《场论、重正化群和临界现象》

图书基本信息

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作者：Daniel J. Amit,Victor Martin Mayor

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内容概要

This volume links field theory methods and concepts from particle physics with those in critical phenomena and statistical mechanics, the development starting from the latter point of view. Rigor and lengthy proofs are trimmed by using the phenomenological framework of graphs, power counting, etc., and field theoretic methods with emphasis on renormalization group techniques. Non-perturbative methods and numerical simulations are introduced in this new edition. Abundant references to research literature complement this matter-of-fact approach. The book introduces quantum field theory to those already grounded in the concepts of statistical mechanics and advanced quantum theory, with sufficient exercises in each chapter for use as a textbook in a one-semester graduate course. The following new chapters are included: I. Real Space Methods II. Finite Size Scaling III. Monte Carlo Methods. Numerical Field Theory

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作者简介

David Yevick是国际知名学者，在数学和物理学界享有盛誉。本书凝聚了作者多年科研和教学成果，适用于科研工作者、高校教师和研究生。

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