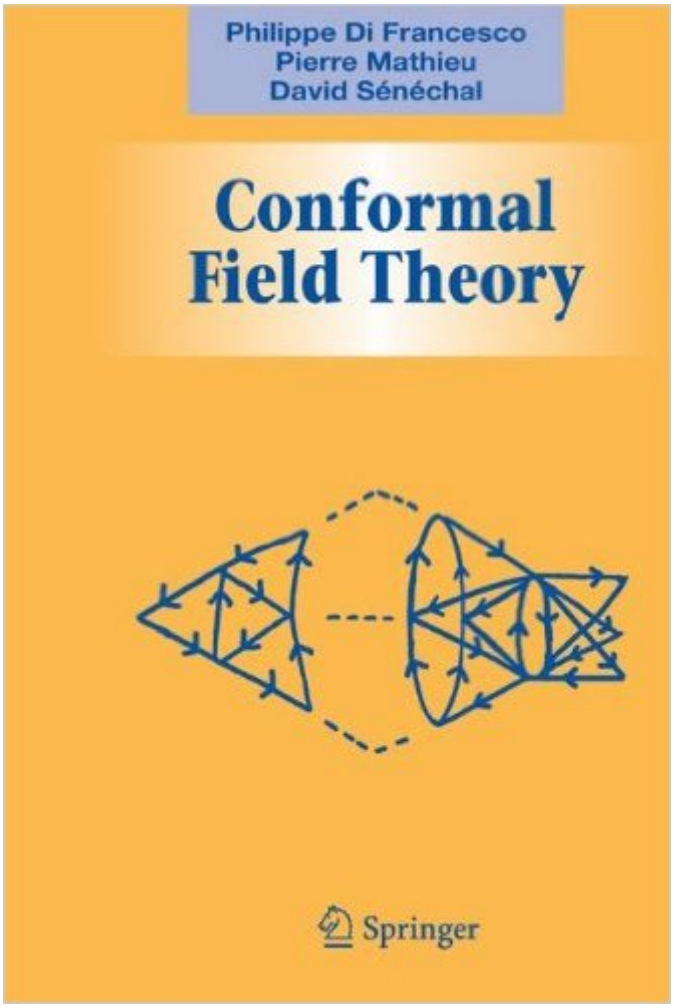
Conformal Field Theory (Graduate Texts In Contemporary Physics)



Synopsis

Filling an important gap in the literature, this comprehensive text develops conformal field theory from first principles. The treatment is self-contained, pedagogical, and exhaustive, and includes a great deal of background material on quantum field theory, statistical mechanics, Lie algebras and affine Lie algebras. The many exercises, with a wide spectrum of difficulty and subjects, complement and in many cases extend the text. The text is thus not only an excellent tool for classroom teaching but also for individual study. Intended primarily for graduate students and researchers in theoretical high-energy physics, mathematical physics, condensed matter theory, statistical physics, the book will also be of interest in other areas of theoretical physics and mathematics. It will prepare the reader for original research in this very active field of theoretical and mathematical physics.

Book Information

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Customer Reviews

This book is a fine contribution to the literature on conformal field theory and will no doubt become one of the standard references on the subject. It is well worth the price as it gives a comprehensive introduction to the subject. Chapter 5 is a good discussion of local conformal invariance and clears up some of my own misunderstandings of this invariance. The later chapters discuss affine Lie algebras and algebraic considerations in detail.

This book is really well done. It introduce the theory of conformal fields in a really pedagogical way

so that any person not familiar at all with the subject can enjoy it. The review of quantum field theory and statistical mechanics at the begining is excellent and it is of great help if you haven't work with these subjects recently. The book is also filled with many basic applications that make the theory closer to real life.Congratulations for this nice book!

Probably the best book to introduce you to conformal field theory. It starts from basics and go up to coset constrcutions, WZW models. More than a textbook, it is a necessary reference!

I have come across some books and lecture notes on CFT, but this book truly is great - almost all notes are based on this book. It presents elementary CFT at an understand pace and progresses slowly towards the end to the more advanced topics in 2D string theory and statistical physics.The book is pleasant to read and the derivations are done well. Some minor errors and typos are forgiven, because the rest of the book makes well up for them. Numerous examples are given in each section and there are many problems at the end of each chapter. Unfortunately, there are no detailed solutions available, as far as I know.Some prior knowledge of QFT might be useful, but the basics (Lagrangian formalism, Wick's theorem, Noether's theorem and conserved currents, etc.) are provided in the first chapters. This book is highly recommended for those interested in CFT and its application to string theory (and statistical physics), and I even dare to say it is a MUST!

Very good text on CFT. Concise in general, but never deficient on important concepts and derivations.

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