

References

To find unpublished preprints and reports, try a search at the SPIRES database, <http://www.slac.stanford.edu/spires/hep/>. Many are available in scanned form. See <http://arxiv.org/> for e-prints with only an arXiv number. These www addresses were accurate in 2010.

- Abazov V. M., *et al.* (2008). Measurement of the inclusive jet cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV. *Phys. Rev. Lett.* **101**, 062001. arXiv:0802.2400.
- Abe F., *et al.* (1990). Pseudorapidity distributions of charged particles produced in $p\bar{p}$ interactions at $\sqrt{s} = 630$ GeV and 1800 GeV. *Phys. Rev.* **D41**, 2330.
- Abe F., *et al.* (1996). Inclusive jet cross section in $\bar{p}p$ collisions at $\sqrt{s} = 1.8$ TeV. *Phys. Rev. Lett.* **77**, 438–443. arXiv:hep-ex/9601008.
- Abe F., *et al.* (1997). Observation of diffractive W boson production at the Tevatron. *Phys. Rev. Lett.* **78**, 2698–2703. arXiv:hep-ex/9703010.
- Abramowitz M., Stegun I. A. (1964). *Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables*. New York: Dover.
- Abulencia A., *et al.* (2007). Measurement of the inclusive jet cross section using the k_T algorithm in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV with the CDF II detector. *Phys. Rev.* **D75**, 092006. arXiv:hep-ex/0701051.
- Adloff C., *et al.* (2003). Measurement and QCD analysis of neutral and charged current cross sections at HERA. *Eur. Phys. J.* **C30**, 1–32. arXiv:hep-ex/0304003.
- Affolder A. A., *et al.* (2000). The transverse momentum and total cross section of e^+e^- pairs in the Z boson region from $p\bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV. *Phys. Rev. Lett.* **84**, 845–850. arXiv:hep-ex/0001021.
- Airapetian A., *et al.* (2005). First measurement of the tensor structure function b_1 of the deuteron. *Phys. Rev. Lett.* **95**, 242001. arXiv:hep-ex/0506018.
- Airapetian A., *et al.* (2007). Precise determination of the spin structure function g_1 of the proton, deuteron and neutron. *Phys. Rev.* **D75**, 012007. arXiv:hep-ex/0609039.
- Airapetian A., *et al.* (2008). Evidence for a transverse single-spin asymmetry in lepton production of $\pi^+\pi^-$ pairs. *JHEP* **06**, 017. arXiv:0803.2367.
- Aivazis M. A. G., *et al.* (1994). Lepton production of heavy quarks. 2. A unified QCD formulation of charged and neutral current processes from fixed target to collider energies. *Phys. Rev.* **D50**, 3102–3118. arXiv:hep-ph/9312319.
- Aktas A., *et al.* (2007a). Dijet cross sections and parton densities in diffractive DIS at HERA. *JHEP* **10**, 042. arXiv:0708.3217.
- Aktas A., *et al.* (2007b). Tests of QCD factorisation in the diffractive production of dijets in deep-inelastic scattering and photoproduction at HERA. *Eur. Phys. J.* **C51**, 549–568. arXiv:hep-ex/0703022.
- Albino S., Kniehl B. A., Kramer G. (2008). AKK update: improvements from new theoretical input and experimental data. *Nucl. Phys.* **B803**, 42–104. arXiv:0803.2768.

- Alekhin S., Melnikov K., Petriello F. (2006). Fixed target Drell-Yan data and NNLO QCD fits of parton distribution functions. *Phys. Rev.* **D74**, 054033. arXiv:hep-ph/0606237.
- Allanach B. C., *et al.* (2006). Les Houches “Physics at TeV colliders 2005” Beyond the Standard Model working group: summary report. arXiv:hep-ph/0602198.
- Almeida L. G., Sterman G., Vogelsang W. (2009). Threshold resummation for dihadron production in hadronic collisions. *Phys. Rev.* **D80**, 074016. arXiv:0907.1234.
- Alner G. J., *et al.* (1986). Scaling of pseudorapidity distributions at c.m. energies up to 0.9 TeV. *Z. Phys.* **C33**, 1–6.
- Altarelli G., Parisi G. (1977). Asymptotic freedom in parton language. *Nucl. Phys.* **B126**, 298–318.
- Altarelli G., *et al.* (1979). Processes involving fragmentation functions beyond the leading order in QCD. *Nucl. Phys.* **B160**, 301–329.
- Amsler C., *et al.* (2008). Review of particle physics. *Phys. Lett.* **B667**, 1–1339.
- Anastasiou C., *et al.* (2003). Dilepton rapidity distribution in the Drell-Yan process at next-to-next-to-leading order in QCD. *Phys. Rev. Lett.* **91**, 182002. arXiv:hep-ph/0306192.
- Anastasiou C., *et al.* (2004). High-precision QCD at hadron colliders: electroweak gauge boson rapidity distributions at next-to-next-to leading order. *Phys. Rev.* **D69**, 094008. arXiv:hep-ph/0312266.
- Andersson B. (1998). *The Lund Model*. Cambridge: Cambridge University Press.
- Appelquist T., Carazzone J. (1975). Infrared singularities and massive fields. *Phys. Rev.* **D11**, 2856–2861.
- Arnold P. B., Kauffman R. P. (1991). W and Z production at next-to-leading order: from large q_T to small. *Nucl. Phys.* **B349**, 381–413.
- Artru X., Collins J. C. (1996). Measuring transverse spin correlations by 4-particle correlations in $e^+e^- \rightarrow 2$ jets. *Z. Phys.* **C69**, 277–286. arXiv:hep-ph/9504220.
- Artru X., Mekhfi M. (1990). Transversely polarized parton densities, their evolution and their measurement. *Z. Phys.* **C45**, 669–676.
- ATLAS Collaboration (2010). Charged-particle multiplicities in pp interactions at $\sqrt{s} = 900$ GeV measured with the ATLAS detector at the LHC. *Phys. Lett.* **B688**, 21–42. arXiv:1003.3124.
- Aybat S. M., Sterman G. (2009). Soft-gluon cancellation, phases and factorization with initial-state partons. *Phys. Lett.* **B671**, 46–50. arXiv:0811.0246.
- Bacchetta A., *et al.* (2004). Single-spin asymmetries: the Trento conventions. *Phys. Rev.* **D70**, 117504. arXiv:hep-ph/0410050.
- Bacchetta A., *et al.* (2007). Semi-inclusive deep inelastic scattering at small transverse momentum. *JHEP* **02**, 093. arXiv:hep-ph/0611265.
- Bacchetta A., *et al.* (2008). Matches and mismatches in the descriptions of semi-inclusive processes at low and high transverse momentum. *JHEP* **08**, 023. arXiv:0803.0227.
- Bacchetta A., *et al.* (2009). Asymmetries involving dihadron fragmentation functions: from DIS to e^+e^- annihilation. *Phys. Rev.* **D79**, 034029. arXiv:0812.0611.
- Badier J., *et al.* (1981). Angular distributions in the dimuon hadronic production at 150 GeV/c. *Zeit. Phys.* **C11**, 195–202.
- Bahr M., *et al.* (2008). Herwig++ physics and manual. *Eur. Phys. J.* **C58**, 639–707. arXiv:0803.0883.
- Baier R., Fey K. (1979). Finite corrections to quark fragmentation functions in perturbative QCD. *Z. Phys.* **C2**, 339–349.
- Baikov P. A., Chetyrkin K. G., Kuhn J. H. (2008). Order α_s^4 QCD corrections to Z and τ decays. *Phys. Rev. Lett.* **101**, 012002. arXiv:0801.1821.
- Bakker B. L. G., Leader E., Trueman T. L. (2004). A critique of the angular momentum sum rules and a new angular momentum sum rule. *Phys. Rev.* **D70**, 114001. arXiv:hep-ph/0406139.

