

Quenching of polarized jets

Jets produced in association with a Z^0 or W^\pm boson in hadronic collisions are naturally polarized due to the parity violation of weak interaction, making these processes ideal for extracting information about the longitudinal spin transfer G_{1L} , and for studying the phenomenon of polarized jet quenching. In this work, we compute the polarization of Λ hyperons in pp collisions and investigate the nuclear modification due to the jet-medium interaction in AA collisions. We demonstrate that this quantity is a sensitive probe to the energy loss effect.

Primary authors: Mr YAO, Wenhao (Shandong University); Ms LI, Xiaowen (Shandong University); Mr DONG, Hui (Shandong University); Mr WEI, Shuyi (Shandong University)

Presenter: Mr YAO, Wenhao (Shandong University)

Session Classification: Parallel

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