

problems are the subject of Chapter 6, which gives a variational characterization of spline interpolation, error estimates, and convergence results.

The Gabor and Toeplitz transforms are described in Chapter 9, which is followed by the continuous wavelet transform in Chapter 10 and the discrete wavelet transform in Chapter 11. The basic tool is the theory of singular integrals on the sphere, which is given in Chapter 8.

Geoscientists and approximators will welcome this book as a fine exposition and collection of material which was otherwise only to be found in research journals. The bibliographical notes given at the end of each chapter allow interested researchers to find additional material.

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Proceedings

Advances in Multivariate Approximation, Werner Haussmann, Kurt Jetter, and Manfred Reimer, Eds., Mathematical Research **107**, Wiley-VCH, Berlin, 1999, 334 pp.

These are the proceedings of the 3rd international conference on Multivariate Approximation, which was held at Haus Bommerholtz, the guest house of the University of Dortmund, from September 27 through October 2, 1998. The book contains 22 refereed contributions taken from the 10 invited lectures and the 25 contributed talks of the scientific program. Several topics from modern aspects of multivariate approximation theory are covered, with emphasis on interpolation and approximation on spheres and balls, approximation by harmonic and subharmonic functions, multivariate splines, numerical integration, periodic interpolation, simultaneous approximation, and moduli of smoothness.

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