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Titolo	Conformally Invariant Metrics and Quasiconformal Mappings [[electronic resource] /] / by Parisa Hariri, Riku Klén, Matti Vuorinen
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Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XIX, 502 p. 56 illus.)
Collana	Springer Monographs in Mathematics, , 1439-7382
Disciplina	515.9
Soggetti	Potential theory (Mathematics) Differential geometry Potential Theory Differential Geometry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part I: Introduction and Review -- Introduction -- A Survey of Quasiregular Mappings -- Part II: Conformal Geometry -- Möbius Transformations -- Hyperbolic Geometry -- Generalized Hyperbolic Geometries -- Metrics and Geometry -- Part III: Modulus and Capacity -- The Modulus of a Curve Family -- The Modulus as a Set Function -- The Capacity of a Condenser -- Conformal Invariants -- Part IV: Intrinsic Geometry -- Hyperbolic Type Metrics -- Comparison of Metrics -- Local Convexity of Balls -- Inclusion Results for Balls -- Part V: Quasiregular Mappings -- Basic Properties of Quasiregular Mappings -- Distortion Theory -- Dimension-Free Theory -- Metrics and Maps -- Teichmüller's Displacement Problem -- Part VI: Solutions -- Solutions to Exercises.
Sommario/riassunto	This book is an introduction to the theory of quasiconformal and quasiregular mappings in the euclidean $n$ -dimensional space, (where $n$ is greater than 2). There are many ways to develop this theory as the literature shows. The authors' approach is based on the use of metrics, in particular conformally invariant metrics, which will have a key role throughout the whole book. The intended readership consists of mathematicians from beginning graduate students to researchers. The prerequisite requirements are modest: only some familiarity with basic

ideas of real and complex analysis is expected.

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