

xFitter project

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We present the xFitter project (former HERAFitter) which provides a unique open-source software framework for the determination of the proton's PDFs and for the interpretation of the physics analyses in the context of Quantum Chromodynamics.

We highlight the new xFitter software release which includes many new features and additions, e.g. the possibility of the inclusion of photon PDF, updated variable and fixed-flavour schemes for heavy quarks, interface to the APFEL library and n-space evolution program MELA, updates to the latest theory calculations and many more.

We will also report on the latest xFitter results on the new determination of the mass of the charm quark extracted by analysing the statistical quality of fits to inclusive and exclusive charm deep-inelastic scattering data from the HERA collider.

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