- Balitsky I. (1999). Factorization and high-energy effective action. *Phys. Rev.* **D60**, 014020. arXiv:hep-ph/9812311.
- Balitsky I. I., Lipatov L. N. (1978). The pomeranchuk singularity in quantum chromodynamics. *Sov. J. Nucl. Phys.* **28**, 822–829.
- Barbieri R., *et al.* (1976). Mass corrections to scaling in deep inelastic processes. *Nucl. Phys.* **B117**, 50–76.
- Bardakci K., Halpern M. B. (1968). Theories at infinite momentum. *Phys. Rev.* **176**, 1686–1699.
- Bardeen W. A., *et al.* (1978). Deep-inelastic scattering beyond the leading order in asymptotically free gauge theories. *Phys. Rev.* **D18**, 3998–4017.
- Barone V., Drago A., Ratcliffe P. G. (2002). Transverse polarisation of quarks in hadrons. *Phys. Rept.* **359**, 1–168. arXiv:hep-ph/0104283.
- Barone V., Melis S., Prokudin A. (2009). The Boer-Mulders effect in unpolarized SIDIS: an analysis of the COMPASS and HERMES data on the $\cos 2\phi$ asymmetry. *Phys. Rev.* **D81**, 114026. arXiv:0912.5194.
- Bassetto A., Dalbosco M., Soldati R. (1987). Renormalization of the Yang-Mills theories in the light cone gauge. *Phys. Rev.* **D36**, 3138–3147.
- Bassetto A., *et al.* (1985). Yang-Mills theories in the light-cone gauge. *Phys. Rev.* **D31**, 2012–2019.
- Bauer C. W., Stewart I. W. (2001). Invariant operators in collinear effective theory. *Phys. Lett.* **B516**, 134–142. arXiv:hep-ph/0107001.
- Bauer C. W., *et al.* (2001). An effective field theory for collinear and soft gluons: heavy to light decays. *Phys. Rev.* **D63**, 114020. arXiv:hep-ph/0011336.
- Becchi C., Rouet A., Stora R. (1975). Renormalization of the abelian Higgs-Kibble model. *Commun. Math. Phys.* **42**, 127–162.
- Becchi C., Rouet A., Stora R. (1976). Renormalization of gauge theories. *Annals Phys.* **98**, 287–321.
- Belitsky A. V., Müller D., Kirchner A. (2002). Theory of deeply virtual Compton scattering on the nucleon. *Nucl. Phys.* **B629**, 323–392. arXiv:hep-ph/0112108.
- Bengtsson M., Sjöstrand T. (1988). Parton showers in leptoproduction events. *Z. Phys.* **C37**, 465–476.
- Berera A., Soper D. E. (1996). Behavior of diffractive parton distribution functions. *Phys. Rev.* **D53**, 6162–6179. arXiv:hep-ph/9509239.
- Berger C. F., *et al.* (2009). Next-to-leading order QCD predictions for $W+3$ -jet distributions at hadron colliders. *Phys. Rev.* **D80**, 074036. arXiv:0907.1984.
- Berger E. R., Diehl M., Pire B. (2002). Timelike Compton scattering: exclusive photoproduction of lepton pairs. *Eur. Phys. J.* **C23**, 675–689. arXiv:hep-ph/0110062.
- Bern Z., Dixon L. J., Kosower D. A. (2007). On-shell methods in perturbative QCD. *Annals Phys.* **322**, 1587–1634. arXiv:0704.2798.
- Bernreuther W. (1983a). Heavy quark effects on the parameters of quantum chromodynamics defined by minimal subtraction. *Z. Phys.* **C20**, 331–333.
- Bernreuther W. (1983b). Decoupling of heavy quarks in quantum chromodynamics. *Ann. Phys.* **151**, 127–162.
- Bernreuther W., Wetzel W. (1982). Decoupling of heavy quarks in the minimal subtraction scheme. *Nucl. Phys.* **B197**, 228–236. Erratum: **B513**, 758 (1998).
- Bethke S. (2009). The 2009 world average of α_s . *Eur. Phys. J.* **C64**, 689–703. arXiv:0908.1135.
- Bethke S., *et al.* (2009). Determination of the strong coupling α_s from hadronic event shapes and NNLO QCD predictions using JADE data. *Eur. Phys. J.* **C64**, 351–360. arXiv:0810.1389.
- Bianconi A., *et al.* (2009). Effects of azimuth-symmetric acceptance cutoffs on the measured asymmetry in unpolarized Drell-Yan fixed target experiments. arXiv:0911.5493.

- Binosi D., *et al.* (2009). JaxoDraw: a graphical user interface for drawing Feynman diagrams. Version 2.0 release notes. *Comput. Phys. Commun.* **180**, 1709–1715. Available from: <http://jaxodraw.sourceforge.net/>, arXiv:0811.4113.
- Binoth T., *et al.* (2008). NLO QCD corrections to tri-boson production. *JHEP* **06**, 082. arXiv:0804.0350.
- Bjorken J. D. (1966). Applications of the chiral $U(6) \otimes U(6)$ algebra of current densities. *Phys. Rev.* **148**, 1467–1478.
- Bjorken J. D., Paschos E. A. (1969). Inelastic electron-proton and γ -proton scattering and the structure of the nucleon. *Phys. Rev.* **185**, 1975–1982.
- Bloom E. D., Gilman F. J. (1971). Scaling and the behavior of nucleon resonances in inelastic electron-nucleon scattering. *Phys. Rev.* **D4**, 2901–2916.
- Blümlein J., Robaschik D. (2000). On the structure of the virtual Compton amplitude in the generalized Bjorken region: integral relations. *Nucl. Phys.* **B581**, 449–473. arXiv:hep-ph/0002071.
- Bodwin G. T. (1985). Factorization of the Drell-Yan cross-section in perturbation theory. *Phys. Rev.* **D31**, 2616–2642. Erratum: **D34**, 3932 (1986).
- Bodwin G. T., Brodsky S. J., Lepage G. P. (1981). Initial state interactions and the Drell-Yan process. *Phys. Rev. Lett.* **47**, 1799–1803.
- Boer D. (2008). Transversity asymmetries. Talk given at Transversity 2008: 2nd International Workshop on Transverse Polarization Phenomena in Hard Processes, Ferrara, Italy, 28–31 May 2008. arXiv:0808.2886.
- Boer D. (2009). Angular dependences in inclusive two-hadron production at BELLE. *Nucl. Phys.* **B806**, 23–67. arXiv:0804.2408.
- Bogoliubov N. N., Shirkov D. V. (1959). *Introduction to the Theory of Quantized Fields*. New York: Wiley-Interscience.
- Bomhof C. J., Mulders P. J., Pijlman F. (2004). Gauge link structure in quark-quark correlators in hard processes. *Phys. Lett.* **B596**, 277–286. arXiv:hep-ph/0406099.
- Born M., Heisenberg W., Jordan P. (1926). On quantum mechanics II. *Zeit. f. Phys.* **35**, 557–615.
- Born M., Jordan P. (1925). On quantum mechanics. *Zeit. f. Phys.* **34**, 858–888.
- Bouchiat C., Fayet P., Meyer P. (1971). Galilean invariance in the infinite momentum frame and the parton model. *Nucl. Phys.* **B34**, 157–176.
- Brock R., *et al.* (1995). Handbook of perturbative QCD: version 1.0. *Rev. Mod. Phys.* **67**, 157–248.
- Brodsky S. J., Farrar G. R. (1973). Scaling laws at large transverse momentum. *Phys. Rev. Lett.* **31**, 1153–1156.
- Brodsky S. J., Hwang D.-S., Schmidt I. (2002). Final-state interactions and single-spin asymmetries in semi-inclusive deep inelastic scattering. *Phys. Lett.* **B530**, 99–107. arXiv:hep-ph/0201296.
- Brodsky S. J., Lepage G. P. (1989). Exclusive processes in quantum chromodynamics. *Adv. Ser. Direct. High Energy Phys.* **5**, 93–240.
- Brodsky S. J., Pauli H.-C., Pinsky S. S. (1998). Quantum chromodynamics and other field theories on the light cone. *Phys. Rept.* **301**, 299–486. arXiv:hep-ph/9705477.
- Brodsky S. J., *et al.* (1994). Diffractive lepton production of vector mesons in QCD. *Phys. Rev.* **D50**, 3134–3144. arXiv:hep-ph/9402283.
- Brodsky S. J., *et al.* (2001). Light-cone representation of the spin and orbital angular momentum of relativistic composite systems. *Nucl. Phys.* **B593**, 311–335. arXiv:hep-th/0003082.
- Brown L. S. (1992). *Quantum Field Theory*. Cambridge: Cambridge University Press.
- Buras A. J., *et al.* (1977). Asymptotic freedom beyond the leading order. *Nucl. Phys.* **B131**, 308–326.

