

If we can get a budget in next a few weeks, then AGS polarized proton commissioning is quite possible. In preparing for this test, Haixin presented the job-list. It is not a completed one yet and he asked inputs from everyone. The two big jobs are pushing horizontal tune to 8.95 and explore polarization loss near injection. Pushing horizontal tune to 8.95 has higher priority. Since the horizontal resonance effect is an accumulated effect from 80+ resonances, Thomas asked if we can shift horizontal tune along the ramp by same amount in the optics control program. Leif responded that the program has the feature and has been used. It is amazed that the desired tune shift can be generated even in the presence of snakes. Another big job is to compare AGS optics with model. Since there is already discrepancy without snakes, a lot of the tests on the list can be done with Au beam(with snake off). For the ORM data taking, Mei reminded us to take IPM centroid measurement along with the ORM data. We need to develop a script to take these data automatically. To have a direct comparison of measured beta function with ORM, adding a PUE near one of the snake compensation quads is an attractive idea. However, the diameters of the beam pipe and PUE may not fit and installation of such a PUE is also an intensive job. Leif will follow on that. Currently, the AGS model can not predict the tunes and chromaticities from the magnet current correctly. One problem is that the MAD code dose not treat the rectangular combined function dipole magnets properly. Thomas asked Dejan if he can use PTC (Polymorphic Tracking Code) together with MADX to treat combined function dipole magnets in the AGS. Dejan will talk to Kevin/Steve. Alfredo added that Wuzheng is modeling the AGS main dipole with 3-D OPERA. It will tell us how big the difference is between the MAD model and the magnets. Woody suggested to check the sag of the dipole magnets. About 40% of the dipoles can be easily checked. Leif suggested Woody to write the procedure and we may get a chance to measure the possible magnet sag.

Haixin