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	Nota di contenuto	From the Uncertainty Relation to Many-Body Systems -- Quantum Mechanics of Point Particles -- Scattering of Particles by Potentials -- The Principles of Quantum Theory -- Space-Time Symmetries in Quantum Physics -- Applications of Quantum Mechanics -- From Symmetries in Quantum Physics to Electroweak Interactions -- Symmetries and Symmetry Groups in Quantum Physics -- Quantized Fields and their Interpretation -- Scattering Matrix and Observables in Scattering and Decays -- Particles with Spin 1/2 and the Dirac Equation -- Elements of Quantum Electrodynamics and Weak Interactions.
	Sommario/riassunto	Scheck's Quantum Physics presents a comprehensive introductory treatment, ideally suited for a two-semester course. Part One covers the basic principles and prime applications of quantum mechanics, from the uncertainty relations to many-body systems. Part Two introduces to relativistic quantum field theory and ranges from symmetries in quantum physics to electroweak interactions. Numerous worked-out examples as well as exercises, with solutions or hints, enables the book's use as an accompanying text for courses, and also for independent study. For both parts, the necessary mathematical framework is treated in adequate form and detail. The book ends with appendices covering mathematical fundamentals and enrichment

topics, plus selected biographical notes on pioneers of quantum mechanics and quantum field theory. The new edition was thoroughly revised and now includes new sections on quantization using the path integral method and on deriving generalized path integrals for bosonic and fermionic fields.