

Spin meeting minutes, 3/21/2007

Anatoli reported the progress on polarized proton source work. The 200MeV polarimeter was taken apart during the summer and Anatoli got chance two weeks ago to test the 200MeV polarimeter with polarized proton beam. The 200MeV polarimeter test went very well and the polarization are quite high at the end of linac. More importantly, He used this time to explore the observed polarization “oscillation” as function of the correction coil current in the Sona transition region. It has been observed in the past that the measured polarization by both 200MeV polarimeter and Lamb-shift polarimeter showed oscillation structure as function of the correction coil current. Over the summer, the Sona transition part was upgraded. As the results, the oscillation pattern changed but it is still there. With a smaller diameter collimator (12mm vs. 23mm), the polarization increase is higher than the model predicted when the ionizer solenoid field was increased. Polarization of 88% with  $200\mu A$  at the end of linac is achieved. The oscillation effect could be a quantum transition effect, which is very interesting for further study.

Haixin briefly reported that the draft of AGS pp run plan is on the web now and we will discuss it next week. The meeting finished early for people to attend the RSC meeting of final run5 polarization results.

Haixin