

1. Record Nr.	UNINA9910437872803321
Autore	Gal Sorin G
Titolo	Overconvergence in complex approximation // Sorin G. Gal
Pubbl/distr/stampa	New York, : Springer Science, 2013
ISBN	1-4614-7098-6
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (206 p.)
Disciplina	511/.4
Soggetti	Approximation theory Functional analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Overconvergence in C of Some Bernstein-Type Operators -- Overconvergence and Convergence in C of Some Integral Convolutions -- Overconvergence in C of the Orthogonal Expansions .
Sommario/riassunto	This monograph deals with the quantitative overconvergence phenomenon in complex approximation by various operators. The book is divided into three chapters. First, the results for the Schurer-Faber operator, Beta operators of first kind, Bernstein-Durrmeyer-type operators and Lorentz operator are presented. The main focus is on results for several q-Bernstein kind of operators with $q > 1$ , when the geometric order of approximation $1/q^n$ is obtained not only in complex compact disks but also in quaternion compact disks and in other compact subsets of the complex plane. The focus then shifts to quantitative overconvergence and convolution overconvergence results for the complex potentials generated by the Beta and Gamma Euler's functions. Finally quantitative overconvergence results for the most classical orthogonal expansions (of Chebyshev, Legendre, Hermite, Laguerre and Gegenbauer kinds) attached to vector-valued functions are presented. Each chapter concludes with a notes and open problems section, thus providing stimulation for further research. An extensive bibliography and index complete the text. This book is suitable for researchers and graduate students working in complex approximation and its applications, mathematical analysis and numerical analysis.

