



Quantum Field Theory: A Modern Introduction

By Michio Kaku

Download now

Read Online 

Quantum Field Theory: A Modern Introduction By Michio Kaku

The rise of quantum electrodynamics (QED) made possible a number of excellent textbooks on quantum field theory in the 1960s. However, the rise of quantum chromodynamics (QCD) and the Standard Model has made it urgent to have a fully modern textbook for the 1990s and beyond. Building on the foundation of QED, *Quantum Field Theory: A Modern Introduction* presents a clear and comprehensive discussion of the gauge revolution and the theoretical and experimental evidence which makes the Standard Model the leading theory of subatomic phenomena. The book is divided into three parts: Part I, Fields and Renormalization, lays a solid foundation by presenting canonical quantization, Feynman rules and scattering matrices, and renormalization theory. Part II, Gauge Theory and the Standard Model, focuses on the Standard Model and discusses path integrals, gauge theory, spontaneous symmetry breaking, the renormalization group, and BPHZ quantization. Part III, Non-perturbative Methods and Unification, discusses more advanced methods which now form an essential part of field theory, such as critical phenomena, lattice gauge theory, instantons, supersymmetry, quantum gravity, supergravity, and superstrings.

 [Download Quantum Field Theory: A Modern Introduction ...pdf](#)

 [Read Online Quantum Field Theory: A Modern Introduction ...pdf](#)

Quantum Field Theory: A Modern Introduction

By Michio Kaku

Quantum Field Theory: A Modern Introduction By Michio Kaku

The rise of quantum electrodynamics (QED) made possible a number of excellent textbooks on quantum field theory in the 1960s. However, the rise of quantum chromodynamics (QCD) and the Standard Model has made it urgent to have a fully modern textbook for the 1990s and beyond. Building on the foundation of QED, *Quantum Field Theory: A Modern Introduction* presents a clear and comprehensive discussion of the gauge revolution and the theoretical and experimental evidence which makes the Standard Model the leading theory of subatomic phenomena. The book is divided into three parts: Part I, Fields and Renormalization, lays a solid foundation by presenting canonical quantization, Feynman rules and scattering matrices, and renormalization theory. Part II, Gauge Theory and the Standard Model, focuses on the Standard Model and discusses path integrals, gauge theory, spontaneous symmetry breaking, the renormalization group, and BPHZ quantization. Part III, Non-perturbative Methods and Unification, discusses more advanced methods which now form an essential part of field theory, such as critical phenomena, lattice gauge theory, instantons, supersymmetry, quantum gravity, supergravity, and superstrings.

Quantum Field Theory: A Modern Introduction By Michio Kaku Bibliography

- Sales Rank: #195403 in Books
- Published on: 1993-03-11
- Original language: English
- Number of items: 1
- Dimensions: 6.50" h x 1.66" w x 9.56" l, 2.74 pounds
- Binding: Hardcover
- 785 pages



[Download Quantum Field Theory: A Modern Introduction ...pdf](#)



[Read Online Quantum Field Theory: A Modern Introduction ...pdf](#)

Download and Read Free Online Quantum Field Theory: A Modern Introduction By Michio Kaku

Editorial Review

Review

"The book provides an excellent, up-to-date account of quantum field theory and the approach to quantum gravity. It is well written and well organized to be used not only by anyone who intends to do research work in this field but also for anyone at the level of an advanced graduate student or beyond who is interested in broadening his/her perspectives on what might be the elements of a 'final theory' in physics." --Hans J. Haubold, United Nations Office for Outer Space

"Unlike older textbooks that focused on quantum electrodynamics (QED), this text centers on the Standard Model and includes gauge theory. Each chapter concludes with a problem set." --SciTech Book News

"A massive work covering a grand variety of traditional subjects dealt with in most textbooks on this subject, and has done all of us the favor of including, in addition, a good number of current research topics that are normally dealt with only in conference proceedings or specialized texts of their own. This is a lot of book, especially for the relatively modest price." --International Journal of Quantum Chemistry

"Kaku discusses a mind-boggling variety of topics. . . valuable references. . . useful." --Physics Today

"This updated and expanded version of many of the standard QFT texts is refreshingly independent. . . an effective introduction to a breathtakingly wide range of topics, and gives an admirable general ordering and emphasis of life material. . . a fascinating resource for a wealth of information and explanation. What more can one expect between two covers with such a menu?" --Australian and New Zealand Physicist

About the Author

Michio Kaku is at City College of CUNY.

Users Review

From reader reviews:

Eva Byrd:

This Quantum Field Theory: A Modern Introduction book is not ordinary book, you have it then the world is in your hands. The benefit you obtain by reading this book is usually information inside this reserve incredible fresh, you will get facts which is getting deeper anyone read a lot of information you will get. This specific Quantum Field Theory: A Modern Introduction without we understand teach the one who examining it become critical in imagining and analyzing. Don't become worry Quantum Field Theory: A Modern Introduction can bring once you are and not make your tote space or bookshelves' become full because you can have it inside your lovely laptop even telephone. This Quantum Field Theory: A Modern Introduction having fine arrangement in word and also layout, so you will not feel uninterested in reading.

Dale Perez:

Now a day individuals who Living in the era exactly where everything reachable by interact with the internet and the resources inside it can be true or not demand people to be aware of each facts they get. How many

people to be smart in obtaining any information nowadays? Of course the solution is reading a book. Reading through a book can help people out of this uncertainty. Information specifically this Quantum Field Theory: A Modern Introduction book as this book offers you rich data and knowledge. Of course the knowledge in this book hundred per-cent guarantees there is no doubt in it you know.

Mark Wolf:

The book untitled Quantum Field Theory: A Modern Introduction contain a lot of information on that. The writer explains your ex idea with easy way. The language is very clear to see all the people, so do not worry, you can easy to read it. The book was authored by famous author. The author brings you in the new period of literary works. You can easily read this book because you can keep reading your smart phone, or program, so you can read the book within anywhere and anytime. If you want to buy the e-book, you can wide open their official web-site and also order it. Have a nice study.

Michael Barth:

This Quantum Field Theory: A Modern Introduction is fresh way for you who has intense curiosity to look for some information mainly because it relief your hunger of knowledge. Getting deeper you onto it getting knowledge more you know or else you who still having small amount of digest in reading this Quantum Field Theory: A Modern Introduction can be the light food to suit your needs because the information inside that book is easy to get by anyone. These books acquire itself in the form and that is reachable by anyone, yep I mean in the e-book form. People who think that in reserve form make them feel drowsy even dizzy this e-book is the answer. So there is no in reading a reserve especially this one. You can find actually looking for. It should be here for an individual. So , don't miss it! Just read this e-book style for your better life along with knowledge.

Download and Read Online Quantum Field Theory: A Modern Introduction By Michio Kaku #WFE8ZLRBVUI

Read Quantum Field Theory: A Modern Introduction By Michio Kaku for online ebook

Quantum Field Theory: A Modern Introduction By Michio Kaku Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Quantum Field Theory: A Modern Introduction By Michio Kaku books to read online.

Online Quantum Field Theory: A Modern Introduction By Michio Kaku ebook PDF download

Quantum Field Theory: A Modern Introduction By Michio Kaku Doc

Quantum Field Theory: A Modern Introduction By Michio Kaku MobiPocket

Quantum Field Theory: A Modern Introduction By Michio Kaku EPub