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Autore	Esposito Giampiero
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Sommario/riassunto	This 2004 textbook provides a pedagogical introduction to the formalism, foundations and applications of quantum mechanics. Part I covers the basic material which is necessary to understand the transition from classical to wave mechanics. Topics include classical dynamics, with emphasis on canonical transformations and the Hamilton-Jacobi equation, the Cauchy problem for the wave equation, Helmholtz equation and eikonal approximation, introduction to spin, perturbation theory and scattering theory. The Weyl quantization is presented in Part II, along with the postulates of quantum mechanics. Part III is devoted to topics such as statistical mechanics and black-

body radiation, Lagrangian and phase-space formulations of quantum mechanics, and the Dirac equation. This book is intended for use as a textbook for beginning graduate and advanced undergraduate courses. It is self-contained and includes problems to aid the reader's understanding.