

Abstract Submitted
for the CAL11 Meeting of
The American Physical Society

Longitudinal Spin Transfer to Λ and $\bar{\Lambda}$ Hyperons Produced in Polarized Proton-Proton Collisions at $\sqrt{s} = 200$ GeV RAMON CENDEJAS, UCLA/LBL, STAR COLLABORATION — The longitudinal spin transfer, D_{LL} , of Λ and $\bar{\Lambda}$ hyperons in longitudinally polarized proton-proton collisions is sensitive to the polarization of strange quarks and anti-quarks in the polarized proton, as well as polarized fragmentation. The STAR collaboration previously reported D_{LL} from a data sample obtained in 2005 that corresponds to an integrated luminosity of 2 pb^{-1} with 50% beam polarization. Considerably larger data samples corresponding to 6.5 pb^{-1} and 25 pb^{-1} with beam polarization of 57% were obtained in 2006 and 2009. The analysis of these data is in progress and is anticipated to widen the kinematic range and considerably improve the precision of the D_{LL} measurements. The status of the analysis will be discussed.

Ramon Cendejas
UCLA/LBL

Date submitted: 29 Sep 2011

Electronic form version 1.4