

AGS pp Status

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Time Meeting

Status

- In past a few weeks, we have been working on JQ timing function and emittance. Source polarization has been up lately, the average of past one week is about 82.4%. The vertical emittance at AGS flattop has been reduced with several optical changes. The reported vertical normalized rms emittance is about 3.2π (was 5π) at flattop with 2×10^{11} intensity.
- A new set of JQ timing (by minimizing the timing difference between ramp polarization measurement and B field measurement) has been put into use and an overall timing scan has been done. This new set of timing coincides with the -0.5ms shift in the later part of ramp, so it seems the mysterious shift of -0.5ms is gone. With smaller emittance, higher source polarization and new timing, we get above 70% polarization with 2×10^{11} intensity.
- In the meantime, Keith has set up a faster ramp on user2. The ramp is shortened by about 50ms (out of 430ms). It is faster in the early part. The motivation is to preserve emittance (such as space charge near injection), and secondary effect is to cross the early depolarizing resonances faster. The polarization with JQ off is in the middle of 60% with 2×10^{11} .

Overall JQ Timing Scan (2/14-16)

