

Haixin presented the statistics of Run6 for all RHIC fills during 100GeV and 31GeV runs. RHIC polarimeter group has released final results of jet calibration about two weeks ago, which gave a correction factor of 1.15-1.2 on  $A_N$ . Combined with quality control of carbon selection and profile vs fixed target measurement, the center polarization is scaled down by 4-5% for blue and yellow respectively. The bottom line is that correction at this level will not change our view of polarization loss through the accelerator chain. Anatoli asked if the polarization ratio between AGS and RHIC store can tell us where we lost the polarization. Haixin said that we need a jet calibration run at RHIC injection to get  $A_N$  at RHIC injection to distinguish the polarization loss in the AGS and RHIC. In addition, we have some injection measurements which can be used to compare the polarization between AGS and RHIC. He is going to present it later.

However, there are some interesting phenomena can be seen from these plots.

1. In general the AGS polarization and RHIC polarization are correlated, but there are some exceptions. For the period around fill 7950 (end of 100GeV) run with highest running intensity, the AGS and blue polarization were lower but not yellow. For this period, blue measurements were all with non-Gaussian profiles which resulted a bigger correction factor for  $A_N$ . So the question is: is this an indication of questionable calibration of  $A_N$  for non-Gaussian beam profile cases or intensity effect of AGS CNI polarimeter?

2. Taking the face value of the polarization ratio between RHIC store and AGS, one can see that the polarization transmission efficiency is worse during 31GeV. There is no strong depolarizing resonances between 24 and 31 GeV. Is this an indication of a not-optimized ramp or problem with calibration?

Next Haixin showed the emittances measured with AGS IPM at extraction and AtR U flags for each RHIC fill. Since the IPM does not use online model to change beta function as lattice changes, the jump of emittances around April 22 was due to the constant beta functions used. Woody suggested to run MAD model with different tunes to correct that. Systematically, the vertical emittance is always larger than the horizontal, which is just opposite to the emittances at both AGS injection and RHIC IPM measurements. Woody pointed out that since there is mismatch at AGS injection, it is not necessary for the emittance ratio to be carried through the AGS. Alfredo also pointed out that the coupling is also a factor here. Anatoli suggested to compare IPM with AGS CNI polarimeter target scan data.

There will be no spin meeting next week due to our department Christmas party.

Haixin