569

On certain Wronskians of multiple orthogonal polynomials Lun Zhang, Galina Filipuk

Large degree asymptotics of orthogonal polynomials with respect to an oscillatory weight on a bounded interval Alfredo Deaño

http://arxiv.org/abs/1401.2645

A Note On Multi Poly-Euler Numbers And Bernoulli Polynomials Hassan Jolany, Mohsen Aliabadi, Roberto B. Corcino, M.R.Darafsheh

http://arxiv.org/abs/1401.2970

New Convolution Identities for Hypergeometric Bernoulli Polynomials Hieu D. Nguyen, Long G. Cheong

http://arxiv.org/abs/1401.3639

Hermite Polynomials and Quasi-classical Asymptotics S. Twareque Ali, Miroslav Englis

http://arxiv.org/abs/1401.4560

On a class of \$q\$-Bernoulli, \$q\$-Euler and \$q\$-Genocchi polynomials N. I. Mahmudov, M. Momenzadeh

http://arxiv.org/abs/1401.5400

Counting derangements and Nash equilibria Raimundas Vidunas

http://arxiv.org/abs/1401.6271

More Properties on Multi Poly-Euler Polynomials Hassan Jolany, Roberto B. Corcino

http://arxiv.org/abs/1401.6273

Mutual Interlacing and Eulerian-like Polynomials for Weyl Groups Arthur L.B. Yang, Philip B. Zhang

http://arxiv.org/abs/1401.0485

On the distance from a normal matrix polynomial to the set of matrix polynomials with a prescribed multiple eigenvalue Esmaeil Kokabifar, Ghasem Barid Loghmani

http://arxiv.org/abs/1401.0490

On the distance bounds for two prescribed eigenvalues of matrix polynomials Esmaeil Kokabifar, G.B. Loghmani, A.M. Nazari

http://arxiv.org/abs/1401.7901

The multivariate Charlier polynomials as matrix elements of the Euclidean group representation on oscillator states Vincent X. Genest, Hiroshi Miki, Luc Vinet, Alexei Zhedanov

Identities for generalized Euler polynomials Lin Jiu, Victor H. Moll, C. Vignat

http://arxiv.org/abs/1401.1359

Interplay of symmetries, null forms, Darboux polynomials, integrating factors and Jacobi multipliers in integrable second order differential equations R. Mohanasubha, V. K. Chandrasekar, M. Senthilvelan, M. Lakshmanan

http://arxiv.org/abs/1401.1408

Zeros of large degree Vorob'ev-Yablonski polynomials via a Hankel determinant identity Marco Bertola, Thomas Bothner

http://arxiv.org/abs/1401.3591

Symmetric coupling of angular momenta, quadratic algebras and discrete polynomials V. Aguilanti, D. Marinelli, A. Marzuoli

http://arxiv.org/abs/1401.6824

Grüss and Grüss-Voronovskaya-type estimates for some Bernstein-type polynomials of real and complex variables Sorin Gal, Heiner Gonska

http://arxiv.org/abs/1401.7696

Chinese Remainder Theorem for Cyclotomic Polynomials in \$\mathbf{Z}[X]\$ Kamalakshya Mahatab, Kannappan Sampath

http://arxiv.org/abs/1402.1464

Quantum and affine Schubert calculus and Macdonald polynomials Avinash J. Dalal, Jennifer Morse

http://arxiv.org/abs/1402.5217

Lie Groups of Jacobi polynomials and Wigner d-matrices E. Celeghini, M.A. del Olmo, M.A. Velasco

http://arxiv.org/abs/1402.5357

Zeta Functions for Bivariate Laurent Polynomials over \$p-\$adic Fields Edwin León-Cardenal

http://arxiv.org/abs/1402.5544

The finite Fourier transform of classical polynomials Atul Dixit, Lin Jiu, Victor H. Moll, Christophe Vignat

http://arxiv.org/abs/1402.6539

Inequalities for ultraspherical polynomials. Proof of a conjecture of I. Raşa Geno Nikolov