- Callan C. G., Gross D. J. (1969). High-energy electroproduction and the constitution of the electric current. *Phys. Rev. Lett.* **22**, 156–159.
- Callan C. G., Gross D. J. (1973). Bjorken scaling in quantum field theory. *Phys. Rev.* **D8**, 4383–4394.
- Cardy J. L., Winbow G. A. (1974). The absence of final state interaction corrections to the Drell-Yan formula for massive lepton pair production. *Phys. Lett.* **B52**, 95.
- Catani S., Ciafaloni M., Marchesini G. (1986). Noncancelling infrared divergences in QCD coherent state. *Nucl. Phys.* **B264**, 588–620.
- Catani S., Fiorani F., Marchesini G. (1990a). QCD coherence in initial state radiation. *Phys. Lett.* **B234**, 339–345.
- Catani S., Fiorani F., Marchesini G. (1990b). Small- x behavior of initial state radiation in perturbative QCD. *Nucl. Phys.* **B336**, 18–85.
- Chang S.-J., Ma S.-K. (1969). Feynman rules and quantum electrodynamics at infinite momentum. *Phys. Rev.* **180**, 1506–1513.
- Chekanov S., *et al.* (2005). An NLO QCD analysis of inclusive cross-section and jet-production data from the ZEUS experiment. *Eur. Phys. J.* **C42**, 1–16. arXiv:hep-ph/0503274.
- Chekanov S., *et al.* (2010). A QCD analysis of ZEUS diffractive data. *Nucl. Phys.* **B831**, 1–25. arXiv:0911.4119.
- Chetyrkin K. G., Harlander R. V., Kuhn J. H. (2000). Quartic mass corrections to R_{had} at $\mathcal{O}(\alpha_s^3)$. *Nucl. Phys.* **B586**, 56–72. Erratum: **B634**, 413–414 (2002). arXiv:hep-ph/0005139.
- Chetyrkin K. G., Kniehl B. A., Steinhauser M. (1997). Strong coupling constant with flavour thresholds at four loops in the $\overline{\text{MS}}$ scheme. *Phys. Rev. Lett.* **79**, 2184–2187. arXiv:hep-ph/9706430.
- Chetyrkin K. G., Kniehl B. A., Steinhauser M. (1998). Decoupling relations to $\mathcal{O}(\alpha_s^3)$ and their connection to low-energy theorems. *Nucl. Phys.* **B510**, 61–87. arXiv:hep-ph/9708255.
- Ciafaloni M. (1988). Coherence effects in initial jets at small Q^2/s . *Nucl. Phys.* **B296**, 49–74.
- Coleman S., Gross D. J. (1973). Price of asymptotic freedom. *Phys. Rev. Lett.* **31**, 851–854.
- Coleman S., Norton R. E. (1965). Singularities in the physical region. *Nuovo Cim.* **38**, 438–442.
- Coleman S., Weinberg E. (1973). Radiative corrections as the origin of spontaneous symmetry breaking. *Phys. Rev.* **D7**, 1888–1910.
- Collins J. C. (1974). Structure of counterterms in dimensional regularization. *Nucl. Phys.* **B80**, 341–348.
- Collins J. C. (1980). Algorithm to compute corrections to the Sudakov form-factor. *Phys. Rev.* **D22**, 1478–1489.
- Collins J. C. (1984). *Renormalization*. Cambridge: Cambridge University Press.
- Collins J. C. (1989). Sudakov form factors. *Adv. Ser. Direct. High Energy Phys.* **5**, 573–614. arXiv:hep-ph/0312336.
- Collins J. C. (1993). Fragmentation of transversely polarized quarks probed in transverse momentum distributions. *Nucl. Phys.* **B396**, 161–182. arXiv:hep-ph/9208213.
- Collins J. C. (1998a). Hard-scattering factorization with heavy quarks: a general treatment. *Phys. Rev.* **D58**, 094002. arXiv:hep-ph/9806259.
- Collins J. C. (1998b). Proof of factorization for diffractive hard scattering. *Phys. Rev.* **D57**, 3051–3056. Erratum: **D61**, 019902 (2000). arXiv:hep-ph/9709499.
- Collins J. C. (2002). Leading-twist single-transverse-spin asymmetries: Drell-Yan and deep-inelastic scattering. *Phys. Lett.* **B536**, 43–48. arXiv:hep-ph/0204004.
- Collins J. C., Frankfurt L., Strikman M. (1997). Factorization for hard exclusive electroproduction of mesons in QCD. *Phys. Rev.* **D56**, 2982–3006. arXiv:hep-ph/9611433.
- Collins J. C., Hautmann F. (2000). Infrared divergences and non-lightlike eikonal lines in Sudakov processes. *Phys. Lett.* **B472**, 129–134. arXiv:hep-ph/9908467.

