<<量子场论>>

图书基本信息

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前言

Quantum field theory has been an elementmp course for the students majored in theoretical physics. In recent years it has become a basic knowledge needed for all the students in physics. There is much more variation in style and content among quantum field theory courses than, for example, quantum mechanics. Quantum field theory is indeed a hard course. But we knew that physics was a hard major Quantum field theory is still an active research topic, even though it has had many experimentally confirmed results since l940s. As a result, a quantum field theory course has the flavor of research f there is no set of mathematically rigorous rules to solve any problem.

Answers are not final, and should be treated as questions. One should not be satisfied with the solution of a problem, but consider it as a first step toward generalization. This book arose from the lecture given to the graduate students in Physics Department of Fudan University since l994. The contents of the book are arranged as follows. The first three chapters deal with the basic properties and the quantization of the free scalar, spinor and electromagnetic fields, respectively. Chapter 4 transits to the perturbation theory and chapter 5 is a brief introduction of the quantum electromagnetic processes. Chapter 6 represents the radiative corrections and finally, chapter 7 introduces the functional method used in quantum field theory. This textbook is designed for the graduates in Physics, but it also be of interest to scientists and engineeers major in sub--atomic fields.

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内容概要

Quantum field theory has been an elementmp course for the students majored in theoretical physics. In recent years it has become a basic knowledge needed for all the students in physics.

作者简介

徐建军，1959年8月生于上海。
1982年春毕业于复旦大学物理系，1989年l月获得博士学位。
从1984年开始，在复旦大学物理系任教至今。
现为复旦大学物理系副教授。
已发表学术论文20余篇，出版著作《超对称物理导论》、《数学物理方法解题指导》、《电动力学》（第二版），出版译著《不论》。
主要从事理论物理方面课程的教学和研究工作，开设过电动力学、高等数学、数学物理方法、应用数学、量子场论、群论、天体物理概论等本科生和研究生课程。

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