Topics:

1. Two linked conferences in Canada to celebrate Barry Simon’s 70\textsuperscript{th} birthday
4. Announcement: Computational Methods and Function Theory (CMFT) 2017
5. Report on the AMS JMM Special Session on “Special Functions and $q$-Series”
6. Extension for special issue on “Symmetry in orthogonal polynomials”
7. Preprints in arXiv.org
8. About the Activity Group

Calendar of Events:

March 17–21, 2016
Number Theory in honor of Krishna Alladi’s 60\textsuperscript{th} birthday
University of Florida, Gainesville, Florida, USA
http://www.qseries.org/fgarvan/alladi60.html

March 22–24, 2016
40\textsuperscript{th} South African Symposium of Numerical and Applied Mathematics (SANUM)
University of Stellenbosch, South Africa
http://sanum.github.io

May 6–7, 2016
Orthonet 2016,
Third meeting of the Spanish net of orthogonal polynomials and approximation theory,
Albarracín (Teruel), Universidad de Zaragoza, Spain
May 20, 2016
5èmes Journées Approximation 2016,
International Conference on Constructive Complex Approximation
Laboratoire Paul Painlevé, Université de Lille, France

June 5–10, 2016
XII international Conference on Approximation and Optimization
Havana University, Cuba
http://gama.uc3m.es/appopt

June 6 – June 8, 2016
Second joint Conference of the Belgian, Royal Spanish and Luxembourg Mathematical Societies
Special Session on Orthogonal Polynomials and Special Functions
Universidad de la Rioja, Logroño, Spain
http://bsl.unirioja.es

June 27 – July 1, 2016
Abecedarian of SIDE (ASIDE) 12 Summer School,
Centre de Recherches mathématiques, Université de Montréal, Montréal, Quebec, Canada
http://www.crm.umontreal.ca/ASIDE16

July 3–9, 2016
Symmetries and Integrability of Difference Equations 12,
Hôtel Le Chanteclerc, Saint Adèle, Québec, Canada
http://www.crm.umontreal.ca/2016/SIDE12/index_e.php

July 11–15, 2016
OPSF–S6 Summer School on Orthogonal Polynomials and Special Functions,
Dedicated to the memory and legacy of Frank W. J. Olver,
Norbert Wiener Center for Harmonic Analysis and Applications,
University of Maryland, College Park, Maryland, USA
http://www.norbertwiener.umd.edu/Education/OPSF6

July 20–22, 2016
The 41st International Symposium on Symbolic and Algebraic Computation (ISSAC) 2016,
Wilfrid Laurier University, Waterloo, Ontario, Canada

August 8–12, 2016
Dunkl operators, special functions and harmonic analysis,
Universität Paderborn, Paderborn, Germany
https://math.uni-paderborn.de/arbeitsgruppen/arbeitsgruppe-harmonische-analyse/dunkl2016

August 22–26, 2016
Conference on Methods of Modern Mathematical Physics,
A Young Researcher Symposium on the Occasion of the 70th Birthday of Barry Simon,
Fields Institute, Toronto, Canada
http://www.fields.utoronto.ca/programs/scientific/16-17/modern-physics
August 28–September 1, 2016
Frontiers in Mathematical Physics,
A Conference on the Occasion of Barry Simon’s 70th Birthday,
CRM, Montreal, Canada
http://www.crm.umontreal.ca/2016/Simon16/index_e.php

November 28–December 02, 2016
International Conference on Mathematical Analysis and its Applications (ICMAA 2016),
Department of Mathematics, Indian Institute of Technology Roorkee (I.I.T. Roorkee), India
http://www.iitr.ac.in/icmaa/2016/index.html

June 26–30, 2017
OPSF–S7 Summer School on Orthogonal Polynomials and Special Functions,
University of Kent, Canterbury, UK
http://www.kent.ac.uk/smsas/personal/opsfa

July 3–7, 2017
14th International Symposium on Orthogonal Polynomials, Special Functions and Applications (OPSFA14), University of Kent, Canterbury, UK
http://www.kent.ac.uk/smsas/personal/opsfa

