



Session 5

CLIFFORD AND QUATERNION ANALYSIS

Organizers: Swanhild Bernstein, Uwe Kähler, Irene Sabadini, Frank Sommen

Room: Aula MB

12:10-12:45	F. Sommen	Clifford superanalysis
12:45-13:10	D. Pena-Pena	An alternative proof of the inverse Fueter mapping theorem
	Monday	Tuesday
14:30-15:55	D. Eelbode	I. Sabadini
	Special functions and Verma modules	Toward an extension of Schur analysis to the quaternionic setting
15:55-15:20	D. Smid	D. Alpay
	Conformally invariant higher order operators on the sphere	Some classes of slice hyperholomorphic functions and associated reproducing kernel Pontryagin spaces
15:20-15:45	T. Raeymaekers	T. Qian
	Transvector algebras in Clifford analysis	Questions on Approximation by Reproducing Kernels of Clifford Hardy spaces
15:45-16.10	M. Roels	F. Colombo
	Higher spin generalisations of the Laplace operator	Recent results on the F-functional calculus



16.10-16.35	C. Stoppato	A. Perotti
	Quaternionic functions as tools for the classification of orthogonal complex structures	Continuous slice functional calculus in quaternionic Hilbert spaces
17:00-17.25	R. Lávicka	U. Kähler
	Branching in Hermitian Clifford Analysis	On some structural sets and a quaternionic (φ, ψ) -hyperholomorphic function theory
17:25-17:50	P. Cerejeiras	S.-L. Eriksson
	Towards a discrete function theory: tackling Hardy spaces	Quaternionic Hyperbolic Function Theory
17:50-18.15	K. Gürlebeck	V.V. Kravchenko
	On M-conformal mappings and their geometric properties	Construction of transmutation operators and pseudoanalytic functions of a hyperbolic variable
18:15-18:40	Y. Bolivar	O. Gerus
	Interior L_p Estimates for Monogenic Functions in Clifford-type algebras	On hyperholomorphic functions of spatial variable and some properties of a Cauchy type integral in quaternion analysis
18:40-19.05	Yu. Grigoriev	
	Quaternion functions method for the Moisil-Theodorescu system and it's applications	

	Thursday	Friday
12:10-12:30	M. Vajiac	L.A. Alexeyeva
	Lie Spheres, Spherical Monogenics, and Small Dimensions	Differential algebra of biquaternions. Twistors equation and its generalized solutions
12:30-12:50	M. H. Nguyen	E. Ariza



	On orthogonal monogenics in oblate spheroidal domains and recurrence formulae	Hartog's type extension theorem in some piecewise constant structure relations for metamonogenic functions of first order
12:50-13:10	D. Legatiuk	Y. Jaimes
	On the coupling of function theoretic methods and the finite element method for a boundary value problem with singularity	The initial values problem for generalized metamonogenic initial functions
14:30-15:55	S. Bernstein	Y. Krasnov
	Clifford Wavelets	Properties of DEs in Clifford Algebras
15:55-15:20	M. Ferreira	L. Reséndis Ocampo
	Continuous wavelet transform over an n-dimensional ball	On the quaternionic $F(p,q,s)$ spaces
15:20-15:45	V.V. Kisil	J. Vanegas
	Differential Operators, Integral Formulae and Symmetries	A boundary value problem for monogenic functions
15:45-16.10	C. A. Nolder	N. Vieira
	Möbius Geometry of $\mathbb{R}^1,1$	Time-dependent Schrödinger equation on cylinders and the n-torus
16.10-16.35	G. Gentili	A. Di Teodoro
	Results of geometric theory of hypercomplex functions on the unit ball of quaternions	Multi-metamonogenic function in different dimension