TMDe2015 - A path towards TMD extraction



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Estimating the gluon Sivers function from A_N data in polarized pp collisions at RHIC

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Within a generalized TMD parton model we use the latest highly precise mid-rapidity data on A_N for inclusive neutral pion production in polarized pp collisions by the PHENIX Collaboration to get a first estimate of the still poorly known gluon Sivers distribution.

To this end we adopt present information on the quark Sivers functions as extracted from SIDIS data. These results, together with the recent preliminary analysis on the extraction of gluon Sivers asymmetry in SIDIS by the COMPASS Collaboration can help in clarifying the role of the gluon contribution to the Sivers effect.

Session

4: TMDs from azimuthal asymmetries in polarized SIDIS with transverse and longitudinal spin

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Session Classification: New channels: Λ , J/Ψ , high pT pairs ···production in SIDIS