July 10–15, 2017
Computational Methods and Function Theory,
Maria Curie–Skłodowska University, Lublin, Poland

July 10–19, 2017
Foundations of Computational Mathematics,
Barcelona, Spain
http://focm-society.org

Topic #1 _______ OP – SF Net 23.2 _______ March 15, 2016

From: Jonathan Breuer (jbreuer@math.huji.ac.il) and Jacob Christiansen (stordaljc@gmail.com)
Subject: Two linked conferences in Canada to celebrate Barry Simon’s 70th birthday

Barry Simon is one of the founding fathers of modern mathematical physics. His interests span a vast number of topics and his influence, through research papers, books and mentoring skills, is felt in many areas of mathematics. Among the fields where Barry has been a central figure over the years are those of quantum field theory, statistical mechanics, Schroedinger operators and the theory of orthogonal polynomials.

As part of Barry’s 70th birthday celebration, and in honoring his remarkable dedication to the advancement of young mathematical physicists, a Young Researchers Symposium
covering several areas of mathematical physics will take place at the Fields Institute on August, 22–26, 2016.

The symposium will have the following format: Five distinct topics will be covered in five days. The opening talks will be given by scientific leaders who will also act as moderators. The opening lectures will be followed by talks of junior researchers and round table discussion of open problems. The topic and moderators (Monday to Friday schedule) are:

- Robert Seiringer, IST Austria, Bose–Einstein condensation;
- Rupert Frank, Caltech, Many-body quantum mechanics;
- Laszlo Erdos, IST Austria, Random matrices and random Schrodinger operators;
- Jacob Christiansen, Lund, Orthogonal polynomials; and

It is expected that participants will attend the whole symposium, as well as the continuation of the event, “Frontiers in Mathematical Physics, Conference on the occasion of Barry Simon’s 70th birthday” at CRM in Montreal. This conference aims to bring together leading researchers in mathematical physics for talks and discussions, with the purpose of outlining recent advances and new directions of research.

**Topic #2  -----  OP – SF Net 23.2  -----  March 15, 2016**

From: A. Swaminathan (swamifma@iitr.ac.in)
Subject: Announcement: ICMAA 2016

This is a first announcement and call for participation in the International Conference on Mathematical Analysis and its Applications, 2016 taking place November 28, (Monday) 2016 – December 02, (Friday) 2016 at the Department of Mathematics, Indian Institute of Technology Roorkee (I.I.T. Roorkee), India.

The main objective of ICMAA 2016 is to bring mathematicians from various parts of the world working in topics related to the conference, to interact with each other and to exchange ideas. ICMAA 2016 serves as an excellent platform to inculcate research interest among young minds on recent topics of Mathematical Analysis. The SIAM Activity group on Orthogonal Polynomials and Special Functions (SIAG–OPSF) is also involved in the conference.

Topics to be covered are related to Mathematical Analysis and its applications, including but not limited to:

- Analysis of Differential Equations (including Control theory, Fractional Calculus and Stochastic PDEs);
- Complex Analysis;
- Fourier and Wavelet Analysis;
- Harmonic Analysis (including Potential theory, Harmonic Mappings and Quasi–Conformal Mappings);
- Inverse Problems and Non–linear Analysis;
- Matrix Analysis, Operator Theory and Function Spaces;
- Modern Methods of Summability and Approximation; and
- Orthogonal Polynomials and Special Functions.
SIAM will sponsor two PhD students and two early-career researchers from US-based institutions by means of travel grants.

The invited speakers are:

- Francisco Marcellán, Universidad Carlos III de Madrid and Instituto de Ciencias Matemáticas (ICMAT), Madrid, Spain;
- Walter Van Assche, Chair, SIAM-OPSF activity group, Katholieke Universiteit Leuven, Belgium;
- Stephan Ruscheweyh, University of Wurzburg, Germany;
- A. Sri Ranga, Universidade Estadual Paulista, Sao Paulo, SP, Brazil;
- Mourad E.H. Ismail, University of Central Florida, USA;
- Michael Dorff, Brigham Young University, USA;
- Ram N Mohapatra, University of Central Florida, USA;
- Stamatis Koumandos, University of Cyprus, Cyprus;
- Arpad Baricz, Babes–Bolyai University, Romania;
- T. Bulboaca, Babes Bolyai University, Romania;
- Rosihan M. Ali, Universiti Sains Malaysia, Penang, Malaysia;
- Stanislaw Kanas, University of Rzeszow, Poland;
- Zdzislaw Rychlick, University Maria Curie–Skłodowska, Lublin, Poland;
- Jacek Banasiak, University of Pretoria, South Africa;
- Yusuf Abu Muhanna, American University, Sharjah, UAE; and
- Wilson Lamb, University of Strathclyde, Glasgow, UK.

