Complete list of Publications of Rolf Sören Kraußhar by February 14, 2023

1.1. Publications international journals with peer-review listed on the Citation Index

a) published / in press:

1. F. Colombo, R.S. Kraußhar and I. Sabadini: Slice-monogenic theta series, to appear in *Indiana University Journal of Mathematics,* in press (2022), 28 pages, Preprint available on: https://www.mate.polimi.it/biblioteca/add/quaderni/ qdd234.pdf

2. R.S. Kraußhar and A. Perotti: Eigenvalue problems for slice functions, *Annali di Matematica Pura ed Applicata* **201** (2022), 2519–2548.

3. R.S. Kraußhar: Recent and new results on octonionic Bergman and Szegö kernels, to appear in *Mathematical Methods in the Applied Sciences,* in press, accepted in 2021, 14 pages. https://doi.org/10.1002/mma.7316

4. D. Constales and R.S. Kraußhar: Octonionic Kerzman-Stein operators, *Complex Analysis and Operator Theory* **15** No.6 Paper No. 104 (2021), 23 pages.

5. R.S. Kraußhar: Function Theories in Cayley-Dickson algebras and Number Theory, *Milan Journal of Mathematics* **89** No.1 (2021), 26 pages.

6. F. Colombo, R.S. Kraußhar and I. Sabadini: Symmetries of slice monogenic functions, *Journal of Non-Commutative Geometry* **14** No. 3 (2020), 1075-1106.

7. R.S. Kraußhar: Differential Topological Aspects in Octonionic Monogenic Function Theory, *Advances in Applied Clifford* Algebras **30** No. 4 Paper No. 51 (2020), 25 pages.

8. R.S. Kraußhar. Conformal Mappings Revisited in the Octonions and Clifford Algebras in Arbitrary Dimension, *Advances in Applied Clifford Algebras* **30** No. 3 Paper No. 36 (2020), 14 pages.

9. K. Diki, R.S. Kraußhar and I. Sabadini: On the Bargmann-Fock-Fueter and Bergman Fueter integral transforms, *Journal of Mathematical Physics* **60** No. 8:083506 (2019), 29 pages.

10. M. Ferreira, R.S. Kraußhar, M.M. Rodrigues and N. Vieira: A higher dimensional fractional Borel-Pompeiu formula and a related hypercomplex fractional operator calculus, *Mathematical Methods in the Applied Sciences* **42** No. 10 (2019), 3633-3653.

11. R. De Almeida and R.S. Kraußhar: Wiman-Valiron theory for higher dimensional polynomial Cauchy-Riemann equations, *Mathematical Methods in the Applied Sciences* **41** No. 1 (2018), 15-27.

12. R.S. Kraußhar, M. Rodrigues and N. Vieira: Maximum principle and parabolic inequalities for the regularized Schrödinger operator, *Results Math.* **69** No.1-2 (2016), 49-68.

13. R.S. Kraußhar, M. Rodrigues and N. Vieira: Time-dependent operators on some non-orientable projective orbifolds, *Mathematical Methods in the Applied Sciences* **38** No. 18 (2016), 5305-5319

14. R. De Almeida and R.S. Kraußhar*:* Generalized growth orders for polymonogenic functions and related inequalities, *Complex Analysis an Operator Theory* **10** No.2 (2016), 233-250.

15. R.S. Kraußhar: Dirac and Laplace operators on some non-orientable conformally flat manifolds, *Journal of Mathematical Analysis and its Applications* **427** No. 2 (2015), 669-685.

16. R. De Almeida and R.S. Kraußhar: Basics on growth orders of polymonogenic functions, *Complex Variables and Elliptic Equations* **60** No. 11, (2015), 1480-1504.

17. R.S. Kraußhar and J. Tolksdorf: Applications of hypercomplex automorphic forms in Yang-Mills gauge theories, *Complex Analysis and Operator theory* **9** (2015), 431-444.

18. D. Grob and R.S. Kraußhar: A Selberg trace formula for hypercomplex analytic cusp forms, *Journal of Number Theory* **148** (2015), 398-428.

19. R.S. Kraußhar, M. Rodrigues and N. Vieira: Hodge type decomposition for time dependent first order parabolic operators with non-constant coefficients: the variable exponent case, *Milan Journal of Mathematics* **82** (2014), 407-422.

