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Titolo	A mathematical introduction to conformal field theory : based on a series of lectures given at the Mathematisches Institut der Universität Hamburg // Martin Schottenloher
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Collana	Lecture Notes in Physics. New series m, Monographs
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Mathematical Preliminaries -- Conformal Transformations and Conformal Killing Fields -- The Conformal Group -- Central Extensions of Groups -- Central Extensions of Lie Algebras and Bargmann's Theorem -- The Virasoro Algebra -- First Steps Towards Conformal Field Theory -- Representation Theory of the Virasoro Algebra -- Projective Representations of Diff+ ( ) and More -- String Theory as a Conformal Field Theory -- Foundations of Two-Dimensional Conformal Quantum Field Theory -- Mathematical Aspects of the Verlinde Formula.
Sommario/riassunto	The first part of this book gives a detailed, self-contained and mathematically rigorous exposition of classical conformal symmetry in n dimensions and its quantization in two dimensions. In particular, the conformal groups are determined and the appearance of the Virasoro algebra in the context of the quantization of two-dimensional conformal symmetry is explained via the classification of central extensions of Lie algebras and groups. The second part surveys some more advanced topics of conformal field theory, such as the representation theory of the Virasoro algebra, conformal symmetry within string theory, an axiomatic approach to Euclidean conformally

covariant quantum field theory and a mathematical interpretation of the Verlinde formula in the context of moduli spaces of holomorphic vector bundles on a Riemann surface. This book is an important text for researchers and graduate students.

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