



ID contributo: 689

Tipo: Parallel Talk

Global extraction of unpolarized quark TMDs at N3LL

sabato 9 luglio 2022 09:00 (15 minuti)

In this talk we present the most recent extraction of unpolarized transverse-momentum-dependent (TMD) parton distribution functions (PDFs) and TMD fragmentation functions (FFs) from global data sets of Semi-Inclusive Deep-Inelastic Scattering (SIDIS), Drell-Yan and Z boson production. The fit is performed at the N3LL logarithmic accuracy in the resummation of qT-logarithms and features flexible non-perturbative functions, which allow to reach a very good agreement with the experimental data. In particular, we address the tension between the low-energy SIDIS data and the theory predictions, and explore the impact of the precise LHC data on the fit results.

In-person participation

Yes

Autori principali: BACCHETTA, Alessandro (Istituto Nazionale di Fisica Nucleare); BOZZI, Giuseppe (University of Cagliari and INFN, Cagliari); SIGNORI, Andrea (Istituto Nazionale di Fisica Nucleare); BISSOLOTTI, Chiara (UChicago Argonne, Argonne National Laboratory); RADICI, Marco (Istituto Nazionale di Fisica Nucleare); CERUTTI, Matteo (Istituto Nazionale di Fisica Nucleare); BERTONE, Valerio (CEA Paris-Saclay)

Relatore: BOZZI, Giuseppe (University of Cagliari and INFN, Cagliari)

Classifica Sessioni: Strong interactions and Hadron Physics

Classificazione della track: Strong interactions and Hadron Physics