

CeC status, 9/23/25

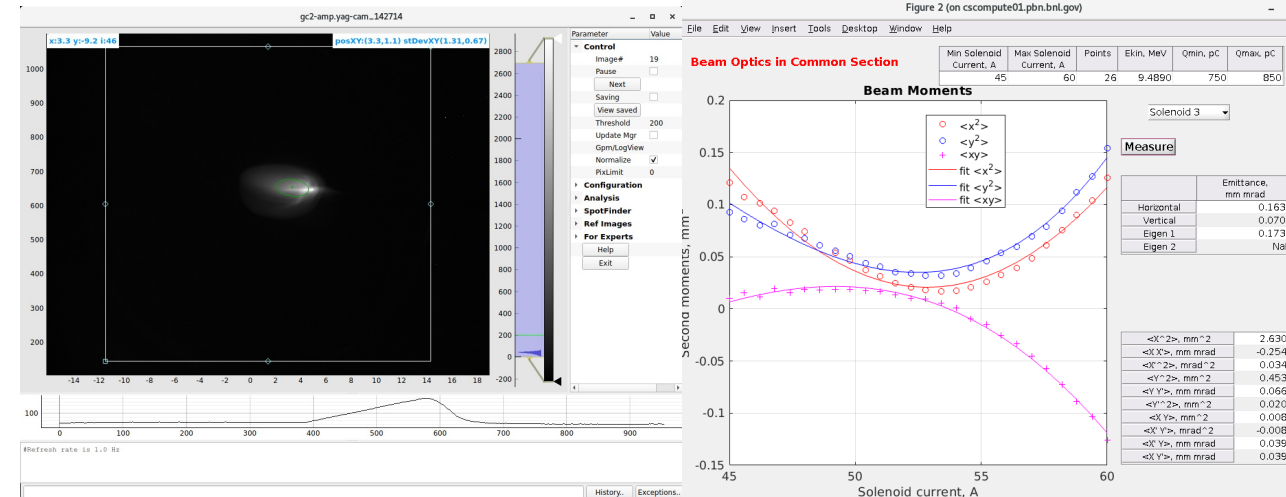
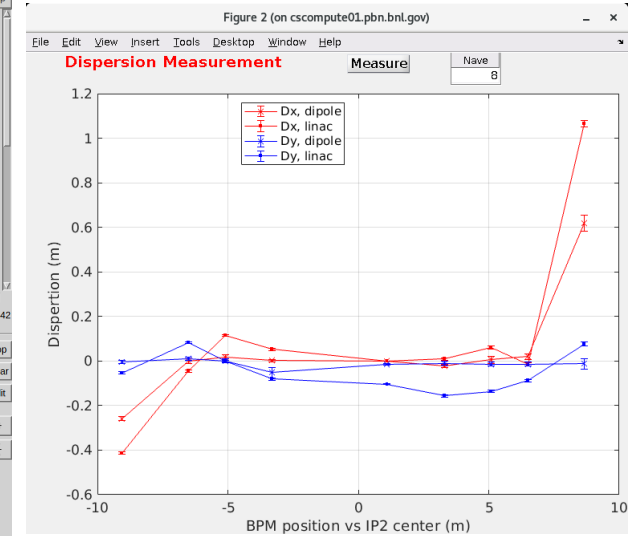
APEX summary

Ions

- RHIC ramp to CeC energy (18.2 GeV/u) was developed.
- Ion beam was put to correct orbit in IP2.

Electrons

- Propagate high current CW beam to final dump with low loss (1 uA) with relaxed solenoid settings in common section.
- Match beam to relaxed lattice with low dispersion (< 0.1 m) leaking into common section (achromat).
- Beam on common section yag indicates there is some mismatch (not round, long energy tail). Emittance using solenoid scan was performed.



IR signal in common section (to see PCA)

- No signal was seen during APEX. Suspicion on IR detector errors due to power dips.
- Later when using strongly compressed beam (increase bunching voltage), IR signal can be observed.
- IR signal has correlation with common section solenoid strength (stronger solenoids higher IR signal).
- Attempt to lower bunching voltage to nominal setting was blocked by CeC and RHIC alarm. Investigation going on.