Special sessions on the following topics will be organized.

1. Orthogonal Polynomials and Special Functions
2. Geometric Function Theory
3. Analysis of PDEs

Submission of Abstracts: Delegates giving presentations/talks are requested to submit their abstract to the organizers at icmaa2016@iitr.ac.in or icmaa2k16@gmail.com in TeX/ETeX/Word format using the template given here. There will be poster presentation session as well.

Proceedings: It is planned to bring out the peer-reviewed proceedings of the conference. Participants interested in submitting their papers for the proceedings can submit as per the details given in the conference website.

Deadlines:

- Abstract submission: June 30, 2016
- Acceptance of Abstracts: July 15, 2016
- Last date for early Registration: July 31, 2016
- Last date of submission of short papers for the Proceedings: July 31, 2016

Local Organizers:

A. Swaminathan (Indian Institute of Technology, Roorkee)
N. Sukavanam (Indian Institute of Technology, Roorkee)
Uaday Singh (Indian Institute of Technology, Roorkee)
Ankik Kumar Giri (Indian Institute of Technology, Roorkee)
We are looking forward to meeting you in Roorkee in 2016.
For more information, see http://www.iitr.ac.in/icmaa/2016/index.html.

**Topic #3  -----  OP – SF Net 23.2  -----  March 15, 2016**

From: Walter Van Assche (walter.vanassche@wis.kuleuven.be)
Subject: US travel grants sponsored by SIAM for ICMAA 2016

The SIAM OPSF activity group has negotiated with SIAM, who agreed to sponsor two travel grants for PhD students and two for early–career researchers from US–based institutions to attend the ICMAA 2016 (see Topic #2 above) conference. The candidates must belong to a US–based institution, but need not be US citizens. The travel grant covers travel expenses from US to India (and back). Please contact Walter Van Assche (walter.vanassche@wis.kuleuven.be) and Swaminathan Anbhu (swamifma@iitr.ac.in) if you are interested in this travel grant.

**Topic #4  -----  OP – SF Net 23.2  -----  March 15, 2016**

From: Doron Lubinsky (lubinsky@math.gatech.edu)
Subject: Announcement: Computational Methods and Function Theory (CMFT) 2017

**Computational Methods and Function Theory (CMFT) 2017**, July 10–15, 2017
Maria Curie Skłodowska University, Lublin, Poland

The general theme of the meeting concerns various aspects of interaction of complex variables and scientific computation, including related topics from function theory, approximation theory and numerical analysis.

The CMFT meetings were previously held as follows:

- CMFT 1989, Valparaiso, Chile;
- CMFT 1994, Penang, Malaysia;
- CMFT 1997, Nicosia, Cyprus;
- CMFT 2001, Aveiro, Portugal;
- CMFT 2005, Joensuu, Finland;
- CMFT 2009, Ankara, Turkey; and
- CMFT 2013, Shantou, Guangdong, China.

An important aspect of the CMFT meetings is to promote the creation and maintenance of contacts with scientists from diverse cultures.

