

1. Record Nr.	UNINA9910972880703321
Autore	Sadovskii Michael V.
Titolo	Quantum Field Theory / / Michael V. Sadovskii
Pubbl/distr/stampa	Berlin ; ; Boston : , : De Gruyter, , [2019] ©2019
ISBN	9783110645262 3110645262 9783110648522 3110648520
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (XII, 431 p.)
Collana	Texts and Monographs in Theoretical Physics
Classificazione	UO 4000
Disciplina	530.14/3
Soggetti	Quantum field theory Kondensierte Materie Quantenfeldtheorie SCIENCE / Physics / Quantum Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Frontmatter -- Preface -- Contents -- 1. Basics of elementary particles -- 2. Lagrange formalism. Symmetries and gauge fields -- 3. Canonical quantization, symmetries in quantum field theory -- 4. The Feynman theory of positron and elementary quantum electrodynamics -- 5. Scattering matrix -- 6. Invariant perturbation theory -- 7. Exact propagators and vertices -- 8. Some applications of quantum electrodynamics -- 9. Path integrals and quantum mechanics -- 10. Functional integrals: scalars and spinors -- 11. Functional integrals: gauge fields -- 12. The Weinberg-Salam model -- 13. Renormalization -- 14. Nonperturbative approaches -- Bibliography -- Index
Sommario/riassunto	This book discusses the main concepts of the Standard Model of elementary particles in a compact and straightforward way. The theoretical results are derived using the physical phenomena as a starting point. This inductive approach allows a deep understanding of the methods used for solving problems in this field. This second, revised edition is expanded with biographical notes contextualizing the

main results in quantum field theory.
