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Descrizione fisica	1 online resource (319 pages) : illustrations (some color)
Disciplina	516.36
Soggetti	Differential geometry Global analysis (Mathematics) Manifolds (Mathematics) Functions of complex variables Projective geometry Algebraic topology Differential Geometry Global Analysis and Analysis on Manifolds Several Complex Variables and Analytic Spaces Projective Geometry Algebraic Topology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Part I. Geometry in the Age of Enlightenment -- Algebraic Geometry -- Differential Geometry -- Part II. Differential and Projective Geometry in the Nineteenth Century -- Projective Geometry -- Gauss and Intrinsic Differential Geometry -- Riemann's Higher-Dimensional Geometry -- Part III. Origins of Complex Geometry -- The Complex Plane -- Elliptic and Abelian Integrals -- Elliptic Functions -- Complex Analysis -- Riemann Surfaces -- Complex Geometry at the End of the Nineteenth Century -- Part IV. Twentieth-Century Embedding Theorems -- Differentiable Manifolds -- Riemannian Manifolds -- Compact Complex Manifolds -- Noncompact Complex Manifolds.

## Sommario/riassunto

Differential and complex geometry are two central areas of mathematics with a long and intertwined history. This book, the first to provide a unified historical perspective of both subjects, explores their origins and developments from the sixteenth to the twentieth century. Providing a detailed examination of the seminal contributions to differential and complex geometry up to the twentieth century embedding theorems, this monograph includes valuable excerpts from the original documents, including works of Descartes, Fermat, Newton, Euler, Huygens, Gauss, Riemann, Abel, and Nash. Suitable for beginning graduate students interested in differential, algebraic or complex geometry, this book will also appeal to more experienced readers.

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