- Collins J. C., Heppelmann S. F., Ladinsky G. A. (1994). Measuring transversity densities in singly polarized hadron-hadron and lepton-hadron collisions. *Nucl. Phys.* **B420**, 565–582. arXiv:hep-ph/9305309.
- Collins J. C., Jung H. (2005). Need for fully unintegrated parton densities. arXiv:hep-ph/0508280.
- Collins J. C., Manohar A. V., Wise M. B. (2006). Renormalization of the vector current in QED. *Phys. Rev.* **D73**, 105019. arXiv:hep-th/0512187.
- Collins J. C., Metz A. (2004). Universality of soft and collinear factors in hard-scattering factorization. *Phys. Rev. Lett.* **93**, 252001. arXiv:hep-ph/0408249.
- Collins J. C., Qiu J.-W. (2007). k_T factorization is violated in production of high-transverse-momentum particles in hadron-hadron collisions. *Phys. Rev.* **D75**, 114014. arXiv:0705.2141.
- Collins J. C., Rogers T. C. (2008). The gluon distribution function and factorization in Feynman gauge. *Phys. Rev.* **D78**, 054012. arXiv:0805.1752.
- Collins J. C., Rogers T. C., Stašo A. M. (2008). Fully unintegrated parton correlation functions and factorization in lowest order hard scattering. *Phys. Rev.* **D77**, 085009. arXiv:0708.2833.
- Collins J. C., Scalise R. J. (1994). The renormalization of composite operators in Yang-Mills theories using general covariant gauge. *Phys. Rev.* **D50**, 4117–4136. arXiv:hep-ph/9403231.
- Collins J. C., Soper D. E. (1977). Angular distribution of dileptons in high-energy hadron collisions. *Phys. Rev.* **D16**, 2219–2225.
- Collins J. C., Soper D. E. (1981). Back-to-back jets in QCD. *Nucl. Phys.* **B193**, 381–443. Erratum: **B213**, 545 (1983).
- Collins J. C., Soper D. E. (1982a). Back-to-back jets: Fourier transform from b to k_T . *Nucl. Phys.* **B197**, 446–476.
- Collins J. C., Soper D. E. (1982b). Parton distribution and decay functions. *Nucl. Phys.* **B194**, 445–492.
- Collins J. C., Soper D. E., Sterman G. (1985a). Factorization for short distance hadron-hadron scattering. *Nucl. Phys.* **B261**, 104–142.
- Collins J. C., Soper D. E., Sterman G. (1985b). Transverse momentum distribution in Drell-Yan pair and W and Z boson production. *Nucl. Phys.* **B250**, 199–224.
- Collins J. C., Soper D. E., Sterman G. (1988). Soft gluons and factorization. *Nucl. Phys.* **B308**, 833–856.
- Collins J. C., Sterman G. (1981). Soft partons in QCD. *Nucl. Phys.* **B185**, 172–188.
- Collins J. C., Tung W.-K. (1986). Calculating heavy quark distributions. *Nucl. Phys.* **B278**, 934–950.
- Collins J. C., Wilczek F., Zee A. (1978). Low-energy manifestations of heavy particles: Application to the neutral current. *Phys. Rev.* **D18**, 242–247.
- Collins J. C., Zu X. (2005). Initial state parton showers beyond leading order. *JHEP* **03**, 059. arXiv:hep-ph/0411332.
- Connes A., Kreimer D. (2000). Renormalization in quantum field theory and the Riemann-Hilbert problem I: the Hopf algebra structure of graphs and the main theorem. *Comm. Math. Phys.* **210**, 249–273. arXiv:hep-th/9912092.
- Connes A., Kreimer D. (2002). Insertion and elimination: the doubly infinite Lie algebra of Feynman graphs. *Annales Henri Poincaré* **3**, 411–433. arXiv:hep-th/0201157.
- Conway J. S., *et al.* (1989). Experimental study of muon pairs produced by 252-GeV pions on tungsten. *Phys. Rev.* **D39**, 92–122.
- Curci G., Furmanski W., Petronzio R. (1980). Evolution of parton densities beyond leading order: the nonsinglet case. *Nucl. Phys.* **B175**, 27–92.
- Cutkosky R. E. (1960). Singularities and discontinuities of Feynman amplitudes. *J. Math. Phys.* **1**, 429–433.

- Czakon M. (2005). The four-loop QCD β -function and anomalous dimensions. *Nucl. Phys.* **B710**, 485–498. arXiv:hep-ph/0411261.
- Dashen R. F., Gross D. J. (1981). The relationship between lattice and continuum definitions of the gauge theory coupling. *Phys. Rev.* **D23**, 2340.
- de Florian D., Sassot R., Stratmann M. (2007). Global analysis of fragmentation functions for protons and charged hadrons. *Phys. Rev.* **D76**, 074033. arXiv:0707.1506.
- DeGrand T., Detar C. E. (2006). *Lattice Methods for Quantum Chromodynamics*. Singapore: World Scientific.
- Del Debbio L., et al. (2007). Neural network determination of parton distributions: the nonsinglet case. *JHEP* **03**, 039. arXiv:hep-ph/0701127.
- DeTar C. E., Ellis S. D., Landshoff P. V. (1975). Final state interactions in large transverse momentum lepton and hadron production. *Nucl. Phys.* **B87**, 176.
- Diehl M. (2003). Generalized parton distributions. *Phys. Rept.* **388**, 41–277. arXiv:hep-ph/0307382.
- Diehl M., Sapeta S. (2005). On the analysis of lepton scattering on longitudinally or transversely polarized protons. *Eur. Phys. J.* **C41**, 515–533. arXiv:hep-ph/0503023.
- Dine M. (2000). TASI lectures on the strong CP problem. arXiv:hep-ph/0011376.
- Dirac P. A. M. (1926). The fundamental equations of quantum mechanics. *Proc. Roy. Soc. A* **109**, 642–653.
- Dirac P. A. M. (1949). Forms of relativistic dynamics. *Rev. Mod. Phys.* **21**, 392–399.
- Dissertori G., Knowles I. G., Schmelling M. (2003). *Quantum Chromodynamics: High Energy Experiments and Theory*. Oxford: Oxford University Press.
- Dittmaier S., Kabelschacht A., Kasprzik T. (2008). Polarized QED splittings of massive fermions and dipole subtraction for non-collinear-safe observables. *Nucl. Phys.* **B800**, 146–189. arXiv:0802.1405.
- Dixon J. A., Taylor J. C. (1974). Renormalization of Wilson operators in gauge theories. *Nucl. Phys.* **B78**, 552–560.
- Dokshitzer Y. L. (1977). Calculation of the structure functions for deep inelastic scattering and e^+e^- annihilation by perturbation theory in quantum chromodynamics. *Sov. Phys. JETP* **46**, 641–653.
- Donohue J. T., Gottlieb S. A. (1981). Dilepton production from collisions of polarized spin-1/2 hadrons. I. General kinematic analysis. *Phys. Rev.* **D23**, 2577–2580.
- Doplicher S., Haag R., Roberts J. E. (1974). Local observables and particle statistics. 2. *Commun. Math. Phys.* **35**, 49–85.
- Drell S. D., Levy D. J., Yan T.-M. (1970). A theory of deep inelastic lepton-nucleon scattering and lepton-pair annihilation processes. III. Deep inelastic electron-positron annihilation. *Phys. Rev.* **D1**, 1617–1639.
- Drell S. D., Yan T.-M. (1970). Massive lepton pair production in hadron-hadron collisions at high-energies. *Phys. Rev. Lett.* **25**, 316–320.
- Drühl K., Haag R., Roberts J. E. (1970). On parastatistics. *Commun. Math. Phys.* **18**, 204–226.
- Eden R. J., et al. (1966). *The Analytic S-matrix*. Cambridge: Cambridge University Press.
- Efremov A. V. (1978). Polarization in high P_T and cumulative hadron production. *Sov. J. Nucl. Phys.* **28**, 83.
- Einhorn M. B. (1976). Confinement, form factors, and deep-inelastic scattering in two-dimensional quantum chromodynamics. *Phys. Rev.* **D14**, 3451–3471.
- Einhorn M. B. (1977). Failure of the parton model in inclusive electron-positron annihilation. *Phys. Rev.* **D15**, 3037–3043.
- Elitzur S. (1975). Impossibility of spontaneously breaking local symmetries. *Phys. Rev.* **D12**, 3978–3982.

