1. Record Nr. UNINA9910483859903321

Titolo Advancements in Complex Analysis: From Theory to Practice / / edited

by Daniel Breaz, Michael Th. Rassias

Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,,

2020

ISBN 3-030-40120-0

Edizione [1st ed. 2020.]

Descrizione fisica 1 online resource (VIII, 536 p. 9 illus., 2 illus. in color.)

Disciplina 515

Soggetti Functions of complex variables

System theory

Quantum computers Difference equations Functional equations

Several Complex Variables and Analytic Spaces

Complex Systems

Quantum Computing

Functions of a Complex Variable
Difference and Functional Equations

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Nota di bibliografia Includes bibliographical references.

Nota di contenuto A Theory on Non-Constant Frequency Decompositions and Applications

(Chen) -- One-component inner functions II (Cima) -- Biholomorphic Cryptosystems (Daras) -- Third order fermionic and fourth order bosonic operators (Ding) -- Holomorphic approximation: the legacy of Weierstrass, Runge, Oka-Weil, and Mergelyan (Fornæss) -- A Potapovtype approach to a truncated matricial Stieltjes-type power moment problem (Fritzsche) -- Formulas and inequalities for some special functions of a complex variable (Grinshpan) -- On the means of the non-trivial zeros of the Riemann zeta function (Hassani) -- Minimal kernels and compact analytic objects in complex surfaces(Mongodi) -- On the automorphic group of an entire function (Peretz) -- Integral representations in Complex Analysis: From classical results to recent developments (Range) -- On the Riemann zeta function and Gaussian

Sommario/riassunto

multiplicative chaos (Saksman) -- Some new aspects in hypercomplex analysis (Sprößig) -- Some connections of complex dynamics (De Zotti).

The contributions to this volume are devoted to a discussion of state-of-the-art research and treatment of problems of a wide spectrum of areas in complex analysis ranging from pure to applied and interdisciplinary mathematical research. Topics covered include: holomorphic approximation, hypercomplex analysis, special functions of complex variables, automorphic groups, zeros of the Riemann zeta function, Gaussian multiplicative chaos, non-constant frequency decompositions, minimal kernels, one-component inner functions, power moment problems, complex dynamics, biholomorphic cryptosystems, fermionic and bosonic operators. The book will appeal to graduate students and research mathematicians as well as to physicists, engineers, and scientists, whose work is related to the topics covered.