

1. Record Nr.	UNINA9910155386403321
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Titolo	Parton densities in quantum chromodynamics : gauge invariance, path-dependence, and Wilson lines / / Igor O. Cherednikov, Frederik F. Van der Veken
Pubbl/distr/stampa	Berlin, [Germany] : , : De Gruyter, , 2017 ©2017
ISBN	3-11-043068-1 3-11-043060-6
Descrizione fisica	1 online resource (226 pages)
Collana	De Gruyter Studies in Mathematical Physics, , 2194-3532 ; ; Volume 37
Disciplina	539.7/548
Soggetti	Quantum chromodynamics Partons Gauge invariance Gauge fields (Physics) Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Frontmatter -- Preface -- Contents -- 1. Introduction -- 2. Particle Number Operators in Quantum Mechanics and in Quantum Field Theory -- 3. Geometry of Quantum Field Theories -- 4. Basics of Wilson Lines in QCD -- 5. Gauge-Invariant Parton Densities -- 6. Simplifying Wilson Line Calculations -- A. Brief Literature Guide -- B. Conventions and Reference Formulae -- C. Integrations -- Bibliography -- Index
Sommario/riassunto	The purpose of this book is to give a systematic pedagogical exposition of the quantitative analysis of Wilson lines and gauge-invariant correlation functions in quantum chromodynamics. Using techniques from the previous volume (Wilson Lines in Quantum Field Theory, 2014), an ab initio methodology is developed and practical tools for its implementation are presented. Emphasis is put on the implications of gauge invariance and path-dependence properties of transverse-momentum dependent parton density functions. The latter are associated with the QCD factorization approach to semi-inclusive hadronic processes, studied at currently operating and planned

experimental facilities. Contents:IntroductionParticle Number Operators in Quantum Mechanics and in Quantum Field TheoryGeometry of Quantum Field TheoriesBasics of Wilson Lines in QCDGauge-Invariant Parton DensitiesSimplifying Wilson Line CalculationsBrief Literature GuideConventions and Reference FormulaeIntegrationsBibliographyIndex
