

Contents

Preface	vii
<i>R. Abreu Blaya, J. Bory Reyes, A. Guzmán Adán and U. Kähler</i> Symmetries and Associated Pairs in Quaternionic Analysis	1
<i>D. Alpay, F. Colombo and I. Sabadini</i> Generalized Quaternionic Schur Functions in the Ball and Half-space and Krein–Langer Factorization	19
<i>D. Alpay, F. Colombo, I. Sabadini and G. Salomon</i> The Fock Space in the Slice Hyperholomorphic Setting	43
<i>E. Ariza and A. Di Teodoro</i> Multi M_q -monogenic Function in Different Dimension	61
<i>S. Bernstein</i> The Fractional Monogenic Signal	75
<i>L.J. Carmona L., L.F. Reséndis O. and L.M. Tovar S.</i> Weighted Bergman Spaces	89
<i>D. Eelbode and N. Verhulst</i> On Appell Sets and Verma Modules for $\mathfrak{sl}(2)$	111
<i>S.-L. Eriksson, H. Orelma and N. Vieira</i> Integral Formulas for k -hypermonogenic Functions in \mathbb{R}^3	119
<i>R. Ghiloni, V. Moretti and A. Perotti</i> Spectral Properties of Compact Normal Quaternionic Operators	133
<i>Yu. Grigor’ev</i> Three-dimensional Quaternionic Analogue of the Kolosov–Muskhelishvili Formulae	145
<i>K. Gürlebeck and D. Legatiuk</i> On the Continuous Coupling of Finite Elements with Holomorphic Basis Functions	167

<i>K. Gürlebeck and H. Manh Nguyen</i>	
On ψ -hyperholomorphic Functions and a Decomposition of Harmonics	181
<i>U. Kähler and N. Vieira</i>	
Fractional Clifford Analysis	191
<i>Y. Krasnov</i>	
Spectral Properties of Differential Equations in Clifford Algebras	203
<i>D.C. Struppa, A. Vajiac and M.B. Vajiac</i>	
Differential Equations in Multicomplex Spaces	213

Hypercomplex Analysis: New Perspectives and
Applications

Bernstein, S.; Kähler, U.; Sabadini, I.; Sommen, F. (Eds.)

2014, VII, 227 p., Hardcover

ISBN: 978-3-319-08770-2

A product of Birkhäuser Basel