For more information, see http://www.cmft2017.umcs.lublin.pl/index.html.
One of the AMS special sessions during the Joint Mathematics Meeting in Seattle, Washington, USA, in early January 2016 had as subject “Special Functions and $q$-Series”. It took place during the mornings of January 8 and 9. The session was organized by Richard Askey, Mourad E.H. Ismail, and Erik Koelink. It was unofficially dedicated to the memory of Mizan Rahman, who passed away on January 5, 2015. There were 25 minute lectures by Richard Askey, F. Alberto Grunbaum, Luc Vinet, George Andrews, Neil M. Bickford, Dennis Stanton, S. Ole Warnaar, Tom H. Koornwinder, Wolter Groenevelt, Vincent X. Genest, Michael J. Schlosser, and Gaurav Bhatnagar. Many of these lectures were coauthored. See titles and abstracts at the following url. Quite remarkable was the lecture by Neil Bickford on “Special and limiting values of the Weber function and Dedekind $\eta$”. Neil is an undergraduate student at UCLA who is working with R.W. (Bill) Gosper.

On the evening of January 8, a dinner was held in memory of Mizan Rahman. In after-dinner speeches, there were many words of admiration and friendship for Mizan. Babu Rahman, a son of Mizan, was present at the dinner, and at some of the lectures. The dinner was very-well attended. A much bigger crowd than expected showed up. The restaurant had to improvise for making enough seats at tables available.

The special session partially coincided with a special session on “Recent Advances in Orthogonal Polynomials and Special Functions,” organized by Xiang–Sheng Wang. See a report of this session in OP–SF NET 23.1, Topic #8. Both sessions might have attracted a bigger audience if they had been scheduled without coinciding.

In OP–SF NET 22.5, Topic #3, there is a notice about a special issue on “Symmetry in orthogonal polynomials”, in the journal “Symmetry”, of which I am guest editor. The announcement is that the submission date is now extended to August 31, 2016.

The following preprints related to the fields of orthogonal polynomials and special functions were posted or cross–listed to one of the subcategories of arXiv.org during January and February 2016.
Orthogonal polynomials attached to coherent states for the symmetric Poschl–Teller oscillator
Khalid Ahbli, Patrick Kayupe Kikodio, Zouhair Mouayn

On infinite series concerning zeros of Bessel functions of the first kind
Andrea Giusti, Francesco Mainardi

Approximation by generalized Szasz operators involving Sheffer polynomials
M. Mursaleen, Khursheed J. Ansari

Asymptotics of Prolate Spheroidal Wave Functions
T. M. Dunster

A note on the connection problem of some special Painlevé V functions
Wen-Gao Long, Zhao-Yun Zeng, Jian-Rong Zhou

Jacobi weights, fractional integration, and sharp Ulyanov inequalities
Polina Glazyrina, Sergey Tikhonov

Partition zeta functions
Robert Schneider

Riemann Hypothesis and Random Walks: the Zeta case
André LeClair

The part–frequency matrices of a partition
William J. Keith

Odd zeta motive and linear forms in odd zeta values
Clément Dupont

Generalized Huygens types inequalities for Bessel and modified Bessel functions
Khaled Mehrez

About 30 Years of Integrable Chiral Potts Model, Quantum Groups at Roots of Unity and Cyclic Hypergeometric Functions
Helen Au–Yang, Jacques H. H. Perk

Calculation of local formal Mellin transforms
Adam Graham-Squire

http://arxiv.org/abs/1601.01525
Riemann–Hilbert correspondence for unit $F$–crystals on embeddable algebraic varieties
Sachio Ohkawa

http://arxiv.org/abs/1601.01568
Approximation of Lyapunov Functions from Noisy Data
Peter Giesl, Boumediene Hamzi, Martin Rasmussen, Kevin N. Webster

http://arxiv.org/abs/1601.01603
Two Lax systems for the Painlevé II equation, and two related kernels in random matrix theory
Karl Liechty, Dong Wang

http://arxiv.org/abs/1601.01650
Asymptotic behavior of varying discrete Jacobi–Sobolev orthogonal polynomials
Juan F. Mañas–Mañas, Francisco Marcellán, Juan J. Moreno–Balcázar

http://arxiv.org/abs/1601.01673
Bernoulli identities, zeta relations, determinant expressions, Mellin transforms, and representation of the Hurwitz numbers
Mark W. Coffey

http://arxiv.org/abs/1601.01779
The Riemann zeros as spectrum and the Riemann hypothesis
Germán Sierra

http://arxiv.org/abs/1601.01841
Expected number of real roots of random trigonometric polynomials
Hendrik Flasche

