XI International Conference on New Frontiers in Physics



Contribution ID: 81 Type: Talk

Deeply Virtual Compton Scattering at COMPASS

Saturday 10 September 2022 11:40 (20 minutes)

We will present preliminary COMPASS results on the Deeply Virtual Compton Scattering (DVCS) cross section, which was obtained from exclusive single-photon production by scattering the 160 GeV muon beams of the SPS M2 beamline off a 2.5 m long liquid hydrogen target. The recoil proton was measured by a barrel-shaped time-of-flight detector surrounding the target. The scattered muons were detected by the COMPASS spectrometer and the photons by electromagnetic calorimeters including a new large-angle calorimeter. We will show the charge-spin average DVCS cross section differential in the squared four-momentum transfer to the proton, which is expected to be sensitive to the transverse extension of partons in the proton. COMPASS allows first access to the Bjorken-x domain of sea quarks.

Is this abstract from experiment?

Yes

Name of experiment and experimental site

COMPASS

Is the speaker for that presentation defined?

Yes

Details

Speaker: Anatolii Koval Title: PhD student

Institution Name: National Centre for Nuclear Research

Country: Poland

Webpage of institution: https://www.ncbj.gov.pl/

Webpage of speaker: N/A

Internet talk

No

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