



Multivariate Birkhoff Interpolation

By Rudolph A. Lorentz

Springer Okt 1992, 1992. Taschenbuch. Book Condition: Neu. 235x155x11 mm. This item is printed on demand - Print on Demand Titel. - The subject of this book is Lagrange, Hermite and Birkhoff (lacunary Hermite) interpolation by multivariate algebraic polynomials. It unifies and extends a new algorithmic approach to this subject which was introduced and developed by G.G. Lorentz and the author. One particularly interesting feature of this algorithmic approach is that it obviates the necessity of finding a formula for the Vandermonde determinant of a multivariate interpolation in order to determine its regularity (which formulas are practically unknown anyways) by determining the regularity through simple geometric manipulations in the Euclidean space. Although interpolation is a classical problem, it is surprising how little is known about its basic properties in the multivariate case. The book therefore starts by exploring its fundamental properties and its limitations. The main part of the book is devoted to a complete and detailed elaboration of the new technique. A chapter with an extensive selection of finite elements follows as well as a chapter with formulas for Vandermonde determinants. Finally, the technique is applied to non-standard interpolations. The book is principally oriented to specialists in the field....



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Reviews

This publication may be really worth a go through, and a lot better than other. It really is written in simple terms and never difficult to understand. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- **Natalie Abbott**

This book will not be simple to get going on reading but extremely exciting to read through. Yes, it can be play, still an interesting and amazing literature. I am very easily could possibly get a delight of reading a written book.

-- **Rene Olson**