

Semihard Interactions at TeV energies

Monday, 1 December 2025 15:35 (0:20)

Content

We present a detailed analysis of proton–proton and antiproton–proton scattering at LHC energies within a QCD-inspired framework, wherein the energy dependence of the cross sections is predominantly driven by semihard gluon–gluon interactions inside the nucleons. The study demonstrates that forward observables can be consistently and accurately described by a model in which the even-under-crossing amplitude constitutes the leading contribution in the high-energy regime.

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