20. R.S. Kraußhar, M.M. Rodrigues and N. Vieira: Hodge decomposition for some first order time dependent parabolic operators with non-constant coefficients, *Annali di Matematica Pura ed Applicata* **193** (2014), 1807-1821.

21. R.S. Kraußhar: Applications of the quaternionic calculus to the convective stationary MHD equations in R^n, *Advances in Applied Clifford Algebras* **24** No. 4 (2014), 1047-1058.

22. R.S. Kraußhar, M.M. Rodrigues and N. Vieira: The Schrödinger semigroup on some flat and non flat manifolds, *Complex Analysis and Operator Theory* **8** No. 2 (2014), 461-484.

23. R.S. Kraußhar: The Klein-Gordon operator on Möbius strip domains and the Klein bottle in R^n, *Mathematical Physics, Analysis and Geometry* **16** (2013), 363-379.

24. D. Constales, R. De Almeida and R.S. Kraußhar: The Fourier expansion of the hypermonogenic generalized trigonometric and elliptic functions, *J. Number Theory* **133** (2013), 1991-2004.

25. D. Constales, D. Grob and R.S. Kraußhar: A new class of hypercomplex analytic cusp forms, *Transactions of the AMS* **365** No. 2 (2013), 811-835.

26. D. Constales, D. Grob and R.S. Kraußhar: On Dirichlet problems of polynomial Dirac equations with boundary conditions, *Results in Math.* **64** (2013), 193-213.

27. D. Constales, R.S. Kraußhar and J. Ryan: Hyperbolic Dirac and Laplace Operators on examples of Hyperbolic spin manifolds, *Houston J. Math,* **38** No. 2 (2012), 405-420.

28. R.S. Kraußhar. The Helmholtz operator on higher dimensional Möbius strips, *Advances in Applied Clifford Algebras* **22** No. 3 (2012), 745-755.

29. D. Grob and R.S. Kraußhar: The Szegö metric associated to Hardy spaces of Clifford algebra valued functions and some geometric properties, *Complex Analysis and Operator Theory* **6** No. 2 (2012), 491-513.

30. R.S. Kraußhar und N. Vieira: The Schrödinger equation on cylinders and the n-torus, *J. Evol. Equ.* **11** (2011), 215-237.

31. D. Constales, N. Faustino and R.S. Kraußhar: Fock spaces, Landau operators and the time-harmonic Maxwell equations, *J. Phys. A: Mathematical and Theoretical* **44** (2011), 135303, 31pp.

32. S. Bernstein, S. Ebert and R.S. Kraußhar: On the diffusion equation and diffusion wavelets on flat cylinders and the n-torus, *Math. Meth. Appl. Sci.* **34** No. 4 (2011), 428-441.

33. D. Constales, R. De Almeida and R.S. Kraußhar: Fundamentals of a generalized Wiman-Valiron theory for solutions to the Dirac-Hodge equation on upper half-space of R^{n+1}, *J. Anal. Appl.* **378** (2011), 238-251.

34. E. Bulla, D. Constales, R.S. Kraußhar and J. Ryan: Dirac Type Operators for Arithmetic Subgroups of Generalized Modular Groups, *J. Reine Angew. Math. (Crelle)* **643** (2010), 1-19.

35. D. Constales, D. Grob and R.S. Kraußhar: Explicit formulas for the Green's function and the Bergman kernel for monogenic functions in annular shaped domains in R^{n+1}, *Results in Mathematics* **58** (2010), 173-179.

36. D. Constales, D. Grob and R.S. Kraußhar: On generalized Helmholtz type equations in concentric annular domains in R^3, *Math. Meth. Appl. Sci.* **33** No. 4 (2010), 431-438.

37. D. Constales, D. Grob and R.S. Kraußhar: Constructing 3D mappings onto the unit sphere with the hypercomplex Szego kernel, *J. Comput. Appl. Math.* **233** No. 11 (2010), 2884-2910.

38. D. Constales, R. De Almeida and R.S. Kraußhar: Basics of a generalized Wiman-Valiron theory for monogenic Taylor series of finite convergence radius, *Math. Z.* 266 (2010), 665-881.

39. D. Constales and R.S. Kraußhar: Multiperiodic eigensolutions to the Dirac operator and applications to the generalized Helmholtz equation on flat cylinders and on the n-torus, *Math. Meth. Appl. Sci.* **32** (2009), 2050-2070.

