

Joint 20th International Workshop on Hadron Structure and Spectroscopy and 5th workshop on Correlations in Partonic and Hadronic Interactions



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Extraction of charged pion and kaon fragmentation functions at NNLO

Tuesday 1 October 2024 10:00 (20 minutes)

In this contribution, I will present a determination of unpolarised charged pion and kaon fragmentation functions (FFs) from a set of single-inclusive electron-positron annihilation (SIA) and lepton-nucleon semi-inclusive deep-inelastic scattering (SIDIS) data. The determination is carried out in a framework that combines a neural-network parametrisation of fragmentation functions with a Monte Carlo representation of their uncertainties. It includes exact next-to-next-to-leading (NNLO) order QCD corrections to SIA and approximated NNLO corrections to SIDIS. In view of the recent computation of exact NNLO corrections to SIDIS, I will also comment on their impact on FFs.

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