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Short Curriculum Vitae

I was born in 1953 in Stuttgart and received my Abitur in 1972. After four semesters of studies in Mathematics and Physics at the University of Stuttgart I moved to Berlin and finished my studies in 1981 as Diplom-Mathematiker.

As scientific assistant I finished my PhD in 1984 and my habilitation in 1990, both in geometric function theory, at the Free University of Berlin.

After my habilitation I forced the use of mathematical software in the class-room and used DERIVE in my lectures as didactical tool. By a scholarship of Alexander von Humboldt Foundation I could promote this topic jointly with American colleagues. As a result three text-books appeared which used DERIVE as didactical tool. The last book was designed for the use at high-school level.

Beginning in 1993 I worked at the Konrad-Zuse-Zentrum für Informationstechnik in the Symbolik group, developing and implementing computer algebra algorithms. In cooperation with several diploma and PhD students I developed more than a dozen packages in the systems Mathematica, Maple and REDUCE. Important research topics include summation algorithms and algorithms for the algebraic work with orthogonal polynomials.

Between 1995 and 1998 I was the Editor of the Newsletter of the SIAM Activity Group on Orthogonal Polynomials and Special Functions. My research in this area resulted 1998 in the monograph Hypergeometric Summation. An Algorithmic Approach to Summation and Special Function Identities. Jointly with Dick Askey and Tom Koornwinder I edited a Special Issue of the Journal of Symbolic Computation on Orthogonal Polynomials and Computer Algebra in 1999. My textbook Computeralgebra. Eine algorithmisch orientierte Einführung appeared 2006 with Springer, and in 2014 a second edition of my monograph Hypergeometric Summation appeared in the Springer series Universitext.

Since 1996 I am an elected member of the Steering Committee of Fachgruppe Computeralgebra. Between 1996 and 2002 I was active as officer for teaching and didactics. In this function I organized four workshops on *Computeralgebra in Lehre, Ausbildung und Weiterbildung*, which took place between 1998 and 2004. Between 2002 and 2011 I was chairing Fachgruppe Computeralgebra. In this function I organized four scientific meetings on computer algebra that took place between 2003 and 2012 in Kassel. I was the General Chair of the international symposium <u>ISSAC 2010</u>, and furthernore since 2010 I am PC Chair and co-editor of the Proceedings of the international <u>CASC</u> meetings. In this function six proceedings appeared in the Springer series *Lecture Notes of Computer Science*.

In November 2007 I was nominated by the Executive Committee of DMV as editor of the internet portal www.mathematik.de. Since 2009 I am an elected member of the Executive Committee of DMV.

I am a member of the Editorial Board of the following scientific journals: *Journal of Symbolic Computation*, Complex *Variables and Elliptic Equations* as well as *Integral Transforms and Special Functions*.

Between 1997 and 2000 I was *Professor für angewandte Mathematik* at the *Hochschule für Technik, Wirtschaft und Kultur Leipzig*. Since 2000 I am *Professor für Computational Mathematics* at the *Universität Kassel*.

12 PhD candidates (http://genealogy.math.ndsu.nodak.edu/id.php?id=30723) finished their PhD under my supervision. Besides many other international guests I hosted four scholars of Alexander von Humboldt Foundation. My humboldtian Prof. Dr. Mama Foupouagnigni was the first African Mathematician who finished his habilitation in Germany (Kassel), and he received the *Humboldt Alumni* Award for Innovative Networking Initiatives in 2012. An AvH alumni program financed an institutional partnership between Kassel and Yaounde which resulted in five finished PhD projects. In the mean time Prof. Dr. Foupouagnigni is the Director of AIMS-Cameroon.

My 10 most important publications

Koepf, W.: Power series in computer algebra. Journal of Symbolic Computation **13**, 1992, 581-603

Koepf, W., Schmersau, D.: Bounded nonvanishing functions and Bateman functions. Complex Variables **25**, 1994, 237-259

Koepf, W.: Algorithms for *m*-fold hypergeometric summation. Journal of Symbolic Computation **20**, 1995, 399-417

Koepf, W.: Identities for families of orthogonal polynomials and special functions. Integral Transforms and Special Functions **5**, 1997, 69-102

Koepf, W., Schmersau, D.: Representations of orthogonal polynomials. J. Comput. Appl. Math. **90**, 1998, 57-94

Böing, H., Koepf, W.: Algorithms for q-hypergeometric summation in computer algebra. Journal of Symbolic Computation **28**, 1999, 777-799

Debeerst, R., Hoeij, M. van, Koepf, W.: Solving differential equations in terms of Bessel functions. Proceedings of ISSAC'08, ACM, New York, 2008, 39-46

Nana Chiadjeu, E., Koepf, W.: Algorithmic approach to formal Fourier series. Mathematics in Computer Science, 2014

Njionou Sadjang, P., Foupouagnigni, M., Koepf, W.: On moments of classical orthogonal polynomials. J. Math. Anal. Appl. **424**, 2015, 122-151

Tcheutia, D., Foupouagnigni, M., Koepf, W., Njionou Sadjang, P.: Coefficients of multiplication formulas for classical orthogonal polynomials. Ramanujan Journal, 2015

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