

# Injector Status

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Time Meeting

# Injector Status

- RHIC vacuum leak (fixed) limits the RHIC injection bunch intensity at  $1.8E9$  in yellow. EBIS cathode problem limits the bunch intensity for blue at  $2E9$ .
- EBIS repair work is needed and it may take two days.
- Au beam from tandem setup started Friday. So far with all four pulses into one bunch, Keith got  $1.6E9$  at AGS extraction. To reach current EBIS level, we will try to improve TTB efficiency (improvement has been seen this morning) and/or to use 6 tandem pulses.
- Today the Au from tandem development will continue.
- Switching to d-Au run on May 9<sup>th</sup>. Deuteron development starts on Thursday afternoon and continue on Friday then Monday.
- Remaining jobs for deuteron setup: AGS extraction setup; and tape sequencer to switch between d and Au; 8 deuteron pulses from tandem.

# Proton Setup

- Booster survey done last summer changed the Booster alignment significantly. The old scraping point at E7 is not valid anymore. It is good that we found a new orbit function to scrape beam vertically, so that we don't need to realign Booster for next proton run.
- Dual harmonics ( $h=12$  and  $6$ ) was tested in the early part of the ramp and it was successful. The vertical emittance at flattop is smaller than the nominal  $h=8$  case, but single harmonic  $h=6$  acceleration has also been done, which also showed smaller vertical emittance at flattop.
- The beta functions are measured on the ramp and flattop with this snake-less setup. AC phase loop (instead of radial loop) is used on most part of ramp, except around transition. This make it possible for horizontal beta function measurement.
- The proton development has been wrapped up last night.

# Dual Harmonics in the AGS

