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## The Structure of the Proton (Part 1)

*Monday, March 10, 2025 9:00 AM (1 hour)*

In these set of lectures we review the modern tools used to compute the quark and gluon distributions within hadrons in general, and the proton in particular. We begin with a review of deep inelastic scattering, and factorization theorems. We then introduce the definitions of parton distribution functions (PDFs), generalized PDFs (GPDs), and transverse-momentum dependent PDFs (TMDPDFs), and how they can be compute from first principles.

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**Session Classification:** Morning