http://arxiv.org/abs/1601.01998
Radii of starlikeness and convexity of a cross–product of Bessel functions
Árpád Baricz, Nihat Yağmur

http://arxiv.org/abs/1601.02074
On the Very–well–poised Bilateral Basic Hypergeometric $\psi_\alpha$ Series
Runping Ye, Qing Zou

http://arxiv.org/abs/1601.02192
Some results associated with Bernoulli and Euler numbers with applications
C.–P. Chen, R.B. Paris

http://arxiv.org/abs/1601.02263
The asymptotic expansion of Kummer functions for large values of the $\alpha$–parameter, and remarks on a paper by Olver
Hans Volkmer

http://arxiv.org/abs/1601.02517
Painlevé equations, topological type property and reconstruction by the topological recursion
Convergence of Magnus integral addition theorems for confluent hypergeometric functions
Howard S. Cohl, Jessie Hirtenstein, Hans Volkmer

On the reduction of generalized polylogarithms to $\text{Li}_n$ and $\text{Li}_{2,2}$ and on the evaluation thereof
Hjalte Frellesvig, Damiano Tommasini, Christopher Wever

Exact relaxation dynamics of the ASEP with Langmuir kinetics on a ring
Jun Sato, Katsuhiro Nishinari

Extreme residues of Dedekind zeta functions
Peter J. Cho, Henry H. Kim

Convergence Rate for the Ordered Upwind Method
Alex Shum, Kirsten Morris, Amir Khajepour

Optimal Gabor frame bounds for separable lattices and estimates for Jacobi theta functions
Markus Faulhuber, Stefan Steinerberger

The Bergman kernel: explicit formulas, deflation, Lu Qi-Keng problem and Jacobi Polynomials
Tomasz Beberok

Height growth of solutions and a discrete Painlevé equation
A Al-Ghassani, R Halburd

The Riemann Hypothesis For Period Polynomials Of Modular Forms
Seokho Jin, Wenjun Ma, Ken Ono, Kannan Soundararajan

Pick Functions Related to the Multiple Gamma Functions of order $n$
Sourav Das, A. Swaminathan

Bounds for the asymptotic order parameter of the stochastic Kuramoto model
István Mező, Árpád Baricz

Equivalent of the elliptic function solutions of nonlinear differential equations
Orthogonal polynomials on the circle for the weight $w$ satisfying conditions: $w, 1/w \in BMO(𝕋)$
S. Denisov, K. Rush

On Spectrum Generating Algebra of the Heun Operator
Priyasri Kar, Ritesh K. Singh, Ananda Dasgupta, Prasanta K. Panigrahi

On the mixed joint functional independence of a class of zeta–functions
Roma Kacinskaite, Kohji Matsumoto

Telescopin method and congruences for double sums
Yan–Ping Mu, Zhi–Wei Sun

The Heun functions and their applications in astrophysics
Denitsa Staicova, Plamen Fiziev

A unified approach to the Painlevé Transcendents
Norbert Steinmetz

An old new class of meromorphic functions
Norbert Steinmetz

Spherical rectangles
Alexandre Eremenko, Andrei Gabrielov

Reductions of Gauss–Codazzi equations
Robert Conte, A. Michel Grundland

General construction of Reproducing Kernels on a quaternionic Hilbert space
K. Thirulogasanthar, S. Twareque Ali

Discriminants of Chebyshev–like polynomials and their generating functions
Khang Tran

Discriminants of Polynomials Related to Chebyshev Polynomials: The ‘Mutt and Jeff’ Syndrome
Khang Tran
On Second Solutions to Second–Order Difference Equations
William C. Parke, Leonard C. Maximon

A functional relation for L–functions of graphs equivalent to the Riemann Hypothesis for Dirichlet L–functions
Fabien Friedli

A Zeta Function for Multicomplex Algebra
A. Sebbar, D.C. Struppa, A. Vajiac, M.B. Vajiac

Bounds on the Lambert function and their application to the outage analysis of user co-operation
Ioannis Chatzigeorgiou

Smooth Kernel Estimation of a Circular Density Function: A Connection to Orthogonal Polynomials on the Unit Circle
Yogendra P. Chaubey

