Fragmentation functions and their uncertainties

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In recent years, the NNPDF Collaboration has developed a new methodology to determine the parton distribution functions (PDFs) of the proton. This is based on a Monte Carlo sampling and representation of PDFs, a parametrization of PDFs based on neural networks, and closure tests for a full characterization of procedural uncertainties. The aim is to provide minimally biased parton sets in which PDF uncertainties due to the methodology used to determine them from experimental data are reduced as much as possible. I review the NNPDF methodology and I show how it can be applied to a determination of fragmentation functions from a global analysis of electron-positron annihilation data up to next-to-next-to leading order accuracy in quantum chromodynamics.