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	Nota di contenuto	0.1 For whom this book is written*; Preface; 0.2 On the contents of some of the chapters; 0.3 Two beacons*; 0.4 Acknowledgments; Contents; 8.7 The emission and absorption of light; 1. The Fundamentals; 1.1 On intuition; 1.2 Space and time*; 1.3 Matter and substance*; 1.4 Motion*; 2. Units*; 2.1 Standards; 2.2 Circle and angles; 2.3 Units of time and length; 3. A Minimum of Mathematics; 3.1 Four operations of school mathematics and the imaginary unit*; 3.2 Powers of ten*; 3.3 Prefixes of the powers of ten; 3.4 Differentiation and integration; 3.5 Matrices; 4. Translational Motion*
		4.1 Free particle4.2 Maximum velocity c; 4.3 Energy and momentum of a particle; 4.4 Kinetic and potential energy in Newtonian mechanics; 4.5 Momentum in Newtonian mechanics; 4.6 Space and time in relativistic mechanics; 4.7 Energy and momentum in relativistic mechanics; 4.8 Particle's mass; 4.9 Rest energy; 4.10 Massless photon; 4.11 Masses of electron and proton; 5. Rotation and Quantization; 5.1 The spin and orbital rotation*; 5.2 About vectors and tensors; 5.3 The orbital angular momentum in theory of relativity; 5.4 Identity of particles*; 5.5 Quantization of S and L*
		5.6 More about spin*5.7 Fermions and bosons*; 5.8 Elementary quantum state*; 5.9 Bound states*; 6. Particles as Corpuscles and Waves; 6.1 Wave vector*; 6.2 The wave function*; 6.3 Probability amplitude*; 6.4 The role of chance in the decay*; 6.5 The role of chance in the two-slit experiments; 6.6 Uncertainty relations*; 6.7 "Correct" and "incorrect" questions*; 6.8 Schrodinger equation; 6.9 The Klein-Fock-Gordon equation; 6.10 Dirac equation; 6.11 Action; 7. More

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11.11 Renormalizability of QED

| Sommario/riassunto | This little book concentrates on the foundations of modern physics (its "ABC's") and its most fundamental constants: c - the velocity of light and ? - the quantum of action. First of all, the book is addressed to professional physicists, but in order to achieve maximal concentration and clarity it uses the simplest (high school) mathematics. As a result many pages of the book will be useful to college students and may appeal to a more general audience. |