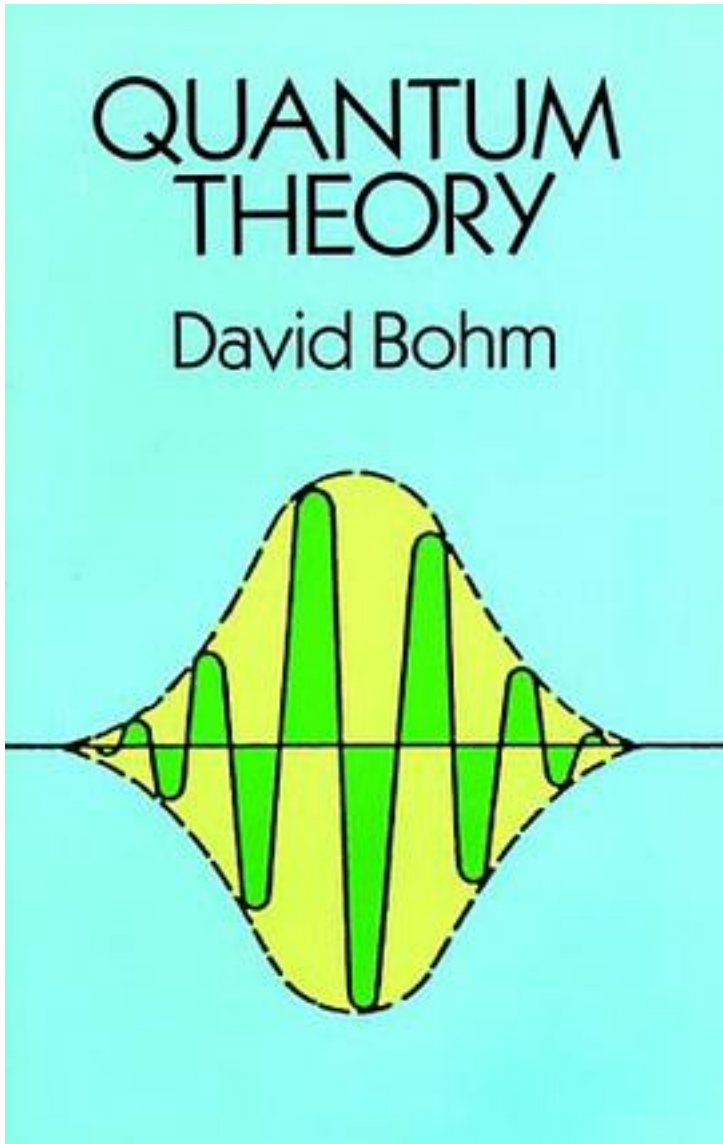


Quantum Theory



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This book will be useful to anyone who wants to understand the use of quantum theory for the description of physical processes. It is a graduate level text, ideal for independent study, and includes numerous figures, exercises, bibliographical references, and even some computer programs.

The first chapters introduce formal tools: the mathematics are precise, but not excessively abstract. The physical interpretation too is rigorous. It makes no use of the uncertainty principle or of other ill-defined notions. The central part of the book is devoted to Bell's theorem and to the Kochen-Specker theorem. It is here that quantum phenomena depart most radically from classical physics. There has recently been considerable progress on these issues, and the latest developments have been included. The final chapters discuss further topics of current research: spacetime symmetries, quantum thermodynamics and information theory, semiclassical methods, irreversibility, quantum chaos, and especially the measuring process. In particular, it is shown how modern techniques allow the extraction of more information from a physical system than traditional measurement methods.

For physicists, mathematicians and philosophers of science with an interest in the applications and foundations of quantum theory. The volume is suitable as a supplementary graduate textbook.

作者介绍:

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书评

作为一个非物理学人士，我对这本书的评价是好、坏参半的。 先说好的方面：
1、这本书是很多论文、书籍引用的一本经典之作；
2、这本书将量子理论（不仅仅是量子物理），还包括数学基础、试验基础，甚至后来发展的量子信息、量子逻辑等理论都介绍过了，因此这本书是一本较早较全...

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