



Contribution ID: 210

Type: **Parallel session talk**

Z'-boson dilepton searches and the high-x quark density

Tuesday 22 August 2023 09:30 (15 minutes)

We study the influence of theoretical systematic uncertainties due to the quark density on LHC experimental searches for Z' -bosons.

Using an approach originally proposed in the context of the ABMP16 PDF set for the high-x behaviour of the quark density, we present results on differential cross section and Forward-Backward asymmetry observables commonly used to study Z' signals in dilepton channels.

Collaboration / Activity

Any

Primary author: Dr GIULI, Francesco (CERN)

Co-authors: HAUTMANN, Francesco (Universiteit Antwerpen, Trinity College Oxford); Dr FIASCHI, Juri (University of Liverpool); Prof. MORETTI, Stefano (University of Southampton); MOCH, Sven-Olaf (UNI/TH (Uni Hamburg, Institut fuer Theoretische Physik))

Presenter: Dr GIULI, Francesco (CERN)

Session Classification: T10 Searches for New Physics

Track Classification: Searches for New Physics