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	Autore	Lvovski Serge
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	Descrizione fisica	1 online resource (XIII, 257 p.)
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	Soggetti	Functions of complex variables Geometry, Algebraic
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	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Introduction -- Preliminaries -- Derivatives of functions of complex variable -- Practicing conformal mappings -- Integrals of functions of complex variable -- Cauchy theorem and its consequences -- Homotopy and analytic continuation -- Laurent series and singular points -- Residues -- Local properties of holomorphic functions -- Conformal mappings I -- Infinite sums and products -- Conformal mappings II -- Introduction to Riemann surfaces.
	Sommario/riassunto	This is a brief textbook on complex analysis intended for the students of upper undergraduate or beginning graduate level. The author stresses the aspects of complex analysis that are most important for the student planning to study algebraic geometry and related topics. The exposition is rigorous but elementary: abstract notions are introduced only if they are really indispensable. This approach provides a motivation for the reader to digest more abstract definitions (e.g., those of sheaves or line bundles, which are not mentioned in the book) when he/she is ready for that level of abstraction indeed. In the chapter on Riemann surfaces, several key results on compact Riemann surfaces are stated and proved in the first nontrivial case, i.e. that of elliptic curves.