- Ellis R. K., Stirling W. J., Webber B. R. (1996). *QCD and Collider Physics*. Cambridge: Cambridge University Press.
- Ellis R. K., *et al.* (1979). Perturbation theory and the parton model in QCD. *Nucl. Phys.* **B152**, 285–329.
- Eskola K. J., Paukkunen H., Salgado C. A. (2009). EPS09 – a new generation of NLO and LO nuclear parton distribution functions. *JHEP* **04**, 065. arXiv:0902.4154.
- Faddeev L. D., Jackiw R. (1988). Hamiltonian reduction of unconstrained and constrained systems. *Phys. Rev. Lett.* **60**, 1692–1694.
- Faddeev L. D., Popov V. N. (1967). Feynman diagrams for the Yang-Mills field. *Phys. Lett.* **B25**, 29–30.
- Fadin V. S., Kuraev E. A., Lipatov L. N. (1975). On the pomeranchuk singularity in asymptotically free theories. *Phys. Lett.* **B60**, 50–52.
- Falciano S., *et al.* (1986). Angular distributions of muon pairs produced by 194 GeV/c negative pions. *Z. Phys.* **C31**, 513–526.
- Farhi E. (1977). Quantum chromodynamics test for jets. *Phys. Rev. Lett.* **39**, 1587–1588.
- Fetter A. L., Walecka J. D. (1980). *Quantum Theory of Many-Particle Systems*. New York: McGraw-Hill.
- Feynman R. P. (1972). *Photon-Hadron Interactions*. Reading, MA: Benjamin.
- Fleming S. (2009). Soft collinear effective theory: an overview. *PoS EFT09*, 002 arXiv:0907.3897.
- Floratos E. G., Kounnas C., Lacaze R. (1981). Higher order QCD effects in inclusive annihilation and deep inelastic scattering. *Nucl. Phys.* **B192**, 417–462.
- Floratos E. G., Lacaze R., Kounnas C. (1981). Space and timelike cut vertices in QCD beyond the leading order. 2. The singlet sector. *Phys. Lett.* **B98**, 285–290.
- Floratos E. G., Ross D. A., Sachrajda C. T. (1979). Higher order effects in asymptotically free gauge theories. 2. Flavor singlet Wilson operators and coefficient functions. *Nucl. Phys.* **B152**, 493–520.
- Frederix R., Gehrmann T., Greiner N. (2008). Automation of the dipole subtraction method in MadGraph/MadEvent. *JHEP* **09**, 122. arXiv:0808.2128.
- Fritzsch H., Gell-Mann M. (1972). Current algebra: quarks and what else? In *Proceedings of XVI International Conference on High-Energy Physics, Chicago 1972* (J.D. Jackson, A. Roberts, eds.), 135–165. arXiv:hep-ph/0208010.
- Fritzsch H., Gell-Mann M., Leutwyler H. (1973). Advantages of the color octet gluon picture. *Phys. Lett.* **B47**, 365–368.
- Furmanski W., Petronzio R. (1980). Singlet parton densities beyond leading order. *Phys. Lett.* **B97**, 437–442.
- Gastmans R., Wu T. T. (1990). *The Ubiquitous Photon: Helicity Method for QED and QCD*. Oxford: Oxford University Press.
- Gehrmann T., Luisoni G., Stenzel H. (2008). Matching NLLA + NNLO for event shape distributions. *Phys. Lett.* **B664**, 265–273. arXiv:0803.0695.
- Gell-Mann M. (1962). Symmetries of baryons and mesons. *Phys. Rev.* **125**, 1067–1084.
- Gell-Mann M. (1964). A schematic model of baryons and mesons. *Phys. Lett.* **8**, 214–215.
- Gonzalez-Arroyo A., Lopez C. (1980). Second order contributions to the structure functions in deep inelastic scattering. 3. The singlet case. *Nucl. Phys.* **B166**, 429–459.
- Grammer, G. J., Yennie D. R. (1973). Improved treatment for the infrared divergence problem in quantum electrodynamics. *Phys. Rev.* **D8**, 4332–4344.
- Grazzini M., Trentadue L., Veneziano G. (1998). Fracture functions from cut vertices. *Nucl. Phys.* **B519**, 394–404. arXiv:hep-ph/9709452.
- Gribov V. N. (1973). Space-time description of hadron interactions at high energies. arXiv:hep-ph/0006158.

- Gribov V. N. (2009). *Strong Interactions of Hadrons at High Energies*. Cambridge: Cambridge University Press.
- Gribov V. N., Lipatov L. N. (1972). Deep inelastic ep scattering in perturbation theory. *Sov. J. Nucl. Phys.* **15**, 438–450.
- Gross D. J., Wilczek F. (1973a). Ultraviolet behavior of non-Abelian gauge theories. *Phys. Rev. Lett.* **30**, 1343–1346.
- Gross D. J., Wilczek F. (1973b). Asymptotically free gauge theories. 1. *Phys. Rev.* **D8**, 3633–3652.
- Guanziroli M., *et al.* (1988). Angular distributions of muon pairs produced by negative pions on deuterium and tungsten. *Z. Phys.* **C37**, 545–556.
- Guidal M., Vanderhaeghen M. (2003). Double deeply virtual Compton scattering off the nucleon. *Phys. Rev. Lett.* **90**, 012001. arXiv:hep-ph/0208275.
- Gupta S., Quinn H. R. (1982). Heavy quarks and perturbative QCD calculations. *Phys. Rev.* **D25**, 838.
- H1 Collaboration. (2010). Diffractive electroproduction of ρ and ϕ mesons at HERA. *JHEP* **05**, 032. arXiv:0910.5831.
- H1 website. (2010). Available from: <http://www-h1.desy.de>.
- Halzen F., Martin A. D. (1984). *Quarks and Leptons: An Introductory Course in Modern Particle Physics*. New York: Wiley.
- Hamberg R., van Neerven W. L. (1992). The correct renormalization of the gluon operator in a covariant gauge. *Nucl. Phys.* **B379**, 143–171.
- Hasegawa K., Moch S., Uwer P. (2008). Automating dipole subtraction. *Nucl. Phys. Proc. Suppl.* **183**, 268–273. arXiv:0807.3701.
- Hasenfratz A., Hasenfratz P. (1980). The connection between the Λ parameters of lattice and continuum QCD. *Phys. Lett.* **B93**, 165.
- Heinzel T. (2001). Light-cone quantization: foundations and applications. *Lect. Notes Phys.* **572**, 55–142. arXiv:hep-th/0008096.
- Heinzel T. (2003). Light-cone zero modes revisited. arXiv:hep-th/0310165.
- Heinzel T. (2007). A novel approach to light-front perturbation theory. *Phys. Rev.* **D75**, 025013. arXiv:hep-ph/0610293.
- Heinzel T., Ilderton A. (2007). Noncommutativity from spectral flow. *J. Phys.* **A40**, 9097–9125. arXiv:0704.3547.
- Heinzel T., Werner E. (1994). Light front quantization as an initial boundary value problem. *Z. Phys.* **C62**, 521–532. arXiv:hep-th/9311108.
- Heney F., Savit R. (1974). Final state interactions in the parton model and massive lepton pair production. *Phys. Lett.* **B52**, 71.
- Hobbs T., Melnitchouk W. (2008). Finite- Q^2 corrections to parity-violating DIS. *Phys. Rev.* **D77**, 114023. arXiv:0801.4791.
- Hofstadter R. (1956). Electron scattering and nuclear structure. *Rev. Mod. Phys.* **28**, 214–254.
- Hofstadter R., Bumiller F., Yearian M. R. (1958). Electromagnetic structure of the proton and neutron. *Rev. Mod. Phys.* **30**, 482–497.
- Hoodbhoy P., Jaffe R. L., Manohar A. (1989). Novel effects in deep inelastic scattering from spin 1 hadrons. *Nucl. Phys.* **B312**, 571–588.
- Idilbi A., *et al.* (2004). Collins-Soper equation for the energy evolution of transverse-momentum and spin dependent parton distributions. *Phys. Rev.* **D70**, 074021. arXiv:hep-ph/0406302.
- Ito A. S., *et al.* (1981). Measurement of the continuum of dimuons produced in high-energy proton-nucleus collisions. *Phys. Rev.* **D23**, 604–633.
- Itzykson C., Zuber J.-B. (1980). *Quantum Field Theory*. New York: McGraw-Hill.
- Jackiw R. (1968). Dynamics at high momentum and the vertex function of spinor electrodynamics. *Ann. Phys.* **48**, 292–321.

