

<<费恩曼物理学讲义 (第3卷)(英文版)>>

图书基本信息

书名：<<费恩曼物理学讲义 (第3卷)(英文版)>>

13位ISBN编号：9787506272490

10位ISBN编号：7506272490

出版时间：2004-11

出版时间：世界图书出版公司

作者：Richard P. Feynman, Robert B. Leighton, Matthew Sands

页数：394

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

前言

A great triumph of twentieth-century physics, the theory of quantum mechanics, is now nearly 40 years old, yet we have generally been giving our students their introductory course in physics (for many students, their last) with hardly more than a casual allusion to this central part of our knowledge of the physical world. We should do better by them. These lectures are an attempt to present them with the basic and essential ideas of the quantum mechanics in a way that would, hopefully, be comprehensible. The approach you will find here is no..

内容概要

A great triumph of twentieth-century physics , the theory of quantum mechanics , is now nearly 40 years old , yet we have generally been giving our students their introductory course in physics (for many students , their last) with hardly more than a casual allusion to this central part of our knowledge of the physical world. We should do better by them. These lectures are an attempt to present them with the basic and essential ideas of the quantum mechanics in a way that would , hopefully , be comprehensible. The approach you will find here is novel , particularly at the level of a sophomore course , and was considered very much an experiment. After seeing how easily some of the students take to it , however , I believe that the experiment was a success. There is , of course , room for improvement , and it will come with more experience in the classroom. What you will find here is a record of that first experiment. . In the two-year sequence of the Feynman Lectures on Physics which were given from September 1961 through May 1963 for the introductory physics course at Caltech , the concepts of quantum physics were brought in whenever they were necessary for an understanding of the phenomena being described. In addition , the last twelve lectures of the second year were given over to a more coherent introduction to some of the concepts of quantum mechanics. It became clear as the lectures drew to a close , however , that not enough time had been left for the quantum mechanics. As the material was prepared , it was continually discovered that other important and interesting topics could be treated with the elementary tools that had been developed. There was also a fear that the too brief treatment of the Schrodinger wave function which had been included in the twelfth lecture would not provide a sufficient bridge to the more conventional treatments of many books the students might hope to read. It was therefore decided to extend the series with seven additional lectures; they were given to the sophomore class in May of 1964. These lectures rounded out and extended somewhat the material developed in the earlier lectures.

作者简介

Feynman et al, These are the lectures in physics that I gave last year and the year before to the freshman and sophomore classes at Caltech. The lectures are, of course, not verbatim—they have been edited, sometimes extensively and sometimes less so. The lectures form only part of the complete course. The whole group of 180 students gathered in a big lecture room twice a week to hear these lectures and then they broke up into small groups of 15 to 20 students in recitation sections under the guidance of a teaching assistant. In addition, there was a laboratory session once a week.

书籍目录

CHAPTER1.QUANTUM BEHAVIOR.CHAPTER2.THE RELATION OF WAVE AND PARTICLE
VIEWPOINTSCHAPTER3.PROBABILITY AMPLITUDESCHAPTER4.IDENTICAL
PARTICLESCHAPTER5.SPIN ONECHAPTER6.SPIN ONE-HALFCHAPTER7.THE DEPENDENCE
OF AMPLITUDES ON TIMECHAPTER8.THE HAMILTONIAN MATRIXCHAPTER9.THE AMMONIA
MASERCHAPTER10.OTHER TWO-STATE SYSTEMSCHAPTER11.MOPE TWO-STATE
SYSTEMSCHAPTER12.THE HYPERFINE SPLITTING IN HYDROGENCHAPTER13.PROPAGATION IN A
CRYSTAL LATTICECHAPTER14.SEMICONDUCTORSCHAPTER15.THE INDEPENDENT PARTICLE
APPROXIMATIONCHAPTER16.THE DEPENDENCE OF AMPLITUDES ON
POSITIONCHAPTER17.SYMMETRY AND CONSERVATION LAWSCHAPTER18.ANGULAR
MOMENTUMCHAPTER19.THE HYDROGEN ATOM AND THE PERIODIC
TABLECHAPTER20.OPERATORSCHAPTER21.THE SCHRÖDINGER EQUATION IN A CLASSICAL
CONTEXT:A SEMINARON SUPERCONDUCTIVITYFEYNMAN'SEPILOGUEAPPENDIXINDEX

编辑推荐

《费恩曼物理学讲义》(第3卷)为英文版。

版权说明

本站所提供下载的PDF图书仅提供预览和简介, 请支持正版图书。

更多资源请访问:<http://www.tushu007.com>