

Transverse spin asymmetries in the CNR region in polarized proton-proton elastic scattering at STAR

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Summary

We shall present the result on single spin asymmetry (A_N) in polarized proton-proton scattering at $\sqrt{s} = 200$ GeV in small four momentum transfer region. With the Roman Pots of the pp2pp experiment, installed at the STAR detector at RHIC, a data sample of about 20 million elastic events in $-t$ range of $0.005 - 0.035$ $(\text{GeV}/c)^2$ was analyzed. A fit of t -dependence of A_N indicates that a hadronic spin-flip amplitude is comparable to zero. The preliminary result from the same data sample on double spin asymmetries A_{NN} and A_{SS} is that they are of the order of 10^{-3} , which implies negligible hadronic double spin-flip amplitude and disfavors contribution Reggeons other than the Pomeron. Pla

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