Contribution ID: **56** Type: **Oral**

Measurement of $\Lambda/\bar{\Lambda}$ Transverse Polarization within Jets in pp Collisions at $\sqrt{s} = 510$ GeV

The transverse polarization of Λ hyperons in unpolarized hadron–hadron reactions, first observed decades ago, is still not fully understood. The polarizing fragmentation functions, which are expected to contribute to the Λ polarization, can be investigated by measuring the $\Lambda/\bar{\Lambda}$ transverse polarization inside jets in pp collisions. In this contribution, we will present the status of our analysis on $\Lambda/\bar{\Lambda}$ polarization within jets based on pp collisions at $\sqrt{s} = 510$ GeV collected by the STAR detector at RHIC in 2017.Comparisons of the measurements at different energies in pp collisions and e^+e^- annihilation processes can probe the energy scale dependence and test the universality of the polarizing fragmentation functions.

Primary author: HE, Jinhao (Shandong University)

Presenter: HE, Jinhao (Shandong University)

Session Classification: Parallel

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