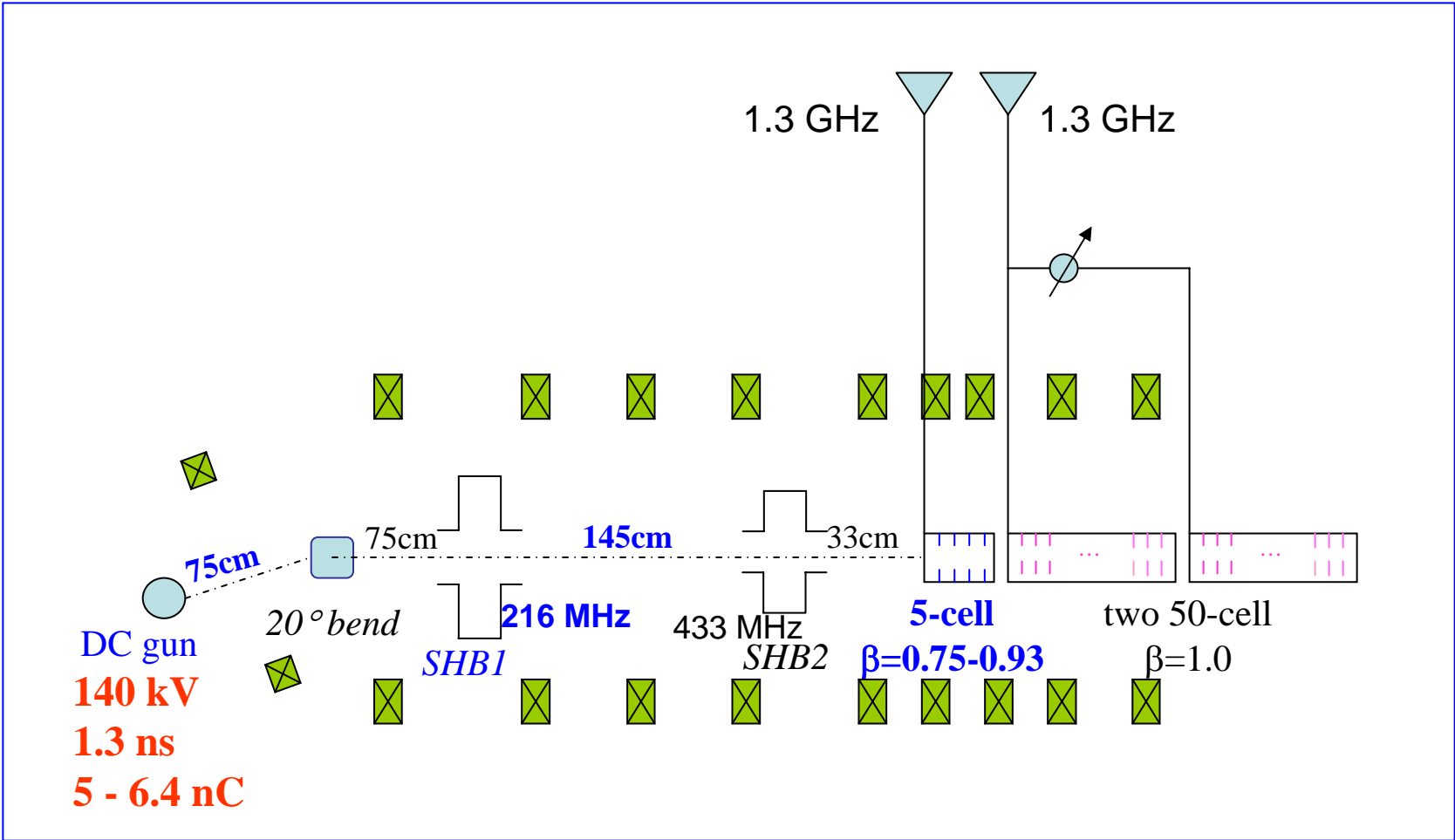


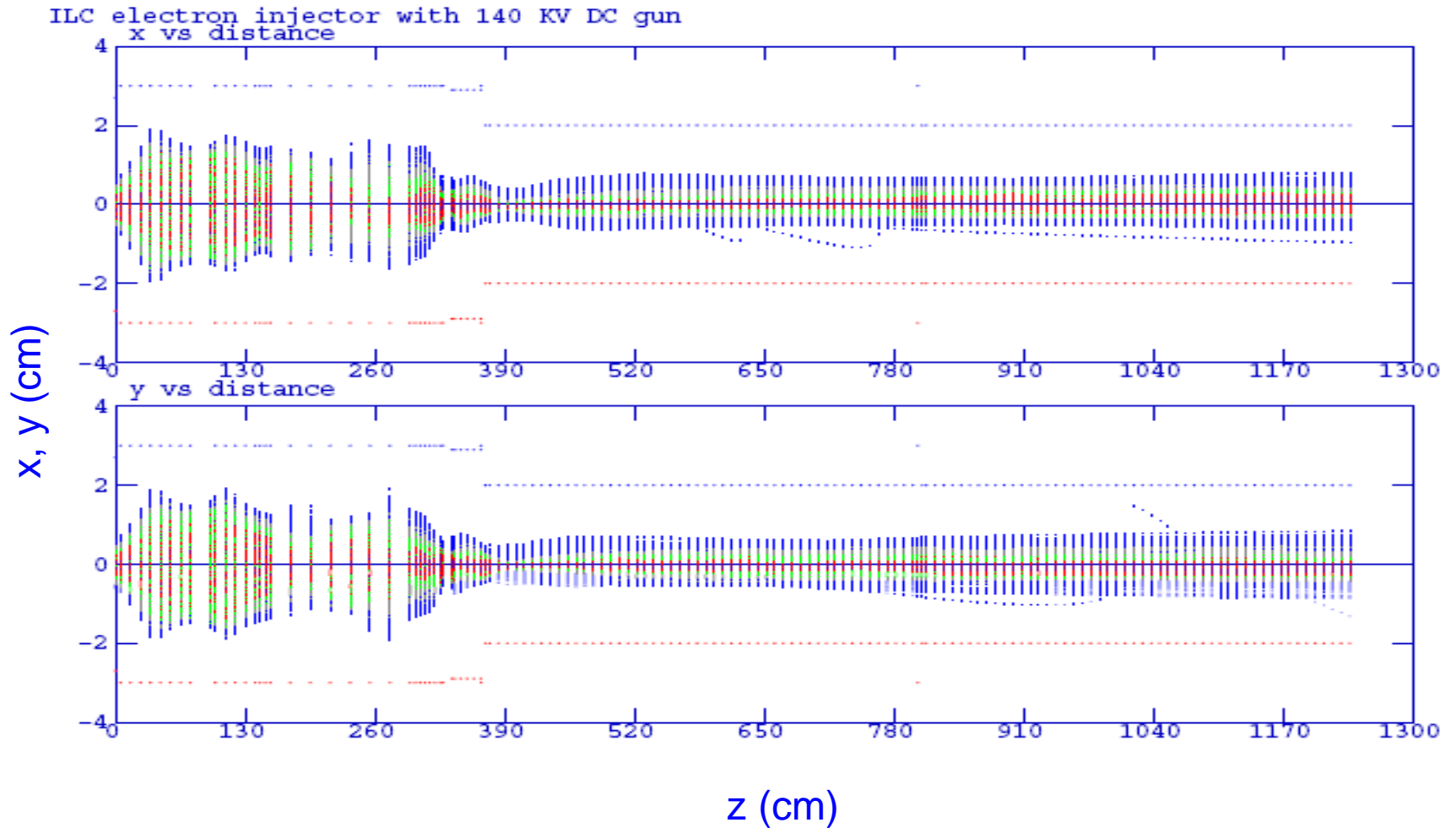
# Update on 216 MHz injector

- L-band buncher has independent phase and amplitude (either using independent klystron or sharing klystron with L-band accelerator)
- Micro-pulse length 1.3 ns on the cathode
- Drift length between the gun and bend is increased from 55 cm to 75 cm; other parameters are adjusted accordingly.
- The injector is optimized for 5 nC, but the charge is adjustable from 5 nC to 6.4 nC: 40  $\mu\text{m}$  (5.0 nC), 50  $\mu\text{m}$  (6.4 nC)
- Achieved parameters are similar to 108 MHz injector

