

and perform a global analysis of the experimental data.

In conclusion, in this paper, we have studied the twist-three fragmentation function contribution to the inclusive hadron's SSA in pp scattering $p^\uparrow p \rightarrow hX$. With a simple parametrization for the twist-three fragmentation function, we estimate its contribution to the SSAs of π^0 production at RHIC energy. We find that the contribution of the twist-three fragmentation function is comparable to that of the twist-three distribution function from the polarized nucleon. We comment on the possibility to use our approach to describe the large difference of the SSAs between the η and π^0 meson. We emphasize that one need to include both contributions from twist-three distribution and fragmentation functions into a global analysis, in order to better understand the single spin asymmetry for the inclusive hadron production.

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