

a) Done. We add some word to compare the averaged value with the STAR's previous published results.

b)

i> The lambda polarization results were not corrected by the re-construction efficiency effects. There is no significant pT dependence for lambda polarization (Takafumi Niida's presentation at QCD Chirality workshop 2017). The mean-pT variation in azimuthal angle cannot lead such obvious azimuthal dependence for lambda polarization.

ii> In the analysis, we cannot the real Psi. The Psi we used is observed Psi instead of the real Psi. The observed PH is smaller than real PH. The observed PH should be corrected by the resolution factor. The value of resolution factor in this analysis is about 0.39. The resolution effect on x-axis (phi-Psi) is smearing the x bins. For example, there are 1000 lambdas in measured bin1. Maybe 400 particles were from real bin1, 300 particles were from real bin2, 200 particles were from real bin3, 100 particles were from real bin4. After correction the strength of the azimuthal dependence could be stronger. A method to correct this effect is under investigation.

iii>The feed down correction is not done for this analysis. We will correct it in further study.

iv> phi* is defined to be the daughter proton(anti-proton) azimuthal angle in lambda frame. The azimuthal angle is the lambda (anti-lambda) phi in lab frame.

c) done

d) done

e) Actually acceptance*efficiency didn't shows a very weak dependence of cos(theta*), so the value rho_00 would not have a potentially change after being corrected by acceptance*efficiency.

f) The value we show in the plot had been corrected by resolution. For a given resolution, we found that the observed rho_00 has linear dependence of real rho_00 by Monte Carlo simulation. So we can correct the rho_00 by this method. (Sun Xu' poster presentation at Quark Matter2017 also can be found in my SQM2017 slides).