

<<固态物理学家用的格林函数>>

图书基本信息

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作者：S. Doniach, E. H. Sondheimer

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内容概要

A lot has happened in the field of condensed matter physics since the original edition of "Green's functions for Solid State Physicists" was published in 1974. Nevertheless, the book has helped introduce several generations of condensed matter physics graduate students to the very powerful ideas of quantum many body theory and some of their applications, particularly those in the physics of itinerant magnetism and superconductivity that have nowadays come to be called "the correlated electron problem". In preparing for the reprint edition, two new chapters have been added to the original text to provide an introduction to the recent developments in this branch of condensed matter physics. Chapter 11 focuses on the understanding of the Kondo problem which grew out of the exact solutions developed in the mid 1970's. The accompanying growth of experimental work culminating in the discovery of the heavy fermion superconductors gave substance to the idea that Coulomb repulsion between electrons in a narrow band metal can actually lead to attraction between the electrons and resulting instabilities at low temperatures to either a superconducting or an antiferromagnetic state.

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书籍目录

PREFACE TO THE IMPERIAL COLLEGE PRESS EDITION PREFACE INTRODUCTION: THE THEORY OF CONDENSED MATTER CHAPTER 1 LATTICE DYNAMICS IN THE HARMONIC APPROXIMATION 1.1 The ground state energy 1.2 The ground state energy as an integral over coupling constant 1.3 The neutron scattering cross-section 1.4 The Green 's function and its equation of motion 1.5 The iteration solution of G 1.6 Summation of the iteration series 1.7 Calculation of the ground state energy and the neutron cross-section in terms of the phonon Green 's function CHAPTER 2 LATTICE DYNAMICS AT FINITE TEMPERATURES 2.1 The free energy in the harmonic approximation 2.2 The phonon temperature Green 's function 2.3 The real-time Green 's function and neutron scattering at finite temperatures CHAPTER 3 THE FEYNMAN-DYSON EXPANSION 3.1 Zero-temperature theory: general formalism 3.2 Evaluation of the phonon Green 's function at T= 0 by Feynman-Dyson perturbation theory 3.3 The Feynman-Dyson expansion at finite temperatures 3.4 Direct evaluation of the free energy by Feynman-Dyson perturbation theory CHAPTER 4 THE SCATTERING OF FERMIONS BY A LOCALIZED PERTURBATION 4.1 Scattering of a single electron 4.2 Formulation of the many-electron scattering problem in terms of fermion creation and annihilation operators 4.3 Single-electron Green's functionCHAPTER 5 ELECTRONS IN THE PRESENCE OF MANY IMPURITIES-THE THEORY OF ELECTRICAL RESISTANCE IN METALS CHAPTER 6 THE INTERACTING ELECTRON GAS CHAPTER 7 THE MAGNETIC INSTABILITY OF THE INTERACTING ELECTRON GAS CHAPTER 8 INTERACTING ELECTRON IN THE ATOMIC LIMIT CHAPTER 9 TRANSCIENT RESPONSE OF THE FERMI GAS-THE X-RAY AND KONDO PROBLEMS CHAPTER 10 SUPERCONDUCTIVITY CHAPTER 11 STRONG CORRELATED ELECTRON SYSTEMS HEAVY FERMIONS THE 1-DIMENSIONAL ELECTRON GAS CHAPTER 12 HIGH T SUPERCONDUCTIVITY APPENDIX 1 SECOND QUANTIZATION FOR FERMIONS AND BOSONS APPENDIX 2 TIME CORRELATION FUNCTIONS AND GREEN'S FUNCTIONS BIBLIOGRAPHY HISTORICAL NOTE ON GEORGE GREEN INDEX

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