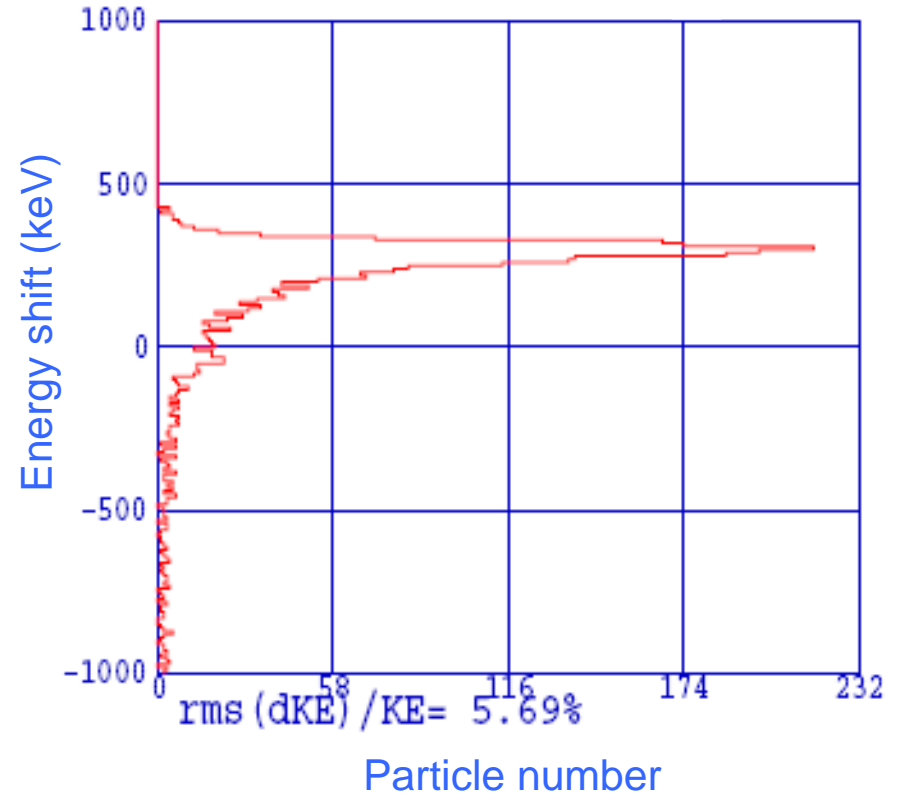
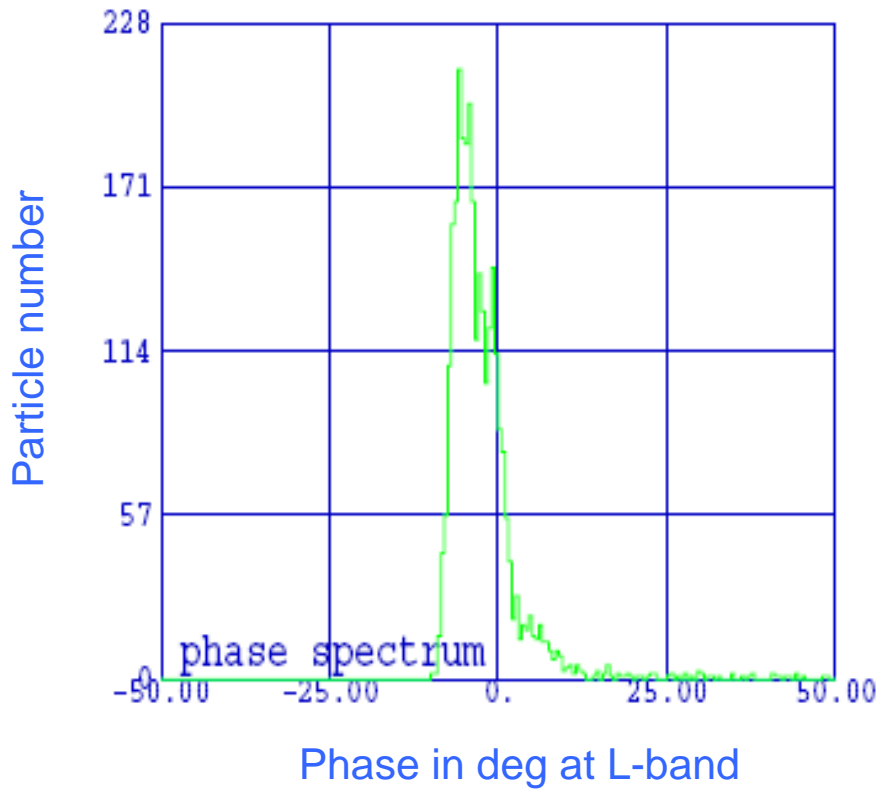
# Injector layout