40. D. Constales, D. Grob and R.S. Kraußhar: Reproducing kernel functions of solutions to polynomial Dirac equations in the annulus of the unit ball in R^n and applications to boundary value problems, *J. Math. Anal. Appl.* **358** No. 2 (2009), 281-293.

41. I. Cação, D. Constales and R.S. Kraußhar: Explicit representations of the regular solutions of the time-harmonic Maxwell equations combined with the radial symmetric Euler operator, *Math. Meth. Appl. Sci.* **32** No. 1 (2009), 1-11.

42. D. Constales, R. De Almeida and R.S. Kraußhar: A Generalization of Wiman and Valiron's theory to the Clifford analysis setting, *Cubo* **11** No. 1 (2009), 1-20.

43. I. Cação, D. Constales and R.S. Kraußhar: On rotationally symmetric Dirac equations and hypergeometric functions I, *Arch. Math.* **90** No. 5 (2008), 440-449.

44. D. Constales and R.S. Kraußhar: On the Navier-Stokes equation with Free Convection in three dimensional unbounded triangular channels, *Math. Meth. Appl. Sci.* **31**, No. 6 (2008), 735-751.

45. H. Albuquerque and R.S. Kraußhar: Multiplicative invariant lattices in R^n obtained by twisting of group algebra and some explicit characterizations, *J. Algebra* **319**, No. 3 (2008), 1116-1131.

46. D. Constales, R. De Almeida and R.S. Kraußhar: Applications of the maximum term and the central index in the asymptotic growth analysis of entire solutions to higher dimensional polynomial Cauchy-Riemann equations, *Complex Variables* **53** No. 3 (2008), 195-213.

47. D. Constales, R.S. Kraußhar and J. Ryan: k-hypermonogenic automorphic forms, *J. Number Theory* **126**, No. 2, (2007), 254-271.

48. R.S. Kraußhar and J. Ryan: Some Conformally Flat Spin Manifolds, Dirac Operators and Automorphic Forms, *J. Math. Anal. Appl.* **325** No. 1 (2007), 359-376.

49. D. Constales, R. De Almeida and R.S. Kraußhar: On the growth type of entire monogenic functions, *Arch. Math.* **88**, No. 2 (2007), 153-163.

50. D. Constales, R. De Almeida and R.S. Kraußhar: On the relation between the growth and the Taylor coefficients of entire solutions to the higher dimensional Cauchy-Riemann system in $\mathbf{R}^{n+1}$, *J. Math. Anal. Appl.* **327** No. 2 (2007), 763-775.

51. I. Cação, D. Constales and R.S. Kraußhar: On the role of arbitrary order Bessel functions in higher dimensional Dirac type equations, *Arch. Math.* **87** No. 5 (2006), 468-477.

52. D. Constales, R. De Almeida and R.S. Kraußhar: On Cauchy estimates and growth orders of entire solutions of iterated Dirac and generalized Cauchy-Riemann equations, *Math. Meth. Appl. Sci.* **29** No. 14 (2006), 1663-1686.

53. D. Constales, R. De Almeida and R.S. Kraußhar: Further results on the asymptotic growth of entire solutions of iterated Dirac equations in $\mathbf{R}^n$, *Math. Meth. Appl. Sci.* **29** No. 5 (2006), 537-556.

54. D. Constales and R.S. Kraußhar: Bergman Spaces of higher dimensional hyperbolic polyhedron type domains I, *Math. Meth. Appl. Sci.* **29** No. 1 (2006), 85-98.

55. R.S. Kraußhar, Qiao Yuying and J. Ryan: Harmonic, Monogenic and Hypermonogenic Functions on Some Conformally Flat Manifolds in $\mathbf{R}^n$ arising from Special Arithmetic Groups of the Vahlen Group. *Contemporary Mathematics, Amer. Math. Soc.* **370** (2005), 159-173.

56. R.S. Kraußhar and J. Ryan: Clifford and Harmonic Analysis on Cylinders and Tori, *Rev. Mat. Iberoam.* **21** (2005), 87-110.

57. R. De Almeida and R.S. Kraußhar: On the asymptotic growth of entire monogenic functions, *Z. Anal. Anw.* **24** No. 4 (2005), 791-813.