On the spacings between the successive zeros of the Laguerre polynomials Stephane Chretien, Sebastien Darses

http://arxiv.org/abs/1402.6681

On Salem numbers, expansive polynomials and Stieltjes continued fractions Christelle Guichard (IF), Jean-Louis Verger-Gaugry (IF)

http://arxiv.org/abs/1402.6778

Nonnegative Trigonometric Polynomials, Sturms Theorem, and Symbolic Computation Man Kam Kwong

http://arxiv.org/abs/1402.7092

Transfer Functions of Generalized Bessel Polynomials Jose R. Martinez

http://arxiv.org/abs/1402.3540

Zero curvature representation of non-commutative and quantum Painlevé II equation with its non-vacuum solutions Irfan Mahmood

http://arxiv.org/abs/1402.5926

Painlevé IV Coherent States David Bermudez, Alonso Contreras-Astorga, David J. Fernández C

http://arxiv.org/abs/1401.1703

Bessel and Struve Related Integrals Bernard J. Laurenzi

http://arxiv.org/abs/1401.2744

Error Bounds for Numerical Integration of Oscillatory Bessel Transforms with Algebraic or Logarithmic Singularities Hongchao Kang, Congpei An

http://arxiv.org/abs/1401.4850

Derivatives with respect to the order of the Bessel function of the first kind J. Sesma

http://arxiv.org/abs/1401.7764

Van der Corput inequalities for Bessel functions Árpád Baricz, Andrea Laforgia, Tibor K. Pogány

http://arxiv.org/abs/1402.0747

On an identity for zeros of Bessel functions Árpád Baricz, Dragana Jankov Maširević, Tibor K. Pogány, Róbert Szász

The zeros of the Riemann-zeta function and the transition from pseudo-random to harmonic behavior R. V. Ramos

http://arxiv.org/abs/1401.4781

A zero density result for the Riemann zeta function Habiba Kadiri

http://arxiv.org/abs/1402.0169

\$a\$-Points of the Riemann zeta-function on the critical line S. J. Lester

http://arxiv.org/abs/1402.6682

Discrepancy bounds for the distribution of the Riemann zeta-function and applications Youness Lamzouri, Stephen Lester, Maksym Radziwill

http://arxiv.org/abs/1401.3117

Entropic inequalities and properties of some special functions V.I. Man'ko, L.A. Markovich

http://arxiv.org/abs/1402.0692

Close-to-convexity of some special functions and their derivatives Árpád Baricz, Róbert Szász

http://arxiv.org/abs/1402.5158

Projection to the Set of Shift Orthogonal Functions Farzin Barekat, Rongjie Lai, Ke Yin, Stanley Osher, Russel Caflisch, Vidvuds Ozolins

http://arxiv.org/abs/1402.6681

On Salem numbers, expansive polynomials and Stieltjes continued fractions Christelle Guichard (IF), Jean-Louis Verger-Gaugry (IF)

http://arxiv.org/abs/1402.2340

An explicit formula for Bernoulli polynomials in terms of \$r\$-Stirling numbers of the second kind

Bai-Ni Guo, István Mező, Feng Qi

http://arxiv.org/abs/1401.5958

The values of the high order Bernoulli polynomials at integers and the r-Stirling numbers Miloud Mihoubi, Meriem Tiachachat

http://arxiv.org/abs/1401.3161

Identities of symmetry for expansion of q-Euler polynomials Dae San Kim, Tae Gyun Kim

Identities of symmetry for higher-order q-Bernoulli polynomials Dae San Kim, Taekyun Kim

http://arxiv.org/abs/1401.1474

Identities Involving Zeros of Ramanujan and Shanks Cubic Polynomials Stefano Barbero, Umberto Cerruti, Nadir Murru, Marco Abrate

http://arxiv.org/abs/1402.1004

Laplace Transform of Product of Generalized Marcum Q, Bessel I, and Power Functions with Applications Natalia Y. Ermolova, Olav Tirkkonen

http://arxiv.org/abs/1401.7764

Van der Corput inequalities for Bessel functions Árpád Baricz, Andrea Laforgia, Tibor K. Pogány

http://arxiv.org/abs/1402.2522

Sharp estimates for potential operators associated with Laguerre and Dunkl-Laguerre expansions Adam Nowak, Krzysztof Stempak

http://arxiv.org/abs/1402.3367

An Electrostatics Problem on the Sphere Arising from a Nearby Point Charge Johann S. Brauchart, Peter D. Dragnev, Edward B. Saff

http://arxiv.org/abs/1402.3148

A new approach to the logistic function with some applications Grzegorz Rzadkowski, Iwona Głażewska, Katarzyna Sawińska

Topic #6 ------ OP-SF NET 21.2 ------ March 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 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 #7 ----- OP-SF NET 21.2 ----- March 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 21.3 should be sent by May 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