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Titolo	Elliptic Functions and Modular Forms / / by Max Koecher, Aloys Krieg
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Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (373 pages)
Collana	Universitext, , 2191-6675
Disciplina	516.9
Soggetti	Functions of complex variables Number theory Geometry, Hyperbolic Group theory Functions of a Complex Variable Number Theory Hyperbolic Geometry Group Theory and Generalizations Formes modulaires Funcions el·líptiques Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1 Elliptic functions -- 2 Geometry in the upper-half plane and the action of the modular group -- 3 Modular forms -- 4 The Hecke-Petersson theory -- 5 Theta series.
Sommario/riassunto	The theory of elliptic functions and modular forms is rich and storied, though it has a reputation for difficulty. In this textbook, the authors successfully bridge foundational concepts and advanced material. Following Weierstrass's approach to elliptic functions, they also cover elliptic curves and complex multiplication. The sections on modular forms, which can be read independently, include discussions of Hecke operators and Dirichlet series. Special emphasis is placed on theta series, with some advanced results included. With detailed proofs and numerous exercises, this book is well-suited for self-study or use as a

reference. A companion website provides videos and a discussion forum on the topic.
