Drell-Yan results from COMPASS IWHSS 19 - XVI International Workshop on Hadron Structure and Spectroscopy 24-26 June, Aveiro, Portugal

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Abstract

The COMPASS-II collaboration at CERN collected a significant amount of Drell-Yan data over two years of data taking in 2015 and 2018. Measured lepton pairs originate from the interaction of a negatively charged pion beam at 190 GeV/c with a polarized ammonia target or unpolarized nuclear targets. These data provide unique information about the nature of the nucleon, especially the transverse spin asymmetries. Additionally, the study of the unpolarized differential cross sections and angular distributions on the NH₃, Al, and W nuclei offers the possibility to test the Lam-Tung relation as well as the influence of the cold nuclear matter effects in the evaluation of the cross-section. The recent projections and results will be presented and discussed.