

# 11th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions



Beitrag ID: 198

Typ: Talk

## New constraints on nucleon structure from LHCb

*Dienstag, 28. März 2023 09:00 (20 Minuten)*

The forward geometry of the LHCb detector provides unprecedented access to both the very high and very low regions of Bjorken  $x$  inside the nucleon. With full particle ID and a fast DAQ, LHCb is able to fully reconstruct plentiful charged particles and  $\pi^0$  mesons, as well as relatively rare probes such as  $Z$  bosons and heavy quarks, providing a unique set of constraints on nucleon structure functions. This talk will discuss recent LHCb measurements sensitive to intrinsic charm within the proton, modification of parton distribution functions inside the nucleus, and show the impact of recent LHCb measurements that dramatically reduce nPDF uncertainties at low  $x$ .

### Experiment/Theory

LHCb

### Affiliation

on behalf of the LHCb collaboration, speaker to be defined

**Hauptautor:** SELLAM, Sara (University of Santiago de Compostela)

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**Sitzung Einordnung:** Parallel: Early-Time Dynamics & nPDFs

**Track Klassifizierung:** Early time dynamics and nuclear PDFs