- Jaffe R. L. (1983). Parton distribution functions for twist four. *Nucl. Phys.* **B229**, 205–230.
- Jaffe R. L., Ji X.-D. (1991). Chiral odd parton distributions and polarized Drell-Yan. *Phys. Rev. Lett.* **67**, 552–555.
- Ji X.-D. (1993). The nucleon structure functions from deep inelastic scattering with electroweak currents. *Nucl. Phys.* **B402**, 217–250.
- Ji X.-D., Ma J.-P., Yuan F. (2004). QCD factorization for spin-dependent cross sections in DIS and Drell-Yan processes at low transverse momentum. *Phys. Lett.* **B597**, 299–308. arXiv:hep-ph/0405085.
- Ji X.-D., Ma J.-P., Yuan F. (2005). QCD factorization for semi-inclusive deep-inelastic scattering at low transverse momentum. *Phys. Rev.* **D71**, 034005. arXiv:hep-ph/0404183.
- Joglekar S. D. (1977a). Local operator products in gauge theories. 1. *Ann. Phys.* **108**, 233–287.
- Joglekar S. D. (1977b). Local operator products in gauge theories. 2. *Ann. Phys.* **109**, 210–241.
- Joglekar S. D., Lee B. W. (1976). General theory of renormalization of gauge invariant operators. *Ann. Phys.* **97**, 160–215.
- Johnson K., Low F. E. (1966). Current algebras in a simple model. *Prog. Theor. Phys. Suppl.* **37**, 74–93.
- Kalinowski J., Konishi K., Taylor T. R. (1981). Jet calculus beyond leading logarithms. *Nucl. Phys.* **B181**, 221–252.
- Kalinowski J., *et al.* (1981). Resolving QCD jets beyond leading order: quark decay probabilities. *Nucl. Phys.* **B181**, 253–276.
- Khachatryan V., *et al.* (2010). Transverse momentum and pseudorapidity distributions of charged hadrons in *pp* collisions at $\sqrt{s} = 0.9$ and 2.36 TeV. *JHEP* **02**, 041. arXiv:1002.0621.
- Khriplovich I. B. (1970). Greens functions in theories with a non-abelian gauge group. *Sov. J. Nucl. Phys.* **10**, 235. *Yad. Fiz.* **10**, 409 (1969).
- Kinoshita T. (1962). Mass singularities of Feynman amplitudes. *J. Math. Phys.* **3**, 650–677.
- Kluberg-Stern H., Zuber J. B. (1975). Ward identities and some clues to the renormalization of gauge-invariant operators. *Phys. Rev.* **D12**, 467–481.
- Knuth D. E. (1976). Big omicron and big omega and big theta. *ACM SIGACT News* **8**, 18–24.
- Kogut J. B., Soper D. E. (1970). Quantum electrodynamics in the infinite momentum frame. *Phys. Rev.* **D1**, 2901–2913.
- Konishi K., Ukawa A., Veneziano G. (1978). A simple algorithm for QCD jets. *Phys. Lett.* **B78**, 243–248.
- Konychev A. V., Nadolsky P. M. (2006). Universality of the Collins-Soper-Sterman nonperturbative function in gauge boson production. *Phys. Lett.* **B633**, 710–714. arXiv:hep-ph/0506225.
- Kotzinian A. (1995). New quark distributions and semi-inclusive electroproduction on the polarized nucleons. *Nucl. Phys.* **B441**, 234–256. arXiv:hep-ph/9412283.
- Krämer M., Olness F. I., Soper D. E. (2000). Treatment of heavy quarks in deeply inelastic scattering. *Phys. Rev.* **D62**, 096007. arXiv:hep-ph/0003035.
- Kretzer S., *et al.* (2004). CTEQ6 parton distributions with heavy quark mass effects. *Phys. Rev.* **D69**, 114005. arXiv:hep-ph/0307022.
- Labastida J. M. F., Sterman G. (1985). Inclusive hadron-hadron scattering in the Feynman gauge. *Nucl. Phys.* **B254**, 425–440.
- Lai H. L., *et al.* (2000). Global QCD analysis of parton structure of the nucleon: CTEQ5 parton distributions. *Eur. Phys. J.* **C12**, 375–392. arXiv:hep-ph/9903282.
- Lam C. S., Tung W.-K. (1978). Systematic approach to inclusive lepton pair production in hadronic collisions. *Phys. Rev.* **D18**, 2447–2461.
- Landry F., *et al.* (2003). Tevatron Run-1 Z boson data and Collins-Soper-Sterman resummation formalism. *Phys. Rev.* **D67**, 073016. arXiv:hep-ph/0212159.
- Landshoff P. V. (1974). Model for elastic scattering at wide angle. *Phys. Rev.* **D10**, 1024–1030.

