

CeC status, 9/16/25

Continue work on measuring/improving e- beam (slice) quality

- Slit measurement showed smaller emittance (~ 1 μm) than quadrupole scan method (~ 2 μm , which might be affected by space charge effect).
- We found reasonably good agreement (within $\pm 10\%$) between slit scan and quad scan for ultra low charge (< 50 pC).
- Continue study for various charge setup.
- Beam propagation (matching) to common section is done. Will test the results in APEX on Wednesday.
- New cathode showed good uniformity as well as decent QE ($> 1\%$).