58. D. Constales and R.S. Kraußhar: Hilbert Spaces of Solutions to Polynomial Dirac equations, Fourier Transforms and Reproducing Kernel Functions for Cylindrical Domains, *Z. Anal. Anw.* **24** No. 3 (2005), 611-636.

59. D. Constales and R.S. Kraußhar: The Bergman Kernels for the half-ball and for fractional wedge-shaped domains in Clifford Analysis, *Forum Math.* **17** No. 5 (2005), 809-821.

60. R.S. Kraußhar: Generalized Analytic Automorphic Forms for some Arithmetic Congruence subgroups of the Vahlen group on the n-Dimensional Hyperbolic Space, *Bull. Belg. Math. Soc. – Simon Stevin* **11** No. 5 (2004), 759-774.

61. R.S. Kraußhar: The Multiplication of the Clifford-analytic Eisenstein Series, *J. Number Theory* **102** (2003), 353-382.

62. T. Hempfling and R.S. Kraußhar: Order Theory for Isolated Points of Monogenic Functions, *Arch. Math.* **80** (2003), 406-423.

63. D. Constales and R.S. Kraußhar: Closed formulas for singly-periodic monogenic cotangent, cosecant and cosecant-squared functions in Clifford Analysis, *J. Lond. Math. Soc. Ser II* **67** No. 2 (2003), 401-416.

64. D. Constales and R.S. Kraußhar: Bergman Kernels for rectangular domains and Multiperiodic Functions in Clifford Analysis, *Math. Meth. Appl. Sci.* **25** No. 16-18 (2002), 1509-1526.

65. D. Constales and R.S. Kraußhar: Representation formulas for the general derivatives of the fundamental solution of the Cauchy-Riemann operator in Clifford Analysis and Applications, *Z. Anal. Anw.* **21** No. 3 (2002), 579-597.

66. D. Constales and R.S. Kraußhar: Szegö and Polymonogenic Bergman Kernels for half-space and strip domains, and Single-periodic Functions in Clifford Analysis, *Complex Variables* **47** No. 4 (2002), 349-360.

67. R.S. Kraußhar: Monogenic Modular Forms in Two and Several Real and Complex Vector Variables, *Comput. Methods Funct. Theory* **2** No. 2 (2002), 299-318.

68. R.S. Kraußhar: Eisenstein Series in Complexified Clifford Analysis, *Comput. Methods Funct. Theory* **2** No. 1 (2002), 29-65.

69. R.S. Kraußhar: Automorphic forms in Clifford analysis, *Complex Variables* **47** No. 5 (2002), 417-440.

70. R. Delanghe, R.S. Kraußhar and H.R. Malonek: Differentiability of functions with values in some real associative algebras: approaches to an old problem, *Bull. Soc. R. Sci. Liège* **70** No. 4-6 (2001), 231-249.

71. R.S. Kraußhar and H.R. Malonek: A characterization of conformal mappings in $\mathbf{R}^4$ by a formal differentiability condition, *Bull. Soc. R. Sci. Liège* **70** No. 4-6 (2001), 231-249.

72. R.S. Kraußhar: On a new type of Eisenstein series in Clifford analysis, *Z. Anal. Anw.* **20** No. 4 (2001), 1007-1029.

73. R.S. Kraußhar: Monogenic multiperiodic functions in Clifford analysis, *Complex Variables* **46** No. 4 (2001), 337-368.

b) submitted for publication (under review):

1. F. Colombo, R.S. Kraußhar, I. Sabadini and Y. Simsek: On the generating functions and special functions associated with superoscillations, submitted for publication to *Journal of Mathematical Physics*, June 2022, 18 pages.

2. F. Colombo, R.S. Kraußhar, S. Pinton and I. Sabadini : Entire monogenic functions of given proximate order and continuous homomorphisms, submitted for publication to the *Japanese Journal of Mathematics*, January 2023, 23 pages.

3. F. Colombo, R.S. Kraußhar and I. Sabadini: Octonionic monogenic and slice monogenic Hardy and Bergman spaces, submitted for publication to *Forum Mathematicum*, February 2023, 28 pages.

