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Titolo	Statistical Structure of Quantum Theory // by Alexander S. Holevo
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Descrizione fisica	1 online resource (IX, 166 p.)
Collana	Lecture Notes in Physics Monographs ; ; 67
Disciplina	530.12/0151
Soggetti	Quantum theory System theory Probabilities Mathematical physics Quantum Physics Complex Systems Probability Theory Theoretical, Mathematical and Computational Physics
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Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	The Standard Statistical Model of Quantum Mechanics -- Statistics of Quantum Measurements -- Evolution of an Open System -- Repeated and Continuous Measurement Processes -- Processes in Fock Space.
Sommario/riassunto	New ideas on the mathematical foundations of quantum mechanics, related to the theory of quantum measurement, as well as the emergence of quantum optics, quantum electronics and optical communications have shown that the statistical structure of quantum mechanics deserves special investigation. In the meantime it has become a mature subject. In this book, the author, himself a leading researcher in this field, surveys the basic principles and results of the theory, concentrating on mathematically precise formulations. Special attention is given to the measurement dynamics. The presentation is pragmatic, concentrating on the ideas and their motivation. For detailed proofs, the readers, researchers and graduate students, are referred to the extensively documented literature.