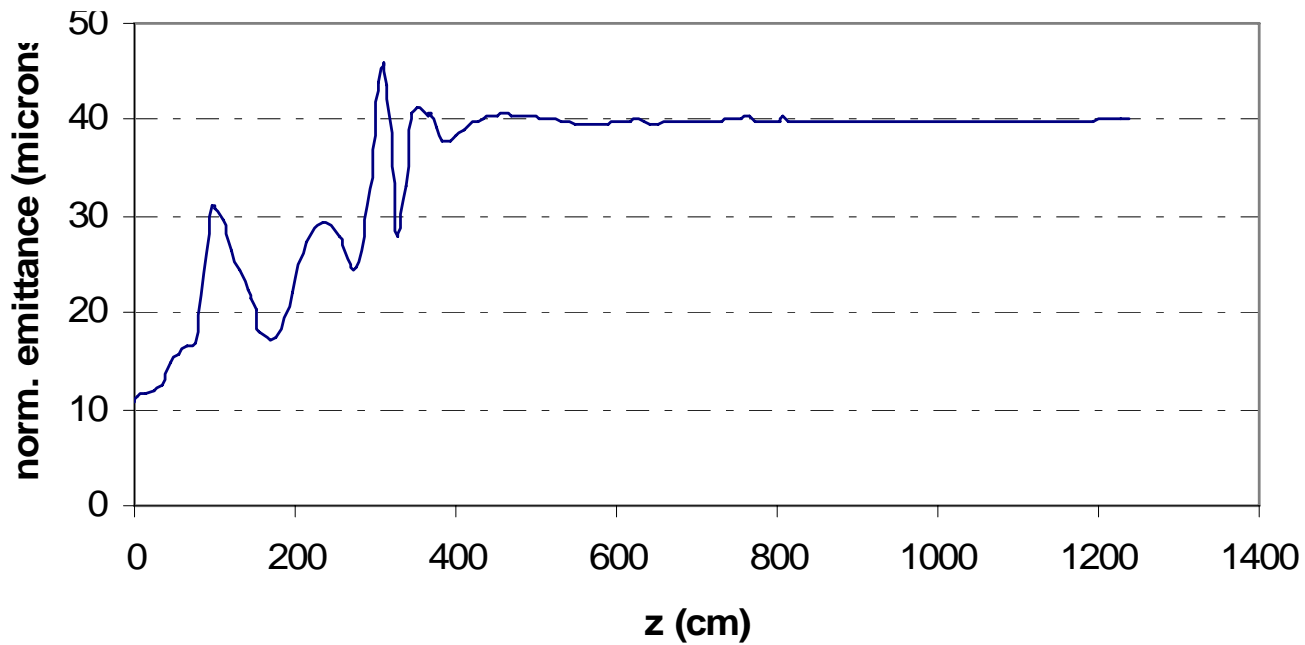
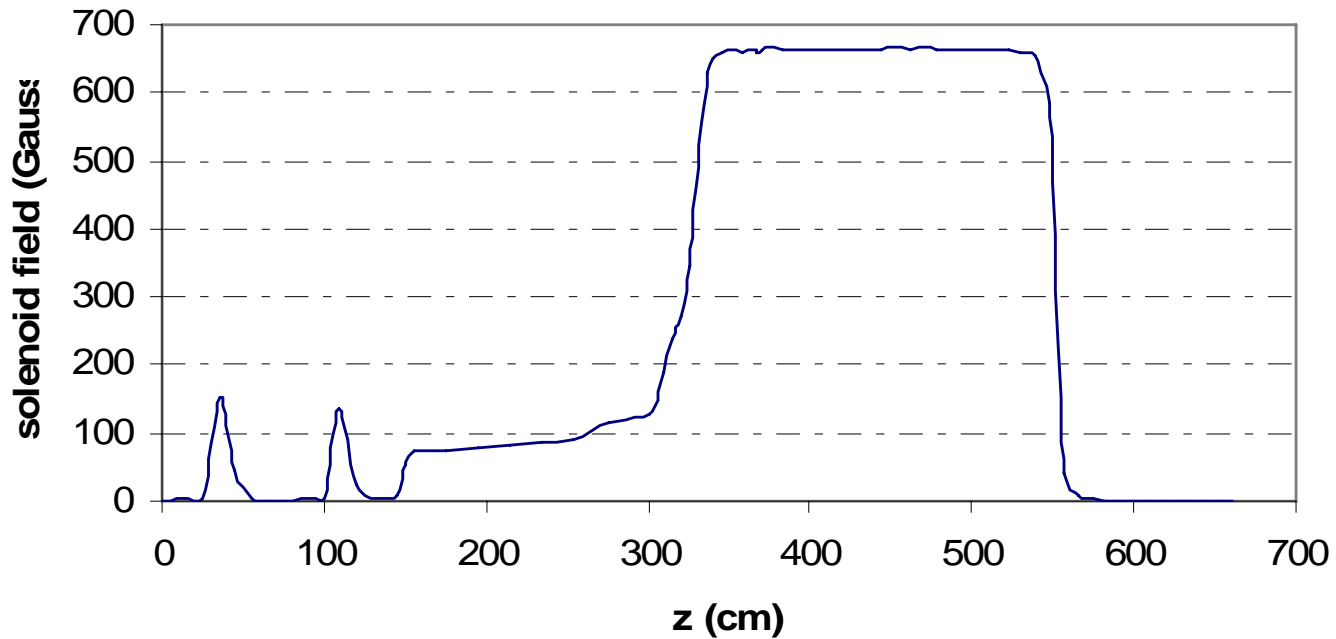


# Beam envelope



# E-z phase space





# My current time allocation

- 50% for e+ source design
- 30% for e- source design
- 20% for ATF2 project
- It will be subject to change based on the work progress, especially the start of ATF2 commissioning