

Curriculum Vitae

Personal Information

Name: Daniel Duviol Tcheutia
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Email: tcheutia@mathematik.uni-kassel.de
Nationality: Cameroonian
Born in august 23, 1983
Gender: Male
Married with 4 children



Current Position

- Post-Doctoral position at the Institute of Mathematics, University of Kassel, Germany
- Ph.D. in Mathematics

Research Area: Orthogonal Polynomials, Special Functions, Computer Algebra, Epidemiology
Objective: Researcher in Mathematics

Professional Experience

July 2016 – Present: Post-Doctoral position at the Institute of Mathematics, University of Kassel, Germany
September 19 – October 7, 2016: Lecturer of Computational Mathematics with Sage, African Institute for Mathematical Sciences (AIMS), Cameroon
September 2014 – 2016: Teaching Assistant in the African Institute for Mathematical Sciences (AIMS)-Cameroon (Master Program)
April 2008 – September 2014: Assistant Lecturer of Analysis, Algebra, Interpolation and Approximation, Orthogonal Polynomials and Special Functions in the Mathematics Department of the Higher Teachers' Training College of Yaoundé, levels II, IV and V
April 2008 – October 2012: Government Secondary School of Babou (Bangangté) as Mathematics lecturer
September 2012 – 2016: Government Secondary School of Cité Verte (Yaoundé) as Mathematics lecturer
October 2008 – June 2011: Higher Institute of Technology and Commercial Studies of Bangangte as Mathematics lecturer

Education / Degrees/ Diplomas

2009 - 2014: Ph.D. in Mathematics, defended on July 14, 2014 at the University of Kassel in Germany
Thesis title: On Connection, Linearization and Duplication Coefficients of Classical Orthogonal Polynomials
Supervisors: Prof. Dr. Wolfram Koepf (University of Kassel, Germany) and Prof. Dr. Foupouagnigni Mama (University of Yaoundé I, Cameroon)
2006 - 2008: Master with thesis in Mathematics (DEA) at the University of Yaoundé I
Thesis title: Asymptotic behaviour of recurrence coefficients of orthogonal polynomials
2005 - 2007: Higher Teachers' Training College of Yaoundé Diploma
2004 - 2006: Master (without thesis) in Mathematics at the University of Yaoundé I
2001 - 2004: Bachelor Degree in Mathematics at the University of Dschang
2003 - 2004: Academic Excellence Diploma of the University of Dschang
2000 - 2001: "BACCALAUREAT C" at the Government High School of Batcham

Languages

French (Excellent) English (Professional) German (Basic)

Software and other computer knowledge

Good skill: in computer algebra software Maple, Mathematica, Sage, Maxima; in programming with Python; in editing software Latex, and in Microsoft Office Professional

Publications in International Refereed Journals

1. M. Foupouagnigni, W. Koepf, **D. D. Tcheutia** and P. Njionou Sadjang, Representations of q -orthogonal polynomials, *Journal of Symbolic Computation* 47 (2012) 1347-1371.
2. M. Foupouagnigni, W. Koepf and **D. D. Tcheutia**, Connection and Linearization Coefficients of the Askey-Wilson Polynomials, *Journal of Symbolic Computation* 53 (2013) 96-118.
3. **D. D. Tcheutia**, M. Foupouagnigni, W. Koepf and P. Njionou Sadjang, Coefficients of multiplication formulas for classical orthogonal polynomials, *Ramanujan Journal* 39: 497-531, 2016, DOI: 10.1007/s11139-015-9682-z
4. I. Area, J. Losada, Faical Ndairou, J.J. Nieto and **D.D. Tcheutia**, Mathematical modeling of 2014 Ebola outbreak, *Mathematical Methods in the Applied Sciences*, DOI: 10.1002/mma.3794, 2015
5. **D. D. Tcheutia**, P. Njionou Sadjang, W. Koepf and M. Foupouagnigni, Divided-difference equation, inversion, connection, multiplication and linearization formulae for the continuous Hahn and the Meixner-Pollaczek polynomials, *Ramanujan Journal* 2017, DOI: 10.1007/s11139-016-9870-5
6. **D. D. Tcheutia**, Y. Guemo Tefo, M. Foupouagnigni, E. Godoy and I. Area, Linear partial divided difference equation satisfied by multivariate orthogonal polynomials on quadratic lattices, *Mathematical Modeling of Natural Phenomena*, 12 3 (2017) 14-43
7. **D. D. Tcheutia**, M. Foupouagnigni, I. Area, E. Godoy and Y. Guemo Tefo, Divided-difference equation and three-term recurrence relations of some bivariate q -orthogonal polynomials, *Journal of Difference Equations and Applications*, DOI: 10.1080/10236198.2017.1382485
8. **D. D. Tcheutia**, Nonnegative linearization coefficients of the generalized Bessel polynomials, submitted
9. **D. D. Tcheutia**, A. S. Jooste, W. Koepf, Mixed recurrence relations and interlacing properties for zeros of classical q -orthogonal polynomials, submitted
10. **D. D. Tcheutia**, A. S. Jooste, W. Koepf, Stieltjes interlacing of zeros of classical orthogonal sequences, submitted
11. **D. D. Tcheutia**, A. S. Jooste, W. Koepf, Quasi-orthogonality of orthogonal polynomials of a q -linear, quadratic and q -quadratic lattice, in preparation

