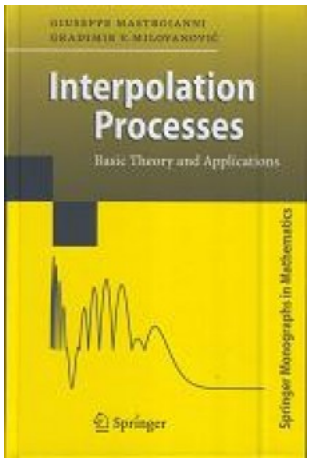

Título: Interpolation Processes. Basic Theory And Applications

Autor: Mastroianni Giuseppe/ Milovanovic Gradimir

Precio: $1851.00

Editorial:

Año: 2008

Tema:

Edición: 1ª

Sinopsis

ISBN: 9783540683469

The classical books on interpolation address numerous negative results, i.e., results on divergent interpolation processes, usually constructed over some equidistant systems of nodes. The authors present, with complete proofs, recent results on convergent interpolation processes, for trigonometric and algebraic polynomials of one real variable, not yet published in other textbooks and monographs on approximation theory and numerical mathematics. In this special, but fundamental and important field of real analysis the authors present the state of art. Some 500 references are cited, including many new results of the authors. Basic tools in this field (orthogonal polynomials, moduli of smoothness, K-functionals, etc.) as well as some selected applications in numerical integration, integral equations, moment-preserving approximation and summation of slowly convergent series are also given. Beside the basic properties of the classical orthogonal polynomials the book provides new results on nonclassical orthogonal polynomials including methods for their numerical construction.