Deep Inelastic Scattering 2025



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Fantômas: advanced polynomial parametrizations for parton distributions

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Fantômas is a C++ module implemented in xFitter for universal approximation of parton densities and other quantum correlator functions using Bézier curves. We review its operating principles and an application of the Fantômas framework to obtain parton distributions in a charged pion with detailed estimates of parametrization and nuclear uncertainties.

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