

There is no presentation today. The discussion was about the AGS running strategy for next pp run. Thomas first reported his modeling of horizontal resonance strength as function of horizontal tune. There is no difference for the strength except when the tune is close to an integer. γ_x was assumed as constant for different tunes in his model. Kevin found that γ_x actually trended higher with larger fractional tunes, which indicates that horizontal tune closer to half integer is a favorable solution for polarization.

Mei suggested to test extraction on the fly in the AGS. The horizontal resonances are outside the spin tune gap generated by the two partial snakes. The crossing speed through them matters to the polarization. The slow down near the end of ramp causes more polarization loss than a regular ramp speed. Extraction-on-the-fly means no slow down near the end of the ramp. The first obstacle is how to handle the rf requirement for RHIC injection. Currently, a radial excursion with rf frequency change is used to get frequency and phase matching for RHIC RF system. Another problem is that the usage of AGS CNI polarimeter for this setup is very difficult: the time for one $G\gamma$ unit is about 20ms which is only 2% of the regular measuring time of each AGS cycle. An AGS polarization measurement would take more than an hour to finish (in ramp measurement mode). Woody suggested to use RHIC polarimeter to scan some necessary parameters. One can change the parameters for different bunches in RHIC to minimize the impact on RHIC operation time. The majority setup would still be based on AGS polarimeter except the extraction parameters.

Anatoli reported source development. An Einzel lens replacing the solenoid in front of the RFQ turned out be very successful, not only beneficial for high intensity (unpolarized) beam but also with low intensity beam. Currently, the Einzel lens may reduce the intensity for BLIP operation unless a fast switching between the two modes can be found. It is not clear if this lens can be used for the coming run.

Anatoli also voiced his concern about run6 polarization data analysis. He suggested to have a progress report to this group, which Thomas agreed. In addition, Thomas suggested to schedule next RSC meeting quickly to discuss planning issues for next pp run.

Haixin