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Differential Forms ; 4.6. Regular Functions
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Chapter 5 Quaternions and the Dirac String Trick
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6.2. The Distance Estimate for Quaternion Mandelbrot Sets

Sommario/riassunto

This book is based on the authors' research on rendering images of higher dimensional fractals by a distance estimation technique. It is self-contained, giving a careful treatment of both the known techniques and the authors' new methods. The distance estimation technique was originally applied to Julia sets and the Mandelbrot set in the complex plane. It was justified, through the work of Douady and Hubbard, by deep results in complex analysis. In this book the authors generalise the distance estimation to quaternionic and other higher dimensional fractals, including fractals derived from it