1.2. Books

1. R.S. Kraußhar: *Generalized Analytic Automorphic Forms in Hypercomplex Spaces*, Frontiers in Mathematics, Birkhäuser, Basel, 2004, 184 pages. [ISBN 3-7643-7059-9]

2. R.S. Kraußhar: *Eisenstein Series in Clifford Analysis* (Dissertation RWTH Aachen), Aachener Beiträge zur Mathematik (Band 28), Wissenschaftsverlag Mainz, Aachen, 2000, 141 pages. [ISBN 3-86073-648-5]

1.3. Chapters in books

1. R.S. Kraußhar: Automorphic Forms and Dirac operators on Conformally Flat Manifolds, in: *Topics in Clifford analysis. Special volume in honor of Wolfgang Sprößig on the*

occasion of his 70th birthday. [Ed. S. Bernstein] Trends in Mathematics, Birkhäuser, Cham 2019, 331-345.

2. P. Cerejeiras, U. Kähler and R.S. Kraußhar: Applications of parabolic Dirac operators to the instationary MHD equations on conformally flat manifolds, in: *Topics in Clifford analysis. Special volume in honor of Wolfgang Sprößig on the occasion of his 70th birthday.* [Ed. S. Bernstein] Trends in Mathematics, Birkhäuser, Cham 2019, 173-190.

3. P. Cerejeiras, U. Kähler and R.S. Kraußhar: Some applications of parabolic Dirac operators to the instationary Navier-Stokes problem on conformally flat cylinders and tori in R^3. In: *Clifford Analysis and Related Topics CART 2014*, [eds. P. Cerejeiras, C. Nolder, J. Ryan, J. Vanegas]. Springer Proceedings in Mathematics & Statistics *260*, Springer, Cham 2018, 19-37.

4. R.S. Kraußhar: On the incompressible viscous MHD equations and explicit solution formulas for some three dimensional radially symmetric domains, in: *Hypercomplex Analysis and Applications*, [eds. I. Sabadini, F. Sommen] Trends in Mathematics, Birkhäuser, Basel 2011, 125-137. [DOI: 10.1007/978-3-0346-0246-4_9]

5. R.S. Kraußhar: On the Klein-Gordon equation on some examples of conformally flat spin 3-manifolds, in: *Recent advances in computational and applied Mathematics*, [eds. T. Simos], Springer, Dordrecht 2011 [DOI: 10.1007/978-90-481-9981-5_9]

6. R.S. Kraußhar: Poincaré Series in Clifford Analysis, in: *Clifford Algebras: Application to Mathematics, Physics, and Engineering*, [ed. Rafal Ablamowicz], Progress in Mathematical Physics, Birkhäuser, Boston 2003; Kapitel 5, 75-90. [ISBN 0-8176-3525-4]

7. R.S. Kraußhar: A Theory of Modular Forms in Clifford Analysis, their Applications and Perspectives, in: *Advances in Analysis and Geometry New Developments Using Clifford Algebras,* [eds. Tao Qian, T. Hempfling, A. McIntosh und F. Sommen], Trends in Mathematics*,* Birkhäuser, Boston 2004, 311-343. [ISBN 3-7643-6661-3]

8. R.S. Kraußhar: Generalizations of the Complex Analytic Trigonometric Functions to Clifford Analysis by Eisenstein Series, in: *Functional-Analytic and complex methods, their interactions, and Applications to Partial Differential Equations*, [eds. H. Florian et al.], World Scientific, Singapore 2001, 438-456. [ISBN 981-02-4764-8]

1.4. Publication in Proceedings volumes

1. R.S. Kraußhar, A. Legatiuk and D. Legatiuk: Towards discrete octonionic analysis, accepted for publication (2022) in Springer conference proceedings.

2. R.S. Kraußhar, D. Legatiuk, B. Schneider and T. Truong: A Dynamic Derivative for Fuzzy-Valued Functions, accepted for publication (2022) in *American Institute of Physics Conference Proceedings* (20th International Conference on Numerical and Applied Mathematics ICNAAM 2022), 4 pages.

3. R.S. Kraußhar: The Cauchy transform and Kerzman-Stein Theory revisited in the octonionic monogenic setting, accepted for publication (2022) in *American Institute of Physics Conference Proceedings* (20th International Conference on Numerical and Applied Mathematics ICNAAM 2022), 4 pages.

