

## Polarised Drell-Yan measurement in the COMPASS experiment at CERN

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The COMPASS experiment at CERN has been contributing to the description of the nucleon spin structure, namely the transverse momentum dependent parton distribution functions (TMDs), through the Semi-Inclusive Deep Inelastic Scattering (SIDIS) using a muon beam impinging on polarised targets. These TMD functions are also accessible via the transversely polarised Drell-Yan (DY) process, which will be studied in the next COMPASS data taking, starting this fall. This process, in which the proton valence region will be explored, will be studied in collisions of a 190 GeV/c negative pion beam with a transversely polarised ammonia target. The QCD prediction that Sivers and Boer-Mulders TMDs change sign when accessed through SIDIS or via DY will be checked by the new COMPASS measurement. Considering one year of data taking, the Sivers azimuthal asymmetry statistical error is expected to be less than 2%. In addition to the polarised target, other nuclear targets will give the possibility to study unpolarised DY subjects. The experimental setup will be presented, and predictions and expectations will be discussed.

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