Spin meeting minute, 12/28/2005

Christoph presented the RHIC lattices with γ_t lowered by 0.54 and 1 unit. The case of lowering by 0.54 unit gives about 20% beta wave, while the other one gives almost 100%. Thomas suggested to check limiting apertures such as Lambertson magnet, abort kicker for the 0.54 unit case. A separate meeting will be called to discuss the impact on RHIC operation. In the meantime, Nick will check Waldo's calculations on the spin transfer effeciency of AtR line. In addition, Thomas also suggested to do field scan with both snakes on at AGS extraction in early stage of AGS setup. The spin transfer effeciency is hard to measure accurately in RHIC. The field scan is only to confirm that $G\gamma = 45.5$ is not a catastrophic place for polarization.

Nick presented the MAD lattice for the cold-snake-only configuration we run last year. The results show that large horizontal chromaticity and large tune exertion to 8.5 and 8.66 are likely the reasons for the difficulty to reach higher intensity. Thomas and Mei suggested to skip the cold-snake-only configuration in the coming AGS setup, since that is not the machine we intend to run and every configuration takes days to set up properly.

The meeting then went on to AGS commissioning plan. Following items are discussed:

1. The length of th injection porch. Currently, the change of injection porch has to be made through several applications and is not a straight forward change. The longer injection porch is needed for multi-bunch injection but is a stretch on the requirement of compensation quads.

2.Dynamic spin tracking in the early part of ramp. Alfredo and Mei are working on it.

3.AGS AC dipole needs to be ready as a backup solution. Mei will preserve the power amplifiers.

4. Provide real current wave forms (for both quads and bumps with the two snake solution) to Ioannis for the power supply test (Nick).

Next week we will discuss the AGS commission plan in detail.

Haixin