

1. Record Nr.	UNINA9910133752403321
Titolo	Conformal invariance : an introduction to loops, interfaces and stochastic Loewner Evolution / / Malte Henkel, Dragi Karevski, editors
Pubbl/distr/stampa	Berlin ; ; Heidelberg, : Springer, c2012
ISBN	9783642279348 3642279341
Edizione	[1st ed. 2012.]
Descrizione fisica	1 online resource (XVI, 189 p. 69 illus., 19 illus. in color.)
Collana	Lecture notes in physics, , 0075-8450 ; ; v. 853
Altri autori (Persone)	HenkelM <1960-> (Malte) KarevskiDragi
Disciplina	530.14/3 530.143
Soggetti	Conformal invariants Stochastic processes Phase transformations (Statistical physics) - Mathematical models
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction to CFT -- Critical Interfaces and SLE -- Numerical tests of SLE -- Loop Models and boundary CFT.
Sommario/riassunto	Conformal invariance has been a spectacularly successful tool in advancing our understanding of the two-dimensional phase transitions found in classical systems at equilibrium. This volume sharpens our picture of the applications of conformal invariance, introducing non-local observables such as loops and interfaces before explaining how they arise in specific physical contexts. It then shows how to use conformal invariance to determine their properties. Moving on to cover key conceptual developments in conformal invariance, the book devotes much of its space to stochastic Loewner evolution (SLE), detailing SLE's conceptual foundations as well as extensive numerical tests. The chapters then elucidate SLE's use in geometric phase transitions such as percolation or polymer systems, paying particular attention to surface effects. As clear and accessible as it is authoritative, this publication is as suitable for non-specialist readers and graduate students alike.

