Contribution ID: **222** Type: **not specified**

Fragmentation functions and their uncertainties

Tuesday, 4 April 2017 12:20 (20 minutes)

I present a first determination of a set of collinear fragmentation functions of charged pions based on the NNDPF methodology. The determination includes a wide set of single-inclusive annihilation data and is performed up to next-to-next-to-leading order accuracy in perturbative quantum chromodynamics. I discuss the results of the fits, highlighting the quality of the description of the data, their stability upon the inclusion of higher-order corrections, and some of their implications in the investigation of the spin structure of the nucleon.

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Session Classification: WG6 Spin and 3D Structure

Track Classification: WG6) Spin and 3D Structure