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Titolo	EPFL Lectures on Conformal Field Theory in D = 3 Dimensions // by Slava Rychkov
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Descrizione fisica	1 online resource (XII, 72 p. 14 illus., 12 illus. in color.)
Collana	SpringerBriefs in Physics, , 2191-5423
Disciplina	530
Soggetti	Quantum field theory String theory Elementary particles (Physics) Mathematical physics Quantum Field Theories, String Theory Elementary Particles, Quantum Field Theory Mathematical Applications in the Physical Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- Physical Foundations of Conformal Symmetry -- Conformal kinematics -- Radial quantization and OPE -- Conformal Bootstrap.
Sommario/riassunto	This primer develops Conformal Field Theory (CFT) from scratch, whereby CFT is viewed as any conformally-invariant theory that describes a fixed point of a renormalization group flow in quantum field theory. The book is divided into four lectures: Lecture 1 addresses the physical foundations of conformal invariance, while Lecture 2 examines the constraints imposed by conformal symmetry on the correlation functions of local operators, presented using the so-called projective null cone – a procedure also known as the embedding formalism. In turn, Lecture 3 focuses on the radial quantization and the operator product expansion, while Lecture 4 offers a very brief introduction to the conformal bootstrap. Derived from course-based notes, these lectures are intended as a first point of entry to this topic for Master and PhD students alike.

