

<<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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