

<<粒子的统计物理学>>

图书基本信息

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内容概要

统计物理是利用物质基本组成成份来研究物质的整体性质，它在量子力学发展中发挥了重要的作用。本书根据作者20多年来在麻省理工学院讲授粒子统计物理的课程讲义编写而成，主要讲解统计物理学的基本概念和处理实际问题的方法。

在讲述完热力学基础后，作者专门讲解了常用数学工具如概率论和中心极限定理。

本书内容还包括相互作用粒子，van der Waals方程及其推导，经典和量子统计力学以及信息论中的相关问题。

本书附有习题，并在全书结尾处给出部分答案。

阅读本书时可以参考作者的另外一本专著《场的统计物理》，主要介绍利用重整化群等非平均场方法研究标度律和临界现象。

目次：热力学；概率论；气体动力学理论；经典统计力学；相互作用的粒子；量子统计力学；理想量子气体；部分习题解答；索引。

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作者简介

MEHRAN KARDAR is Professor of Physics at MIT, where he has taught and researched in the field of statistical physics for the past 20 years. He received his B.A. at Cambridge, and gained his Ph.D. at MIT. Professor Kardar has held research and visiting pos

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