1. Record Nr. UNINA9910300126203321 Autore Sinha Rajnikant Titolo Real and Complex Analysis: Volume 2 / / by Rajnikant Sinha Singapore:,: Springer Singapore:,: Imprint: Springer,, 2018 Pubbl/distr/stampa 981-13-2886-2 **ISBN** Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (XI, 679 p. 9 illus.) 515 Disciplina Soggetti Mathematical analysis Analysis (Mathematics) **Analysis** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Chapter 1. Holomorphic and Harmonic Functions -- Chapter 2. Nota di contenuto Conformal Mapping -- Chapter 3. Analytic Continuation -- Chapter 4. Special Functions. Sommario/riassunto This is the second volume of the two-volume book on real and complex analysis. This volume is an introduction to the theory of holomorphic functions. Multivalued functions and branches have been dealt carefully with the application of the machinery of complex measures and power series. Intended for undergraduate students of mathematics and engineering, it covers the essential analysis that is needed for the study of functional analysis, developing the concepts rigorously with sufficient detail and with minimum prior knowledge of the fundamentals of advanced calculus required. Divided into four chapters, it discusses holomorphic functions and harmonic functions, Schwarz reflection principle, infinite product and the Riemann mapping theorem, analytic continuation, monodromy theorem, prime number theorem, and Picard's little theorem. Further, it includes extensive exercises and their solutions with each concept. The book examines

centuries.

several useful theorems in the realm of real and complex analysis, most of which are the work of great mathematicians of the 19th and 20th