Record Nr. UNINA9910437873303321 Autore Aral Ali Titolo Applications of Q-calculus in operator theory / / Ali Aral, Vijay Gupta, Ravi P. Agarwal New York, : Springer, c2013 Pubbl/distr/stampa 1-4614-6946-5 **ISBN** Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (xii, 262 pages) Collana Gale eBooks Altri autori (Persone) GuptaVijay AgarwalRavi P Disciplina 515.724 Soggetti Calculus Integral operators 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 Introduction of q-calculus -- q-Discrete operators and their results -q-Integral operators -- q-Bernstein type integral operators -- q-Summation-integral operators -- Statistical convergence of goperators -- q-Complex operators. The approximation of functions by linear positive operators is an Sommario/riassunto important research topic in general mathematics and it also provides powerful tools to application areas such as computer-aided geometric design, numerical analysis, and solutions of differential equations. q-Calculus is a generalization of many subjects, such as hypergeometric series, complex analysis, and particle physics. This monograph is an introduction to combining approximation theory and g-Calculus with applications, by using well-known operators. The presentation is systematic and the authors include a brief summary of the notations and basic definitions of q-calculus before delving into more advanced material. The many applications of q-calculus in the theory of approximation, especially on various operators, which includes convergence of operators to functions in real and complex domain forms the gist of the book. This book is suitable for researchers

and students in mathematics, physics and engineering, and for professionals who would enjoy exploring the host of

mathematical techniques and ideas that are collected and discussed in