

Statistical Theory of Heat (Graduate Texts in Physics)

By Florian Scheck



Statistical Theory of Heat (Graduate Texts in Physics) By Florian Scheck

Scheck's textbook starts with a concise introduction to classical thermodynamics, including geometrical aspects. Then a short introduction to probabilities and statistics lays the basis for the statistical interpretation of thermodynamics. Phase transitions, discrete models and the stability of matter are explained in great detail.

Thermodynamics has a special role in theoretical physics. Due to the general approach of thermodynamics the field has as a bridging function between several areas like the theory of condensed matter, elementary particle physics, astrophysics and cosmology. The classical thermodynamics describes predominantly averaged properties of matter, reaching from few particle systems and state of matter to stellar objects. Statistical Thermodynamics covers the same fields, but explores them in greater depth and unifies classical statistical mechanics with quantum theory of multiple particle systems.

The content is presented as two tracks: the fast track for master students, providing the essentials, and the intensive track for all wanting to get in depth knowledge of the field. Clearly labelled material and sections guide students through the preferred level of treatment. Numerous problems and worked examples will provide successful access to Statistical Physics and Thermodynamics.



Read Online Statistical Theory of Heat (Graduate Texts in Ph ...pdf

Statistical Theory of Heat (Graduate Texts in Physics)

By Florian Scheck

Statistical Theory of Heat (Graduate Texts in Physics) By Florian Scheck

Scheck's textbook starts with a concise introduction to classical thermodynamics, including geometrical aspects. Then a short introduction to probabilities and statistics lays the basis for the statistical interpretation of thermodynamics. Phase transitions, discrete models and the stability of matter are explained in great detail.

Thermodynamics has a special role in theoretical physics. Due to the general approach of thermodynamics the field has as a bridging function between several areas like the theory of condensed matter, elementary particle physics, astrophysics and cosmology. The classical thermodynamics describes predominantly averaged properties of matter, reaching from few particle systems and state of matter to stellar objects. Statistical Thermodynamics covers the same fields, but explores them in greater depth and unifies classical statistical mechanics with quantum theory of multiple particle systems.

The content is presented as two tracks: the fast track for master students, providing the essentials, and the intensive track for all wanting to get in depth knowledge of the field. Clearly labelled material and sections guide students through the preferred level of treatment. Numerous problems and worked examples will provide successful access to Statistical Physics and Thermodynamics.

Statistical Theory of Heat (Graduate Texts in Physics) By Florian Scheck Bibliography

Rank: #3071311 in BooksPublished on: 2016-11-16Original language: English

• Number of items: 1

• Dimensions: 9.21" h x .56" w x 6.14" l, .0 pounds

• Binding: Hardcover

• 233 pages

▶ Download Statistical Theory of Heat (Graduate Texts in Phys ...pdf

Read Online Statistical Theory of Heat (Graduate Texts in Ph ...pdf

Download and Read Free Online Statistical Theory of Heat (Graduate Texts in Physics) By Florian Scheck

Editorial Review

From the Back Cover

Scheck's textbook starts with a concise introduction to classical thermodynamics, including geometrical aspects. Then a short introduction to probabilities and statistics lays the basis for the statistical interpretation of thermodynamics. Phase transitions, discrete models and the stability of matter are explained in great detail. Thermodynamics has a special role in theoretical physics. Due to the general approach of thermodynamics the field has a bridging function between several areas like the theory of condensed matter, elementary particle physics, astrophysics and cosmology. The classical thermodynamics describes predominantly averaged properties of matter, reaching from few particle systems and state of matter to stellar objects. Statistical Thermodynamics covers the same fields, but explores them in greater depth and unifies classical statistical mechanics with quantum theory of multiple particle systems.

The content is presented as two tracks: the fast track for master students, providing the essentials, and the intensive track for all wanting to get in depth knowledge of the field. Clearly labelled material and sections guide students through the preferred level of treatment. Numerous problems and worked examples will provide successful access to Statistical Physics and Thermodynamics.

About the Author

Florian A. Scheck, professor emeritus at University of Mainz, Germany.

Born in 1936, diploma degree 1962 , Ph.D. (Dr. rer.nat) 1964, both at U. Freiburg, Germany. Habilitation at U. Heidelberg 1968. Guest scientist at the Weizmann Institute

of Science, Rehovoth, (1964-1966), research assistant U. Heidelberg, (1966-1968), research fellow at CERN, Geneva, (1968-1970), head of theory group

SIN/PSI, lecturer and titular professor at ETH Zurich (1970 – 1976). Professor of theoretical Physics U. Mainz (1976 – 2005). Numerous visits as guest scientist or guest professor, Helsinki, Montpellier, Marseille, San José (Costa Rica), Bogota (Columbia).

Users Review

From reader reviews:

Jerold Richards:

Is it you who having spare time after that spend it whole day by watching television programs or just lying on the bed? Do you need something totally new? This Statistical Theory of Heat (Graduate Texts in Physics) can be the answer, oh how comes? A book you know. You are consequently out of date, spending your spare time by reading in this brand-new era is common not a nerd activity. So what these guides have than the others?

Scott Smith:

As a university student exactly feel bored to be able to reading. If their teacher asked them to go to the

library or even make summary for some book, they are complained. Just small students that has reading's internal or real their interest. They just do what the teacher want, like asked to go to the library. They go to there but nothing reading really. Any students feel that studying is not important, boring along with can't see colorful pics on there. Yeah, it is being complicated. Book is very important for yourself. As we know that on this period, many ways to get whatever we really wish for. Likewise word says, many ways to reach Chinese's country. Therefore, this Statistical Theory of Heat (Graduate Texts in Physics) can make you really feel more interested to read.

Stephen Mosley:

What is your hobby? Have you heard that question when you got scholars? We believe that that problem was given by teacher on their students. Many kinds of hobby, Everyone has different hobby. And also you know that little person like reading or as examining become their hobby. You need to understand that reading is very important along with book as to be the point. Book is important thing to provide you knowledge, except your current teacher or lecturer. You get good news or update about something by book. A substantial number of sorts of books that can you choose to adopt be your object. One of them is actually Statistical Theory of Heat (Graduate Texts in Physics).

Cherry Simard:

Reading a reserve make you to get more knowledge from that. You can take knowledge and information coming from a book. Book is written or printed or descriptive from each source which filled update of news. Within this modern era like right now, many ways to get information are available for an individual. From media social like newspaper, magazines, science publication, encyclopedia, reference book, novel and comic. You can add your understanding by that book. Isn't it time to spend your spare time to spread out your book? Or just searching for the Statistical Theory of Heat (Graduate Texts in Physics) when you needed it?

Download and Read Online Statistical Theory of Heat (Graduate Texts in Physics) By Florian Scheck #35OMCPZ8JI4

Read Statistical Theory of Heat (Graduate Texts in Physics) By Florian Scheck for online ebook

Statistical Theory of Heat (Graduate Texts in Physics) By Florian Scheck Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Statistical Theory of Heat (Graduate Texts in Physics) By Florian Scheck books to read online.

Online Statistical Theory of Heat (Graduate Texts in Physics) By Florian Scheck ebook PDF download

Statistical Theory of Heat (Graduate Texts in Physics) By Florian Scheck Doc

Statistical Theory of Heat (Graduate Texts in Physics) By Florian Scheck Mobipocket

Statistical Theory of Heat (Graduate Texts in Physics) By Florian Scheck EPub

35OMCPZ8JI4: Statistical Theory of Heat (Graduate Texts in Physics) By Florian Scheck