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Nota di contenuto	Frontmatter -- Preface -- Contents -- 1. Complex numbers and functions -- 2. Cauchy's Theorem and Cauchy's formula -- 3. Analytic continuation -- 4. Construction and approximation of holomorphic functions -- 5. Harmonic functions -- 6. Several complex variables -- 7. Bergman spaces -- 8. The canonical solution operator to -- 9. Nuclear Fréchet spaces of holomorphic functions -- 10. The -complex -- 11. The twisted -complex and Schrödinger operators -- Bibliography -- Index
Sommario/riassunto	In this textbook, a concise approach to complex analysis of one and several variables is presented. After an introduction of Cauchy's integral theorem general versions of Runge's approximation theorem and Mittag-Leffler's theorem are discussed. The first part ends with an analytic characterization of simply connected domains. The second part is concerned with functional analytic methods: Fréchet and Hilbert spaces of holomorphic functions, the Bergman kernel, and unbounded operators on Hilbert spaces to tackle the theory of several variables, in particular the inhomogeneous Cauchy-Riemann equations and the $\bar{\partial}$ Neumann operator. Contents Complex numbers and functions Cauchy's Theorem and Cauchy's formula Analytic continuation Construction and approximation of holomorphic functions Harmonic functions Several complex variables Bergman spaces The canonical solution operator to Nuclear Fréchet spaces of holomorphic functions The -complex The twisted -complex and