The mother body phase transition in the normal matrix model
Pavel Bleher, Guilherme Silva

Hypergeometric $\tau$ functions of the $q$–Painlevé Systems of types $A_4^{(1)}$ and $(A_1 + A_1)^{(1)}$
Nobutaka Nakazono

Bessel functions and local converse conjecture of Jacquet
Jingsong Chai

Sign regularity of Maclaurin coefficients of functions in the Laguerre–Pólya class
Dimitar K. Dimitrov, Willian D. Oliveira

Pell's equation and series expansions for irrational numbers
Chuanan Wei

Lattice Green Functions: the d–dimensional face–centred cubic lattice, d=8, 9, 10, 11, 12
S. Hassani, C. Koutschan, J–M. Maillard, N. Zenine

Local universality for real roots of random trigonometric polynomials
Alexander Iksanov, Zakhar Kabluchko

Lattice Green Functions: the d–dimensional face–centred cubic lattice, d=8, 9, 10, 11, 12
S. Hassani, C. Koutschan, J–M. Maillard, N. Zenine

Local universality for real roots of random trigonometric polynomials
Alexander Iksanov, Zakhar Kabluchko
Transformation properties for Dyson’s rank function
Frank Garvan

http://arxiv.org/abs/1601.05918
Laurent series expansions of multiple zeta–functions of Euler–Zagier type at integer points
Kohji Matsumoto, Tomokazu Onozuka, Isao Wakabayashi

http://arxiv.org/abs/1601.06122
On inversion and connection coefficients for basic hypergeometric polynomials
Hamza Chaggara, Mohamed Mabrouk

http://arxiv.org/abs/1601.06138
The energy function with respect to the zeros of the exceptional Hermite polynomials
Á. P. Horváth

http://arxiv.org/abs/1601.06179
Commutation relations and discrete Garnier systems
Christopher M. Ormerod, Eric M. Rains

http://arxiv.org/abs/1601.06186
Branching Rules for Symmetric Hypergeometric Polynomials
J.F. van Diejen, E. Emsiz

http://arxiv.org/abs/1601.06277
Exact solution of Chern–Simons–matter matrix models with characteristic/orthogonal polynomials
Miguel Tierz

http://arxiv.org/abs/1601.06378
Ternary quadratic forms and linear combination of three triangular numbers
Zhi–Hong Sun

http://arxiv.org/abs/1601.06487
Certain unified integral formulas involving the generalized modified $k$–bessel function of first kind
K.S. Nisar, S.R. Mondal

http://arxiv.org/abs/1601.06536
Discrete analogues of Macdonald–Mehta integrals
Richard P. Brent, Christian Krattenthaler, S. Ole Warnaar

http://arxiv.org/abs/1601.06765
On the roots of truncated hypergeometric series over prime fields
Amit Ghosh, Kenneth Ward

http://arxiv.org/abs/1601.06879
Certain weighted averages of generalized Ramanujan sums
K Vishnu Namboothiri

http://arxiv.org/abs/1601.06898
Orthogonal polynomials associated with complementary chain sequences
Kiran Kumar Behera, A. Sriranga, A. Swaminathan
Perturbations of the Spence–Abel equation and deformations of the dilogarithm function
Tobias Hartnick, Andreas Ott

On the subclasses associated with the Bessel–Struve kernel functions
Saiful R. Mondal, Al Dhuain Mohammed

Multivariate Orthogonal Polynomials and Modified Moment Functionals
Antonia M. Delgado, Lidia Fernández, Teresa E. Pérez, Miguel A. Piñar

Matrix biorthogonal polynomials in the unit circle: Riemann–Hilbert problem and matrix
discrete Painlevé II system
Giovanni A. Cassatella-Contra, Manuel Mañas

One-step recurrences for stationary random fields on the sphere
Rick K. Beatson, Wolfgang zu Castell

An elliptic extension of the general product formula for augmented rook boards
Michael J. Schlosser, Meesue Yoo

One some differential subordination involving the Bessel–Struve kernel function
Saiful R Mondal, Mohamed Al Dhuiain

