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Altri autori (Persone)	AnselminoM AvakianH
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Nota di contenuto	Title Page; INDICE; Preface; Gruppo fotografico dei partecipanti al Corso; Experimental methods in polarized DIS and SIDIS; Introduction; Components of typical DIS and SIDIS experiments; Polarized beams; Polarized targets; Detector elements; Magnets; Wire chambers; Vertex trackers; Scintillators; Cherenkov counters and transition radiation detectors; Electromagnetic calorimeters; Hadronic calorimeters and other detector types; Experimental facilities; Methods and challenges in the analysis of DIS and SIDIS experiments; Calibration; Observables; Raw asymmetries; Dilution Beam and target polarizationBackgrounds; Corrections and model inputs; Conclusion; Transverse momenta of partons in high-energy scattering processes; Introduction; Basics; Quantum mechanics; Momenta and phase space; Quantum field theory; Electroweak

scattering processes; Structure functions and cross-sections; Virtual photon cross-sections; Form factors; Partons in QCD; The diagrammatic approach; Correlators, describing parton distributions; The operator in coordinate space; Interpretation as densities; Relation to forward amplitudes; Quark correlation functions in 1PI leptoproduction
Structure functions and cross-sectionsThe parton model approach; Collinear parton distributions; Bounds on the distribution functions; Transverse-momentum-dependent correlation functions; Fragmentation functions; Examples of azimuthal asymmetries; Inclusion of subleading contributions; Color gauge invariance; Gluonic pole matrix elements; Gluon TMDs; Concluding remarks; Appendix A What information is in the form factors; Appendix B Polarized leptoproduction; Appendix C Polarized parton densities; Appendix D Forms of quantization; Appendix E Field quantization in front form
Generalized parton distributionsIntroduction; Factorization in QCD; Examples for factorization: DIS and DVCS; Kinematics; Dominant momentum regions; Power counting; Collinear expansion; Parton distributions and hard-scattering kernels; Loop corrections and evolution; Properties and physics of GPDs; Sum rules; Impact parameter; Transverse deformation and spin-orbit correlations; Transverse momentum vs. transverse position of partons; Studying GPDs in exclusive reactions; From process amplitudes to GPDs; A closer look at DVCS; TMDs at work; Introduction; Notation; Inclusive DIS
DIS in the parton modelDIS beyond the parton model; Semi-inclusive DIS; Semi-inclusive DIS in the parton model; The correlation functions; Structure functions in the parton model; Beyond the parton model; Beyond the parton model: high transverse momentum; Some phenomenology: unpolarized cross-sections; Weighted asymmetries; Phenomenology of transverse-momentum-dependent distributions; Introduction; Moments of TMDs and three-dimensional partonic structure; The Hilbert space of state vectors; Unitarity; Hadron tensors and structure functions; SIDIS cross-section; Structure functions; F_UU, T
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