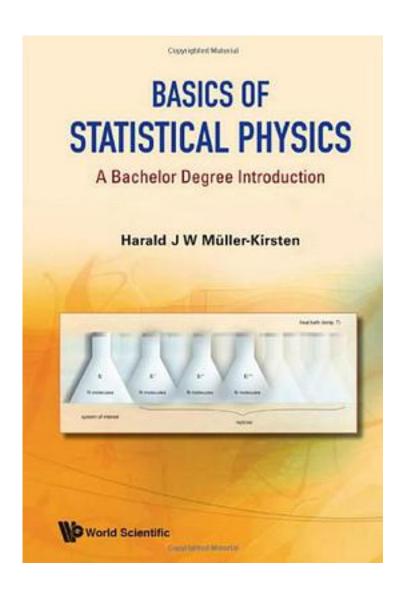
Basics of Statistical Physics



Basics of Statistical Physics_下载链接1_

著者:Harald J. W. Muller-Kirsten

出版者:

出版时间:2009-8

装帧:

isbn:9789814287227

Statistics links microscopic and macroscopic phenomena, and requires for this reason a large number of microscopic elements like atoms. The results are values of maximum probability or of averaging. This introduction to statistical physics concentrates on the basic principles, and attempts to explain these in simple terms supplemented by numerous examples. The basic principles concentrated on are the difference between classical and quantum statistics, the a priori probabilities as related to degeneracies, the vital aspect of indistinguishability as compared with distinguishability in classical physics, the differences between conserved and nonconserved elements (the latter including photons and phonons), the different ways of counting arrangements in the three statistics (Maxwell-Boltzmann, Fermi-Dirac, Bose-Einstein), the difference between maximization of the number of arrangements of elements in these and averaging in the Darwin-Fowler method. Significant applications to solids, radiation and to electrons in metals are treated in separate chapters. Finally the Bose-Einstein distribution is rederived under condensation conditions. Each chapter concludes with examples and exercises.

chapter concludes with examples and exercises.
作者介绍:
目录:
Basics of Statistical Physics_下载链接1_
标签
评论
Basics of Statistical Physics_下载链接1_
书评

Basics of Statistical Physics_下载链接1_