- Landshoff P. V., Polkinghorne J. C. (1971). Two high energy processes involving detected final state particles. *Nucl. Phys.* **B33**, 221–238. Erratum: **B36**, 642 (1972).
- Larin S. A., Vermaseren J. A. M. (1993). The three-loop QCD β function and anomalous dimensions. *Phys. Lett.* **B303**, 334–336. arXiv:hep-ph/9302208.
- Leader E., Predazzi E. (1982). *An Introduction to Gauge Theories and the 'New Physics'*. Cambridge: Cambridge University Press.
- Lee T. D., Nauenberg M. (1964). Degenerate systems and mass singularities. *Phys. Rev.* **133**, B1549–B1562.
- Leibbrandt G. (1987). Introduction to noncovariant gauges. *Rev. Mod. Phys.* **59**, 1067–1119.
- Lepage G. P., Brodsky S. J. (1980). Exclusive processes in perturbative quantum chromodynamics. *Phys. Rev.* **D22**, 2157–2198.
- Libby S. B., Sterman G. (1978a). Jet and lepton-pair production in high-energy lepton-hadron and hadron-hadron scattering. *Phys. Rev.* **D18**, 3252–3268.
- Libby S. B., Sterman G. (1978b). Mass divergences in two-particle inelastic scattering. *Phys. Rev.* **D18**, 4737–4745.
- Liberati S., Maccione L. (2009). Lorentz violation: motivation and new constraints. *Ann. Rev. Nucl. Part. Sci.* **59**, 245–267. arXiv:0906.0681.
- Ligterink N. E., Bakker B. L. G. (1995). Equivalence of light front and covariant field theory. *Phys. Rev.* **D52**, 5954–5979. arXiv:hep-ph/9412315.
- Lipatov L. N. (1997). Small- x physics in perturbative QCD. *Phys. Rept.* **286**, 131–198. arXiv:hep-ph/9610276.
- Lu Z., Schmidt I. (2010). Updating Boer-Mulders functions from unpolarized pd and pp Drell-Yan data. *Phys. Rev.* **D81**, 034023. arXiv:0912.2031.
- Lubański J. K. (1942a). Sur la théorie des particules élémentaires de spin quelconque. I. *Physica* **9**, 310–324.
- Lubański J. K. (1942b). Sur la théorie des particules élémentaires de spin quelconque. II. *Physica* **9**, 325–338.
- Manohar A. V. (1998). Large N QCD. arXiv:hep-ph/9802419.
- Manohar A. V., Wise M. B. (2000). *Heavy Quark Physics*. Cambridge: Cambridge University Press.
- Marchesini G. (1995). QCD coherence in the structure function and associated distributions at small x . *Nucl. Phys.* **B445**, 49–80. arXiv:hep-ph/9412327.
- Martin A. D., *et al.* (1998). Parton distributions: a new global analysis. *Eur. Phys. J.* **C4**, 463–496. arXiv:hep-ph/9803445.
- Martin A. D., *et al.* (2007). Update of parton distributions at NNLO. *Phys. Lett.* **B652**, 292–299. arXiv:0706.0459.
- Melnitchouk W., Ent R., Keppel C. (2005). Quark-hadron duality in electron scattering. *Phys. Rept.* **406**, 127–301. arXiv:hep-ph/0501217.
- Meng R., Olness F. I., Soper D. E. (1996). Semi-inclusive deeply inelastic scattering at small q_T . *Phys. Rev.* **D54**, 1919–1935. arXiv:hep-ph/9511311.
- Mirkes E. (1992). Angular decay distribution of leptons from W bosons at NLO in hadronic collisions. *Nucl. Phys.* **B387**, 3–85.
- Moch S., Vermaseren J. A. M. (2000). Deep-inelastic structure functions at two loops. *Nucl. Phys.* **B573**, 853–907. arXiv:hep-ph/9912355.
- Moch S., Vermaseren J. A. M., Vogt A. (2004). The three-loop splitting functions in QCD: the non-singlet case. *Nucl. Phys.* **B688**, 101–134. arXiv:hep-ph/0403192.
- Mueller A. H. (1979). On the asymptotic behavior of the Sudakov form factor. *Phys. Rev.* **D20**, 2037.
- Mulders P. J., Tangerman R. D. (1996). The complete tree-level result up to order $1/Q$ for polarized deep-inelastic leptonproduction. *Nucl. Phys.* **B461**, 197–237. arXiv:hep-ph/9510301.

- Müller D., *et al.* (1994). Wave functions, evolution equations and evolution kernels from light-ray operators of QCD. *Fortschr. Phys.* **42**, 101–141. arXiv:hep-ph/9812448.
- Nachtmann O. (1973). Positivity constraints for anomalous dimensions. *Nucl. Phys.* **B63**, 237–247.
- Nadolsky P., Stump D. R., Yuan C. P. (2000). Semi-inclusive hadron production at HERA: The effect of QCD gluon resummation. *Phys. Rev.* **D61**, 014003. arXiv:hep-ph/9906280.
- Nakanishi N., Ojima I. (1990). *Covariant Operator Formalism of Gauge Theories and Quantum Gravity*. Singapore: World Scientific.
- Nakanishi N., Yabuki H. (1977). Null-plane quantization and Haag's theorem. *Lett. Math. Phys.* **1**, 371–374.
- Nakanishi N., Yamawaki K. (1977). A consistent formulation of the null-plane quantum field theory. *Nucl. Phys.* **B122**, 15–28.
- Narison S. (2002). *QCD as a Theory of Hadrons*. Cambridge: Cambridge University Press.
- Nayak G. C., Qiu J.-W., Sterman G. (2005). Fragmentation, non-relativistic QCD, and NNLO factorization analysis in heavy quarkonium production. *Phys. Rev.* **D72**, 114012. arXiv:hep-ph/0509021.
- Pais A. (1986). *Inward Bound*. Oxford: Oxford University Press.
- Perkins D. H. (2000). *Introduction to High Energy Physics*. 4th edn. Cambridge: Cambridge University Press.
- Peskin M. E., Schroeder D. V. (1995). *An Introduction to Quantum Field Theory*. Reading, MA: Addison-Wesley.
- Poggio E. C., Quinn H. R., Weinberg S. (1976). Smearing the quark model. *Phys. Rev.* **D13**, 1958–1968.
- Polchinski J. (1984). Renormalization and effective lagrangians. *Nucl. Phys.* **B231**, 269–295.
- Polyzzer H. D. (1973). Reliable perturbative results for strong interactions? *Phys. Rev. Lett.* **30**, 1346–1349.
- Qiu J.-W., Sterman G. (1991a). Power corrections in hadronic scattering (I): Leading $1/Q^2$ corrections to the Drell-Yan cross-section. *Nucl. Phys.* **B353**, 105–136.
- Qiu J.-W., Sterman G. (1991b). Power corrections in hadronic scattering (II): Factorization. *Nucl. Phys.* **B353**, 137–164.
- Quigg C. (1997). *Gauge Theories of the Strong, Weak, and Electromagnetic Interactions*. Boulder, Colorado: Westview Press.
- Ralston J. P., Soper D. E. (1979). Production of dimuons from high-energy polarized proton-proton collisions. *Nucl. Phys.* **B152**, 109–124.
- Rijken P. J., van Neerven W. L. (1997). Higher order QCD corrections to the transverse and longitudinal fragmentation functions in electron-positron annihilation. *Nucl. Phys.* **B487**, 233–282. arXiv:hep-ph/9609377.
- Rogers T. C., Mulders P. J. (2010). No generalized transverse momentum dependent factorization in hadroproduction of high transverse momentum hadrons. *Phys. Rev.* **D81**, 094006 arXiv:1001.2977.
- Salam A. (1968). In *Proceedings of the 8th Nobel Symposium*. Stockholm: Almqvist and Wiksell.
- Salam G. P. (2010). Towards jetography. *Eur. Phys. J.* **C67**, 637–686. arXiv:0906.1833.
- Schienbein I., *et al.* (2009). Parton distribution function nuclear corrections for charged lepton and neutrino deep inelastic scattering processes. *Phys. Rev.* **D80**, 094004. arXiv:0907.2357.
- Seymour M. H., Tevlin C. (2008). TeVJet: a general framework for the calculation of jet observables in NLO QCD. arXiv:0803.2231.
- Sivers D. W. (1990). Single spin production asymmetries from the hard scattering of point-like constituents. *Phys. Rev.* **D41**, 83–90.
- Sjöstrand T. (2009). Monte Carlo tools. arXiv:0911.5286.

