1. Record Nr. UNINA9910453546803321

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Titolo	Lectures on quantum chromodynamics [[electronic resource] /] / Andrei Smilga
Pubbl/distr/stampa	River Edge, NJ, : World Scientific, c2001
ISBN	1-281-95626-0 9786611956264 981-281-059-5
Descrizione fisica	1 online resource (352 p.)
Disciplina	539.7548
Soggetti	Quantum chromodynamics Particles (Nuclear physics) Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 315-317) and index.
Nota di contenuto	Contents ; Preface ; Notation and Conventions ; Introduction: Some History ; PART 1: FOUNDATIONS ; Lecture 1 Yang-Mills Field ; 1.1 Path Ordered Exponentials. Invariant Actions ; 1.2 Classical Solutions ; Lecture 2 Instantons ; 2.1 Topological Charge ; 2.2 Explicit Solutions Lecture 3 Path Integral in Quantum Mechanics 3.1 Conventional Approach ; 3.2 Euclidean Path Integral ; 3.3 Holomorphic Representation ; 3.4 Grassmann Dynamic Variables ; Lecture 4 Quantization of Gauge Theories ; 4.1 Dirac Quantization Procedure ; 4.2 Path Integral on the Lattice Lecture 5 -Vacuum 5.1 Quantum Pendulum ; 5.2 Large Gauge Transformations in Non-Abelian Theory ; PART 2: PERTURBATION THEORY ; Lecture 6 Diagram Technique in Simple and Complicated Theories ; 6.1 Feynman Rules from Path Integral ; 6.2 Fixing the Gauge ; Lecture 7 When the Gauge is

Fixed...; 7.1 Gribov Copies
7.2 Ward Identities 7.3 Ghosts and Unitarity
; 7.4 BRST Quantization ; Lecture 8 Regularization and
Renormalization ; 8.1 Different
Regularization Schemes ; 8.2 Renormalized
Theory as an Effective Theory. Slavnov-Taylor Identities
; Lecture 9 Running Coupling Constant
9.1 One-loop Calculations 9.2 Renormalization
Group. Asymptotic Freedom and Infrared Slavery
; 9.3 Observables. Ambiguities. Anomalous Dimensions
; Lecture 10 Weathering Infrared Storms ;
10.1 Bloch-Nordsieck Cancellation ; 10.2
Non-Abelian Complications. Coherent States
Lecture 11 Collinear Singularities: Theory and Phenomenology

Sommario/riassunto

Quantum chromodynamics is the fundamental theory of strong interactions. It is a physical theory describing Nature. Lectures on Quantum Chromodynamics concentrates, however, not on the phenomenological aspect of QCD; books with comprehensive coverage of phenomenological issues have been written. What the reader will find in this book is a profound discussion on the theoretical foundations of QCD with emphasis on the nonperturbative formulation of the theory: What is gauge symmetry on the classical and on the quantum level? What is the path integral in field theory? How to define the pa