On the geometric properties of the Bessel–Struve kernel function
Saiful R Mondal

The orthogonality of Al–Salam–Carlitz polynomials for complex parameters
H. S. Cohl, R. S. Costas-Santos, W. Xu

Bounds for Extreme Zeros of Quasi–orthogonal Ultraspherical Polynomials
Kathy Driver, Martin E. Muldoon

The Stokes phenomenon and the Lerch zeta function
R B Paris

Composition formulas of Bessel–Struve kernel function
K.S Nisar, S.R. Mondal. P. Agarwal

On Certain Generalizations of Rogers–Ramanujan Type Identities
Ahmad El-Guindy, Mourad E.H. Ismail

Universal formula for Hilbert series of minimal nilpotent orbits
A. Matsuo, A.P. Veselov

On (conditional) positive semidefiniteness in a matrix–valued context
Fritz Gesztesy, Michael Pang

New conditionally exactly solvable potentials of exponential type
A. Lopez–Ortega

Statistical properties of eigenvalues of Laplace–Beltrami operators
Tiefeng Jiang, Ke Wang

Holonomic Tools for Basic Hypergeometric Functions
Christoph Koutschan, Peter Paule

HYPERgeometric functions DIfferential REduction: Mathematica–based packages for the
differential reduction of generalized hypergeometric functions: Fc hypergeometric function
of three variables
V. Bytev, B. Kniehl

On the asymptotic behavior of the maximum absolute value of generalized Gegenbauer
polynomials
Roman Veprintsev

Lambert series and $q$–functions near $q = 1$
Shubho Banerjee, Blake Wilkerson

Analytic Continuation of Hypergeometric Functions in the Resonant Case
Emanuel Scheidegger

Some unified integrals associated with Bessel–Struve kernel function
K. S. Nisar, P. Agarwal, S. Jain

http://arxiv.org/abs/1602.01498
Variational methods for fractional $q$–Sturm–Liouville Problems
Zeinab S.I. Mansour

On Fractional $q$–Sturm–Liouville problems
Zeinab S.I. Mansour
Pfaffian equations and contiguity relations of the hypergeometric function of type \((k + 1, k + n + 2)\) and their applications
Yoshiaki Goto, Keiji Matsumoto

\texttt{http://arxiv.org/abs/1602.01706}

\(L\)-series associated to symmetric functions mod \(N\) with applications related to \(\zeta(3), \zeta(5)\)
David Spring

\texttt{http://arxiv.org/abs/1602.01908}

\(\text{ASEP}(q, j)\) converges to the KPZ equation
Ivan Corwin, Hao Shen, Li–Cheng Tsai

\texttt{http://arxiv.org/abs/1602.02326}

Epstein zeta–functions, subconvexity, and the purity conjecture
Valentin Blomer

\texttt{http://arxiv.org/abs/1602.02618}

On the use of Hahn’s asymptotic formula and stabilized recurrence for a fast, simple, and stable Chebyshev–Jacobi transform
Richard Mikael Slevinsky

\texttt{http://arxiv.org/abs/1602.02632}

On \(p\)-adic approximation of sums of binomial coefficients
Rustem R. Aidagulov, Max A. Alekseyev

\texttt{http://arxiv.org/abs/1602.02705}

Sur le \(p\)-rang du groupe des classes de \(\mathbb{Q}(N^{1/p})\)
Emmanuel Lecouturier

\texttt{http://arxiv.org/abs/1602.02724}

Hypergeometric orthogonal polynomials with respect to Newtonian bases
Luc Vinet, Alexei Zhedanov

\texttt{http://arxiv.org/abs/1602.02801}

The algebra \(\mathbb{C} \langle X \rangle \sqcup \mathbb{C} \langle\langle x_0 \rangle\rangle \sqcup \mathbb{C} \langle\langle x_1 \rangle\rangle\) and polylogarithms
Ngoc Hoang, Gérard Duchamp, Hoang Ngoc Minh

\texttt{http://arxiv.org/abs/1602.03070}

Legendre Functions of Fractional Degree: Transformations and Evaluations
Robert S. Maier