4. K. Gürlebeck, R.S. Kraußhar, M. Rodrigues, N. Vieira: Preface of the special session Fractional Differential Calculus and Clifford Analysis accepted for publication (2022) in *American Institute of Physics Conference Proceedings* (20th International Conference on Numerical and Applied Mathematics ICNAAM 2022), 2 pages

5. N. Faustino, K. Gürlebeck and R.S. Kraußhar: Preface 15th Symposium on Clifford Analysis and Applications, *American Institute of Physics Conference Proceedings* (17th International Conference on Numerical and Applied Mathematics ICNAAM 2019), 2020, 2 pages.

6. N. Faustino, K. Gürlebeck and R.S. Kraußhar: Preface 14th Symposium on Clifford Analysis and Applications, *American Institute of Physics Conference Proceedings* 2116(1):160001 (16th International Conference on Numerical and Applied Mathematics ICNAAM 2018), 2019, 2 pages.

7. M. Ferreira, R.S. Kraußhar, M.M. Rodrigues and N. Vieira: Application of the hypercomplex fractional integro-differential operators to the fractional Stokes equation, *American Institute of Physics Conference Proceedings* 2116(1): 160004 (16th International Conference on Numerical and Applied Mathematics ICNAAM 2018), 4 pages.

8. K. Gürlebeck, R.S. Kraußhar and W. Sprößig: Preface 13th Symposium on Clifford Analysis and Applications, *American Institute of Physics Conference Proceedings* (15th International Conference on Numerical and Applied Analysis ICNAAM 2017), 2 pages.

9. R. De Almeida and R.S. Kraußhar. On the growth type of entire solutions to higher dimensional polynomial Cauchy-Riemann equations, *American Institute of Physics Conference Proceedings* (15th International Conference on Numerical and Applied Analysis ICNAAM 2017), 2 pages.

10. R. De Almeida and R.S. Kraußhar. Fundamentals of a Wiman Valiron Theory for Polymonogenic Functions. *20th International Conference on the Application of Computer Science and Mathematics in Architecture and Civil Engineering IKM 2015*, 20.-22. July 2015, Weimar [eds. K. Gürlebeck, T. Lahmer], Digital Proceedings.

11. D. Constales, R. De Almeida and R.S. Kraußhar. On a generalization of Valiron´s inequality for k-hypermonogenic functions on upper half-space, *American Institute of Physics Conference Proceedings* **1281** vol. 3. (2010), 1464-1468.

12. D. Constales, R. De Almeida and R.S. Kraußhar: On the growth behavior of hypermonogenic functions on upper half-space, *American Institute of Physics Conference Proceedings* **1168** Vol. 2 (2009), 757-760

13. S. Bernstein, S. Ebert and R.S. Kraußhar: Diffusion wavelets on conformally flat cylinders and tori, *American Institute of Physics Conference Proeedings* **1168** Vol. 2 (2009), 773-776

14. K. Gürlebeck, R.S. Kraußhar and S. Poedts: A quaternionic approach to treat the ideally stationary magnetohydrodynamic equations, *American Institute of Physics Conference Proceedings* **1168** Vol. 2 (2009), 789-792.

15. D. Constales, R.S. Kraußhar: On the Klein-Gordon equation on the 3-torus, Proceedings of the *18th International Conference on the Application of Computer Science and Mathematics in Architecture and Civil Engineering IKM 2009*, 7.-9. Juli 2009, Weimar [eds. K. Gürlebeck, C. Könke]

16. D. Constales, D. Grob and R.S. Kraußhar: The hypercomplex Szegö kernel method for 3D mapping problems, Proceedings of the *18th International Conference on the Application of Computer Science and Mathematics in*

Architecture and Civil Engineering IKM 2009, 7.-9. Juli 2009, Weimar [eds. K. Gürlebeck, C. Könke]

17. I. Cação, D. Constales and R.S. Kraußhar: A unified approach for the treatment of some higher dimensional Dirac type equations on spheres, Proceedings of the *18th International Conference on the Application of Computer Science and Mathematics in Architecture and Civil Engineering IKM 2009*, 7.-9. Juli 2009, Weimar [eds. K. Gürlebeck, C. Könke]

18. D. Constales and R.S. Kraußhar: On the Navier-Stokes equations with Free Convection in 3D triangular symmetric channels, *American Institute of Physics Conf. Proc.* **936**, 2007, pp. 623-626.

19. R.S. Kraußhar and J. Tolksdorf: Applications of hyper-complex analysis in Yang-Mills gauge theories, A*merican Institute of Physics Conf. Proc.* **936**, 2007, pp. 754-757.

