Contribution ID: 53 Type: Oral

Neutral mesons transverse single spin asymmetries in proton-proton collisions with sPHENIX

Neutral mesons transverse single spin asymmetries, A_N , provide insights into the spin-orbit correlations inside the nucleon via higher twist correlation functions. As forward rapidities they are known to be very large while at central rapidities vanishing asymmetries have been measured. The sPHENIX experiment with electromagnetic calorimetry over a rapidity range from -1.1 to 1.1 will allow to extend the central rapidity measurements performed by PHENIX and therefore access a region that has not been covered well, yet.

The latest results from the 2024 proton-proton collisions at $\sqrt{s}=200$ GeV will be presented.

Primary author: ROSATI, Marzia (Iowa State University)

Presenter: ROSATI, Marzia (Iowa State University)

Session Classification: Parallel

Track Classification: Three-dimensional structure of the nucleon: transverse momentum dependent

parton distributions