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Sea quark polarization results from STAR

JINLONG ZHANG, Stony Brook University

Polarized proton-proton collision experiments at RHIC provide unique opportunities to study the spin structure of nucleon. One of the primary motivations of RHIC spin program is to probe sea quark spin-flavor structure via the W boson production at $\sqrt{s} = 500$ GeV proton-proton collisions. The W longitudinal single-spin asymmetry, A_L, measurements with STAR have provided significant constraints on the polarized Parton Distribution Functions and especially the first experimental indication of a flavor asymmetry of polarized sea. In this talk, the final W A_L results from STAR and their impacts on the sea quark polarization will be presented.