\texttt{http://arxiv.org/abs/1602.03198}

Harmonic–Number Summation Identities, Symmetric Functions, and Multiple Zeta Values
Michael E. Hoffman

\texttt{http://arxiv.org/abs/1602.03366}

Hermite polynomials, linear flows on the torus, and an uncertainty principle for roots
Diogo Oliveira e Silva, Stefan Steinerberger

\texttt{http://arxiv.org/abs/1602.03387}
Note on the Stieltjes constants: series with Stirling numbers of the first kind
Mark W. Coffey

http://arxiv.org/abs/1602.03486
On \( \zeta(2n) \). Even simpler
Samuel G. Moreno, Esther M. García-Caballero

Generalized beta–transformations and the entropy of unimodal maps
Daniel J. Thompson

Derivation of the properties such as the real part of zeros of the zeta function possibly available in physics
Kimichika Fukushima

Dynamics in the Szegő class and polynomial asymptotics
Jacob S. Christiansen

http://arxiv.org/abs/1602.04096
A note on Hermite polynomials
Taekyun Kim, Dae San Kim

The Method of almost convergence with operator of the form fractional order and applications
Murat Kirisci, Ugur Kadak

Identities involving Bessel polynomials arising from linear differential equations
Taekyun Kim, Dae san Kim

On Binomial Identities in Arbitrary Bases
Lin Jiu, Christophe Vignat

Matrix approach to hypercomplex Appell polynomials
Lidia Aceto, Helmuth Robert Malonek, Graça Tomaz

Multiple Solutions of Riemann–Type of Functional Equations
T. Cao–Huu, D. Ghisa, F. A. Muscutar

Zeros of derivatives of Bessel and Struve functions
Árpád Baricz, Chrysi G. Kokologiannaki, Tibor K. Pogány

Automorphisms of algebras and Bochner's property for discrete vector orthogonal polynomials
Emil Horozov

Log–behavior of two sequences related to the elliptic integrals
Brian Y. Sun, James J.Y. Zhao

A higher order Painlevé system in two variables and extensions of the Appell hypergeometric functions $F_1$, $F_2$ and $F_3$
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http://arxiv.org/abs/1602.04664
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Exceptional solutions to the Painlevé VI equation
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http://arxiv.org/abs/1602.04840
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http://arxiv.org/abs/1602.08169
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http://arxiv.org/abs/1602.08937
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Elliptic hypergeometric summations by Taylor series expansion and interpolation  
Michael J. Schlosser, Meesue Yoo
From: OP–SF Net Editors  
Subject: About the Activity Group

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http://math.nist.gov/opsf

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

The Activity Group sponsors OP–SF NET, an electronic newsletter, and SIAM–OPSF (OP–SF Talk), a listserv, as a free public service; membership in SIAM is not required. OP–SF NET is transmitted periodically through a post to OP–SF Talk. The OP–SF Net Editors are Howard Cohl (howard.cohl@nist.gov) and Kerstin Jordaan (kerstin.jordaan@up.ac.za).

Back issues of OP–SF NET can be obtained at the websites:  
https://staff.fnwi.uva.nl/t.h.koornwinder/opsfnet  
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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 e-mail to siam–opsf@siam.org. The moderators are Bonita Saunders (bonita.saunders@nist.gov) and Diego Dominici (dominicd@newpaltz.edu).

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3600 University City Science Center  
Philadelphia, PA 19104–2688 USA  
phone: +1–215–382–9800  
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Contributions to OP–SF NET 23.3 should be sent by May 1, 2016.

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The elected Officers of the Activity Group (2014–2016) are:
    Walter Van Assche, Chair
    Jeff Geronimo, Vice Chair
    Diego Dominici, Program Director
    Yuan Xu, Secretary

The appointed officers are:
    Howard Cohl, OP–SF NET co–editor
    Kerstin Jordaan, OP–SF NET co–editor
    Diego Dominici, OP–SF Talk moderator
    Bonita Saunders, Webmaster and OP–SF Talk moderator

Thought of the month

“...not everything that counts can be counted, and not everything that can be counted
counts.”

William Bruce Cameron, Informal Sociology: A Casual Introduction to Sociological Thinking,
1963.