

volved in the "Fermiology" of metals. The second chapter, by John Wilkins, surveys the understanding of many-body effects in metals and  $\text{He}^3$  and demonstrates how fermion excitation can be conceived as nearly independent. It provides a very readable account of many-body effects present in a number of phenomena without overemphasizing formalisms and mathematical detail. This article is highly recommended for required supplementary reading for students learning about formal many-body theory.

The third chapter presents R. G. Chambers' clear treatment of the Boltzmann equation and its application to the path-integral method of calculating transport properties of metals. Unfortunately, no description of recent uses of the theory is included.

The first article dealing primarily with the de Haas-van Alphen effect, by A. B. Pippard, is of general interest to solid-state readers because it discusses the cooperative effect of magnetic interaction, which mean-field theory can explain. (The mean magnetization field in the de Haas-van Alphen effect is not  $\mathbf{H}$  but  $\mathbf{B}$ .)

Three articles on Fermi surface studies of transition metals, itinerant-electron ferromagnets and the effect of strain on the Fermi surface bring theory and experiment together to provide critical reviews; they will serve as excellent references. These articles will be favored by research workers but disappoint those seeking introductory presentations.

The last four articles concern particular aspects of the de Haas-van Alphen effect. Written for experimentalists, they show the wealth of information, on topics from Fermi surface topology to many-body effects, that this effect can yield.

This book will be of value to researchers studying the electron properties of metals experimentally and theoretically. It is useful companion to a 1968 book, *Electrons in Metals*, edited by J. F. Cochran and R. R. Heering and A. P. Cracknell's monograph *The Fermi Surface of Metals*. Parts of the book also provide good background and excellent supplementary reading for students taking solid-state physics courses.

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