

Contents

Preface	vii
<i>C. Bisi and G. Gentili</i> On the Geometry of the Quaternionic Unit Disc	1
<i>F. Colombo and I. Sabadini</i> Bounded Perturbations of the Resolvent Operators Associated to the \mathcal{F} -Spectrum	13
<i>K. Coulembier, H. De Bie and F. Sommen</i> Harmonic and Monogenic Functions in Superspace	29
<i>S.-L. Eriksson and H. Orelma</i> A Hyperbolic Interpretation of Cauchy-Type Kernels in Hyperbolic Function Theory	43
<i>M. Ferreira</i> Gyrogroups in Projective Hyperbolic Clifford Analysis	61
<i>P. Franek</i> Invariant Operators of First Order Generalizing the Dirac Operator in 2 Variables	81
<i>G. Gentili and C. Stoppato</i> The Zero Sets of Slice Regular Functions and the Open Mapping Theorem	95
<i>R. Ghiloni and A. Perotti</i> A New Approach to Slice Regularity on Real Algebras	109
<i>R.S. Kraußhar</i> On the Incompressible Viscous Stationary MHD Equations and Explicit Solution Formulas for Some Three-dimensional Radially Symmetric Domains	125
<i>R. Lávíčka</i> The Fischer Decomposition for the H -action and Its Applications	139
<i>S. Li and M. Fei</i> Bochner's Formulae for Dunkl-Harmonics and Dunkl-Monogenics	149
<i>M. Libine</i> An Invitation to Split Quaternionic Analysis	161

<i>M.E. Luna-Elizarrarás, M.A. Macías-Cedeño and M. Shapiro</i> On the Hyperderivatives of Moisil–Théodoresco Hyperholomorphic Functions	181
<i>M. Martin</i> Deconstructing Dirac Operators. II: Integral Representation Formulas ..	195
<i>H. Orelma and F. Sommen</i> A Differential Form Approach to Dirac Operators on Surfaces	213
<i>P. Somberg</i> Killing Tensor Spinor Forms and Their Application in Riemannian Geometry	233
<i>V. Tuček</i> Construction of Conformally Invariant Differential Operators	249
<i>D.C. Struppa, A. Vajiac and M.B. Vajiac</i> Remarks on Holomorphicity in Three Settings: Complex, Quaternionic, and Bicomplex	261
<i>F. Vlacci</i> The Gauss-Lucas Theorem for Regular Quaternionic Polynomials	275



<http://www.springer.com/978-3-0346-0245-7>

Hypercomplex Analysis and Applications

Sabadini, I.; Sommen, F. (Eds.)

2011, VIII, 284 p., Hardcover

ISBN: 978-3-0346-0245-7

A product of Birkhäuser Basel