Workshops, Conferences and Schools

- 1- First Humboldt Kolleg Cameroon on «E-learning, Research-Development in Cameroon: Challenge and Perspectives», July 29 - 30, 2008, Yaoundé, Cameroon
- 2- COPROMAPH 5 school on «Contemporary Problems of Mathematical Physics», October 24 – 30, 2009, Cotonou, Benin
- 3- COPROMAPH 6 workshop on «Contemporary Problems of Mathematical Physics», October 31 – November 4, 2009, Cotonou, Benin
- 4- Training Workshop on Computer Algebra, March 23-24, 2010, University of Yaoundé I, Cameroon
- 5- Cameroon Mathematical Forum, March 19 – 21, 2012, Higher Training College Yaoundé, Cameroon
- 6- Third e-School on working with Moodle, course development and structuring and the opportunities of e-learning, from 30th April to 4th May 2012, Yaoundé, Cameroon
- 7- 22nd Conference on Applications of Computer Algebra (ACA), August 1st – 4th, 2016, Kassel, Germany
- 8- Computeralgebra Tagung, May 04 – 06, 2017, Kassel, Germany

Scientific Visits

1. June 01, 2012 -- August 31, 2012: Visit to the Mathematics Department of the University of Kassel, Germany sponsored by the DAAD Stibet fellowship
2. June 06, 2013 -- August 28, 2013: Visit to the Mathematics Department of the University of Kassel, Germany sponsored by the Alexander von Humboldt Foundation
3. June 16, 2014 -- July 18, 2014: Visit to the Mathematics Department of the University of Kassel, Germany with the defense of my Ph.D. thesis on July 14, 2014, sponsored by the Alexander von Humboldt Foundation

Awards

2009: African Mathematics Millennium Science Initiative (AMMSI) Scholarship
2012: DAAD Stibet Fellowship (from June 01, 2012 to August 31, 2012) within the Mathematics Department of the University of Kassel, Germany. Host: Prof. Dr. Wolfram Koepf
2014: AIMS-Cameroon 2014-2015 Tutor Fellowship
2015: AIMS-Cameroon 2015-2016 Tutor Fellowship
2016: Post-doctoral fellowship of the Institute of Mathematics, University of Kassel

Collaborators

- 1- **Prof. Dr. Mama Foupouagnigni**, University of Yaounde I, Academic Director, AIMS-Cameroon, P. O. Box 608 Limbe, Cameroon, Email: mfoupouagnigni@aims-cameroon.org, Tel: (+237) 670 69 94 60 / 699 71 17 23
- 2- **Prof. Dr. Wolfram Koepf**, Fachbereich 10 Mathematik und Naturwissenschaften, Universität Kassel, Heinrich-Plett-Str. 40, 34132 Kassel, Germany, Tel: +49 (0)561/804-4207, Email: koepf@mathematik.uni-kassel.de, <http://www.mathematik.uni-kassel.de/~koepf>
- 3- **Prof. Iván Area Carracedo**, Dpto. de Matemática Aplicada II, E.E. de Telecomunicación, Universidade de Vigo, 36310-Vigo (Spain), Email: area@uvigo.es
- 4- **Dr. Patrick Njionou Sadjang**, Cameroon, Email: pnjionou@yahoo.fr, Tel: (+237) 677 03 47 87 / 699 61 34 40

September 20, 2017
Daniel Duviol Tcheutia