

# Introduction to perturbative QCD and factorization

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I give a brief introduction to perturbative QCD and then present different variants of factorization, which is one of the main theory concepts for describing high-energy processes and the substructure of hadrons and nuclei.

Topics that will be covered include:

- Renormalisation and running coupling.
- Deep inelastic scattering.
- Parton distributions and fragmentation functions.
- Generalised parton distributions and exclusive processes.
- Transverse momentum and TMDs.
- Hadron tomography.
- Theory of multiparton interactions.