

Spin meeting minute, 10/26/2005

Alfredo summarized the three solutions so far he and Nick got. All three solutions scale as $\frac{1}{p^2}$ with energy. If the vertical tune at 0+nu is set as high as 8.98, the vertical beta function at cold snake would be as high as 70m. If matching with two quads (out of total eight) deviated from $\frac{1}{p^2}$ at higher energies, the maximum beta function can be reduced. The next solution they are going to try is to reduce the vertical tune to 8.96-8.97 and this value should be reached no later than gamma=4. Waldo also suggested to check aperture for this solution. Waldo already asked Ramesh to generate field map from the desired current.

Kevin pointed out MAD-X for AGS is in progress, which may be usable in the near future. Of course, our interest is to have snake in the lattice.

Mei reported the analysis on polarization transfer efficiency over the 205GeV acceleration. She showed plots of correlation of the efficiency vs. rms orbit near two strong intrinsic resonances. The correlation is vague, at least for blue. Mei also said the spink tracking code with varying tunes and lattice is in progress.

Then the last discussion is about the coming run. Leif reported that rf group estimated 5 shifts needed to reduce longitudinal emittance and match at AtR. The 5 shifts will not be consecutive ones. The cold snake quads p/s are under test and should be ready before ones for warm snake.

The lattice match for cold snake only lattice will be the next exercise for Alfredo and Nick after the work done for two snake scenario. Haixin will circulate a run plan next week for comment.

Haixin