- Sjöstrand T., Mrenna S., Skands P. Z. (2006). PYTHIA 6.4 physics and manual. *JHEP* **05**, 026. arXiv:hep-ph/0603175.
- Sjöstrand T., Mrenna S., Skands P. Z. (2008). A brief introduction to PYTHIA 8.1. *Comput. Phys. Commun.* **178**, 852–867. arXiv:0710.3820.
- Slavnov A. A. (1972). Ward identities in gauge theories. *Theor. Math. Phys.* **10**, 99–107.
- Soper D. E. (1977). The parton model and the Bethe-Salpeter wave function. *Phys. Rev.* **D15**, 1141–1149.
- Soper D. E. (1979). Partons and their transverse momenta in QCD. *Phys. Rev. Lett.* **43**, 1847–1851.
- Srednicki M. (2007). *Quantum Field Theory*. Cambridge: Cambridge University Press.
- Srivastava P. P., Brodsky S. J. (2001). Light-front quantized QCD in light-cone gauge. *Phys. Rev.* **D64**, 045006. arXiv:hep-ph/0011372.
- Steinhardt P. J. (1980). Problems of quantization in the infinite momentum frame. *Ann. Phys.* **128**, 425–447.
- Sterman G. (1978). Mass divergences in annihilation processes. I. Origin and nature of divergences in cut vacuum polarization diagrams. *Phys. Rev.* **D17**, 2773–2788.
- Sterman G. (1993). *An Introduction to Quantum Field Theory*. Cambridge: Cambridge University Press.
- Sterman G. (1996). Partons, factorization and resummation. In *QCD and beyond*. Singapore: World Scientific, 327–408. arXiv:hep-ph/9606312.
- Sudakov V. V. (1956). Vertex parts at very high-energies in quantum electrodynamics. *Sov. Phys. JETP* **3**, 65–71.
- 't Hooft G. (1973). Dimensional regularization and the renormalization group. *Nucl. Phys.* **B61**, 455–468.
- 't Hooft G. (1974). A two-dimensional model for mesons. *Nucl. Phys.* **B75**, 461–470.
- 't Hooft G. (1999). When was asymptotic freedom discovered? or The rehabilitation of quantum field theory. *Nucl. Phys. Proc. Suppl.* **74**, 413–425. arXiv:hep-th/9808154.
- 't Hooft G., Veltman M. J. G. (1972). Combinatorics of gauge fields. *Nucl. Phys.* **B50**, 318–353.
- Tarasov O. V., Vladimirov A. A., Zharkov A. Y. (1980). The Gell-Mann-Low function of QCD in the three-loop approximation. *Phys. Lett.* **B93**, 429–432.
- Taylor J. C. (1971). Ward identities and charge renormalization of the Yang-Mills field. *Nucl. Phys.* **B33**, 436–444.
- Thorne R. S., Tung W. K. (2008). PQCD formulations with heavy quark masses and global analysis. arXiv:0809.0714.
- Tkachov F. V. (1994). Theory of asymptotic operation. A summary of basic principles. *Sov. J. Part. Nucl.* **25**, 649. arXiv:hep-ph/9701272.
- Treiman S. B., Jackiw R., Gross D. J. (1972). *Lectures on Current Algebra and Its Applications*. Princeton, NJ: Princeton University Press.
- Trentadue L., Veneziano G. (1994). Fracture functions: an improved description of inclusive hard processes in QCD. *Phys. Lett.* **B323**, 201–211.
- Tung W.-K., Kretzer S., Schmidt C. (2002). Open heavy flavor production in QCD: Conceptual framework and implementation issues. *J. Phys.* **G28**, 983–996. arXiv:hep-ph/0110247.
- Tung W.-K., *et al.* (2007). Heavy quark mass effects in deep inelastic scattering and global QCD analysis. *JHEP* **02**, 053. arXiv:hep-ph/0611254.
- Tyutin I. V. (1975). Gauge invariance in field theory and statistical physics in operator formalism. Originally appeared in 1975 as preprint LEBEDEV-75-39. arXiv:0812.0580.
- van Ritbergen T., Vermaseren J. A. M., Larin S. A. (1997). The four-loop β function in quantum chromodynamics. *Phys. Lett.* **B400**, 379–384. arXiv:hep-ph/9701390.
- Vanyashin V. S., Terent'ev M. V. (1965). Vacuum polarization of a charged vector field. *Sov. Phys. JETP* **21**, 375–380. *Zh.E.T.F.* **48**, 565–573 (1965).

- Vermaseren J. A. M., Vogt A., Moch S. (2005). The third-order QCD corrections to deep-inelastic scattering by photon exchange. *Nucl. Phys.* **B724**, 3–182. arXiv:hep-ph/0504242.
- Vogt A., Moch S., Vermaseren J. A. M. (2004). The three-loop splitting functions in QCD: the singlet case. *Nucl. Phys.* **B691**, 129–181. arXiv:hep-ph/0404111.
- Vossen A., *et al.* (2011). Observation of the interference fragmentation function for charged pion pairs in e^+e^- annihilation near $\sqrt{s} = 10.58$ GeV, *Phys. Rev. Lett.* **107**, 072004. arXiv:1104.2425.
- Wandzura S., Wilczek F. (1977). Sum rules for spin dependent electroproduction: test of relativistic constituent quarks. *Phys. Lett.* **B72**, 195–198.
- Watt G., Martin A. D., Ryskin M. G. (2003). Unintegrated parton distributions and inclusive jet production at HERA. *Eur. Phys. J.* **C31**, 73–89. arXiv:hep-ph/0306169.
- Watt G., Martin A. D., Ryskin M. G. (2004). Unintegrated parton distributions and electroweak boson production at hadron colliders. *Phys. Rev.* **D70**, 014012. arXiv:hep-ph/0309096.
- Weinberg S. (1966). Dynamics at infinite momentum. *Phys. Rev.* **150**, 1313–1318.
- Weinberg S. (1967). A model of leptons. *Phys. Rev. Lett.* **19**, 1264–1266.
- Weinberg S. (1973a). Current algebra and gauge theories. 1. *Phys. Rev.* **D8**, 605–625.
- Weinberg S. (1973b). Current algebra and gauge theories. 2. Nonabelian gluons. *Phys. Rev.* **D8**, 4482–4498.
- Weinberg S. (1989). The cosmological constant problem. *Rev. Mod. Phys.* **61**, 1–23.
- Weinberg S. (1995). *The Quantum Theory of Fields, Vol. I, Foundations*. Cambridge: Cambridge University Press.
- Weinberg S. (1996). *The Quantum Theory of Fields, Vol. II, Modern Applications*. Cambridge: Cambridge University Press.
- Whitlow L. W., *et al.* (1992). Precise measurements of the proton and deuteron structure functions from a global analysis of the SLAC deep inelastic electron scattering cross-sections. *Phys. Lett.* **B282**, 475–482.
- Wilson K. G. (1973). Quantum field theory models in less than 4 dimensions. *Phys. Rev.* **D7**, 2911–2926.
- Witten E. (1976). Heavy quark contributions to deep inelastic scattering. *Nucl. Phys.* **B104**, 445–476.
- Wollny H. for the COMPASS collaboration. (2009). Transversity signal in two hadron pair production in COMPASS. arXiv:0907.0961.
- Yamawaki K. (1998). Zero-mode problem on the light front. arXiv:hep-th/9802037.
- Yan T.-M. (1973). Quantum field theories in the infinite momentum frame. 4. Scattering matrix of vector and Dirac fields and perturbation theory. *Phys. Rev.* **D7**, 1780–1800.
- Yang C.-N., Mills R. L. (1954). Conservation of isotopic spin and isotopic gauge invariance. *Phys. Rev.* **96**, 191–195.
- Zhu L. Y., *et al.* (2009). Measurement of angular distributions of Drell-Yan dimuons in $p + p$ interactions at 800 GeV/c. *Phys. Rev. Lett.* **102**, 182001. arXiv:0811.4589.
- Zijlstra E. B., van Neerven W. L. (1992). Order α_s^2 QCD corrections to the deep inelastic proton structure functions F_2 and F_L . *Nucl. Phys.* **B383**, 525–574.
- Zweig G. (1964a). An SU(3) model for strong interaction symmetry and its breaking. CERN-TH-401.
- Zweig G. (1964b). An SU(3) model for strong interaction symmetry and its breaking. 2. CERN-TH-412.
- Zweig G. (1980). Origins of the quark model. Invited talk given at 4th Int. Conf. on Baryon Resonances, Toronto, Canada, Jul. 14–16, 1980.