20. I. Cação, D. Constales and R.S. Kraußhar: On the role of hypergeometric functions in Dirac type equations, *American Institute of Physics Conf. Proc.* **936,** 2007, pp. 726-729.

21. D. Constales, R. De Almeida and R.S. Kraußhar: Growth orders of monogenic functions in the ball, *American Institute of Physics Conf. Proc.* **936**, 2007, pp. 730-733.

22. D. Constales and R.S. Kraußhar: Explicit solutions of the stationary Navier-Stokes equation in a class of reflection symmetric domains, in: *Proceedings of the International Conference of Numerical Analysis and Applied Mathematics ICNAAM 2006*, 15.-19. September 2006, Kreta, Griechenland, [eds. T. E. Simos], Wiley VCH, Weinheim 2006

23. D. Constales and R.S. Kraußhar: On the Navier-Stokes equation with Free Convection in strip domains and 3D triangular channels, in: *17th International Conference on the Application of Computer Science and Mathematics in Architecture and Civil Engineering IKM 2006*, 12.-14. Juli 2006, Weimar, [eds. K. Gürlebeck, C. Könke]

24. D. Constales, K. Gürlebeck, R.S. Kraußhar, W. Sprößig: Applications of quaternionic analysis in Engineering, in: *17th International Conference on the Application of Computer Science and Mathematics in Architecture and Civil Engineering IKM 2006*, 12.-14. Juli 2006, Weimar, [eds. K. Gürlebeck, C. Könke]

25. I. Cação, D. Constales, R.S. Kraußhar: Bessel functions and higher dimensional Diractype equations, in: *17th International Conference on the Application of Computer Science and Mathematics in Architecture and Civil Engineering IKM 2006*, 12.-14. Juli 2006, Weimar [eds. K. Gürlebeck, C. Könke]

26. R.S. Kraußhar and J. Ryan: Analysis of Dirac Operators on some Conformally Flat Manifolds, in *17th International Conference on the Application of Computer Science and Mathematics in Architecture and Civil Engineering IKM 2006*, 12.-14. Juli 2006, Weimar [eds. K. Gürlebeck, C. Könke]

27. D. Constales, R. De Almeida and R.S. Kraußhar: Asymptotic growth analysis of some PDE related to higher dimensional Dirac type equations I, in: *Proceedings of the International Conference of Numerical Analysis and Applied Mathematics ICNAAM 2005*, 16.-20. September 2005, Rhodos, Griechenland, [eds. T. E. Simos], Wiley VCH, Weinheim 2005, 928-931. [ISBN 3-527-40652-2]

28. D. Constales, R. De Almeida and R.S. Kraußhar: Asymptotic growth analysis of some PDE related to higher dimensional Dirac type equations II, in: *Proceedings*

of the International Conference of Numerical Analysis and Applied Mathematics ICNAAM 2005, 16.-20. September 2005, Rhodos, Griechenland, [eds. T. E. Simos], Wiley VCH, Weinheim 2005 pp. 133-136 [ISBN 3-527-40652-2]

29. D. Constales, R. De Almeida and R.S. Kraußhar: Asymptotic growth analysis of some PDE related to higher dimensional Dirac type equations Part II, in: *Proceedings of the International Conference of Numerical Analysis and Applied Mathematics ICNAAM 2005*, 16-20 September 2005, Rhodos, Griechenland, [eds. T. E. Simos], Wiley VCH, Weinheim 2005 pp.. 892-895 [ISBN 3-527-40652-2]

30. K. Bringmann, D. Constales and R.S. Kraußhar: Applications of hypercomplex Poincaré series to Bergman spaces, in: *Proceedings of the International Conference on Numerical and Applied Mathematics ICNAAM 2004*, 10.-14. September 2004, Chalkis, Greece, [eds. T.E. Simos, Ch. Tsitouras], Wiley VCH Weinheim 2004, 490-492. [mit D. Constales] [ISBN 3-527-40563-1]

1.5. Edition of Special Issues of reer-reviewed journals

1. Edition of the special issue *Bulletin of the Belgian Mathematical Society – Simon Stevin* Vol. 11, No.5 (2004) [with Paul Leopardi, UNSW Sydney]

2. Edition of the special issue *Advances in Applied Clifford Algebras* Vol. 17 No. 2 (2007) [with Sirkka-Liisa Eriksson, Technical University Tampere]