Contribution ID: **222** Type: **Parallel Session Talk**

Transversely polarized Drell-Yan measurements at COMPASS

Wednesday 10 April 2019 08:30 (17 minutes)

The exploration of the transverse spin structure of the nucleon by measuring spin (in)dependent azimuthal asymmetries in semi-inclusive DIS and in Drell-Yan processes is one of the main objectives of the COMPASS experiment at CERN (SPS, M2 beamline). During the first phase of the experiment (2002-2011) a series of SIDIS measurements were performed, using a longitudinally polarized muon beam impinging on transversely polarized ^{6}LiD or NH_3 targets. As a part of the COMPASS-II programme, in 2015 and 2018 the experiment performed Drell-Yan measurements with a π^- beam interacting with a transversely polarized NH_3. The measurement of the Sivers and other azimuthal asymmetries at the same hard scale in polarized SIDIS and Drell-Yan provides a unique possibility to test predicted in QCD (pseudo-)universal features of transverse momentum dependent parton distribution functions. In this talk the results of the first ever polarized Drell-Yan measurements performed by COMPASS will be presented together with related SIDIS results and model predictions.

Author: Dr PARSAMYAN, Bakur (CERN, University of Turin and INFN)

Presenter: Dr PARSAMYAN, Bakur (CERN, University of Turin and INFN)

Session Classification: WG6: Spin and 3D structure

Track Classification: WG6: Spin and 3D structure