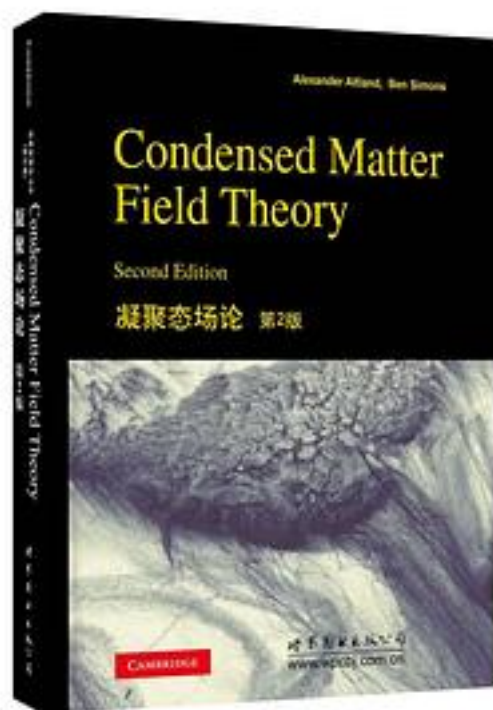


凝聚态场论



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出版者:世界图书出版公司

出版时间:2015-5-1

装帧:平装

isbn:9787510095559

Modern experimental developments in condensed matter and ultracold atom physics present formidable challenges to theorists. This book provides a pedagogical introduction to quantum field theory in many particle physics, emphasizing the applicability of the formalism to concrete problems.

This second edition contains two new chapters developing path integral approaches to classical and quantum nonequilibrium phenomena. Other chapters cover a range of topics, from the introduction of many-body techniques and functional integration, to

renormalization group methods, the theory of response functions, and topology. Conceptual aspects and formal methodology are emphasized, but the discussion focuses on practical experimental applications drawn largely from condensed matter physics and neighboring fields.

Extended and challenging problems with fully-worked solutions provide a bridge between formal manipulations and research-oriented thinking. Aimed at elevating graduate students to a level where they can engage in independent research, this book complements graduate level courses on many particle theory.

作者介绍:

Alexander Altland is Professor of Theoretical Condensed Matter Physics at the Institute of Theoretical Physics, University of Köln. His main areas of research include mesoscopic physics, the physics of interacting many particle systems, and quantum nonlinear dynamics.

Benjamin D. Simons is Professor of Theoretical Condensed Matter Physics at the Cavendish Laboratory, University of Cambridge. His main areas of research include strongly correlated condensed matter systems, mesoscopic and ultracold atom physics.

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评论

Bought but never read, as I transferred outside the field of condensed material.
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intuitive but introductory

好书，读的第一本凝聚态场论。已经看过了第一遍，以后可能还会再翻翻。

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书评

This book authorized by Alex and Simons is one of the most representative publications in the field of classical/quantum field theory. Here, I'm focusing on the errors including typo and unreasonable statements so that our Chinese students can read it conv...

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