

<<相对论量子力学>>

图书基本信息

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前言

I always thought I would write a book and this is it. In the end, though, hardly wrote it at all, it evolved from my research notes, from essays I wrote for postgraduates starting work with me, and from lecture handouts I distribute to students taking the relativistic quantum mechanics option in the Physics department at Keele University. Therefore the early chapters of this book discuss pure relativistic quantum mechanics and the later chapters discuss applications of relevance in condensed matter physics. This book, then, is written with an audience ranging from advanced students to professional researchers in mind. I wrote it because anyone aiming to do research in relativistic quantum theory applied to condensed matter has to pull together information from a wide range of sources using different conventions, notation and units, which can lead to a lot of confusion (I speak from experience). Most relativistic quantum mechanics books, it seems to me, are directed towards quantum field theory and particle physics, not condensed matter physics, and many start off at too advanced a level for present day physics graduates from a British university. Therefore, I have tried to start at a sufficiently elementary level, and have used the SI system of units throughout.

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内容概要

Unlike so many other supportive families, mine did not proof-read, or type this manuscript, or anything else. In fact they played absolutely no part in the preparation of this book, and distracted me from it at every opportunity. They are not the slightest bit interested in physics and know nothing of relativity and quantum theory. Their lack of knowledge in these areas does not worry them at all. Furthermore they undermine one of the central tenets of the theory of relativity, by providing me with a unique frame of reference. Nonetheless, I would like to dedicate this book to them, Jo, Jessica, Susanna and Elizabeth.

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书籍目录

Preface1 The Theory of Special Relativity 1.1 The Lorentz Transformations 1.2 Relativistic Velocities 1.3 Mass, Momentum and Energy 1.4 Four-Vectors 1.5 Relativity and Electromagnetism 1.6 The Compton Effect 1.7 Problems2 Aspects of Angular Momentum 2.1 Various Angular Momenta 2.2 Angular Momentum and Rotations 2.3 Operators and Eigenvectors for Spin 1/2 2.4 Operators for Higher Spins 2.5 Orbital Magnetic Moments 2.6 Spin Without Relativity 2.7 Thomas Precession 2.8 The Pauli Equation in a Central Potential 2.9 Dirac Notation 2.10 Clebsch-Gordan and Racah Coefficients 2.11 Relativistic Quantum Numbers and Spin-Angular Functions 2.12 Energy Levels of the One-Electron Atom 2.13 Plane Wave Expansions 2.14 Problems3 Particles of Spin Zero 3.1 The Klein-Gordon Equation 3.2 Relativistic Wavefunctions, Probabilities and Currents 3.3 The Fine Structure Constant 3.4 The Two-Component Klein-Gordon Equation 3.5 Free Klein-Gordon Particles/Antiparticles 3.6 The Klein Paradox 3.7 The Radial Klein-Gordon Equation 3.8 The Spinless Electron Atom 3.9 Problems4 The Dirac Equation 4.1 The Origin of the Dirac Equation 4.2 The Dirac Matrices 4.3 Lorentz Invariance of the Dirac Equation 4.4 The Non-Relativistic Limit of the Dirac Equation 4.5 An Alternative Formulation of the Dirac Equation 4.6 Probabilities and Currents 4.7 Gordon Decomposition 4.8 Forces and Fields 4.9 Gauge Invariance and the Dirac Equation 4.10 Problems5 Free Particles/Antiparticles 5.1 Wavefunctions, Densities and Currents 5.2 Free-Particle Solutions 5.3 Free-Particle Spin Rotations and Spinors A Generalized Spin Operator 5.4 Negative Energy States, Antiparticles 5.5 Classical Negative Energy Particles? 5.6 The Klein Paradox Revisited 5.7 Lorentz Transformation of the Free-Particle Wavefunction 5.5 Problems6 Symmetries and Operators 6.1 Non-Relativistic Spin Projection Operators 6.2 Relativistic Energy and Spin Projection Operators 6.3 Charge Conjugation 6.4 Time-Reversal Invariance 6.5 Parity 6.6 ... 6.7 Angular Momentum Again 6.8 Non-Relativistic Limits Again 6.9 Second Quantization7 Separating Particles from Antiparticles8 One-Electron Atoms9 Potential Problems10 More Than One Electron11 Scattering Theory12 Electrons and Photons13 SuperconductivityAppendix A The Uncertainty PrincipleAppendix B The Confluent Hypergeometric Function B.1 Relations to Other FunctionsAppendix C Spherical HarmonicsAppendix D Unit SystemsAppendix E Fundamental ConstantsReferencesIndex

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