

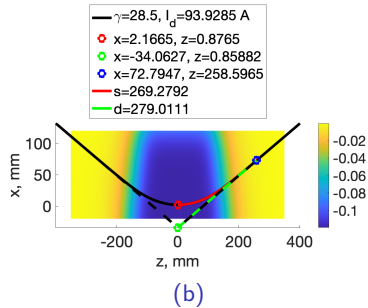
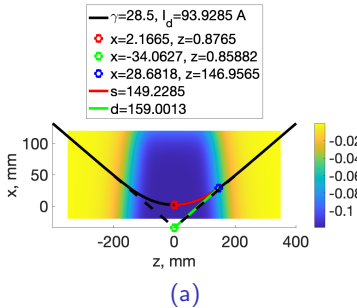
# CeC Physics

Jun Ma

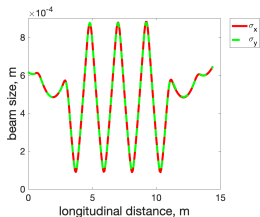
Collider-Accelerator Department  
Brookhaven National Laboratory

9/13/2021

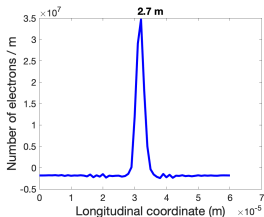
- Center of 2nd dipole to Sol 1: 0.959 m
- Sol 1 to Sol 2: 2.2 m



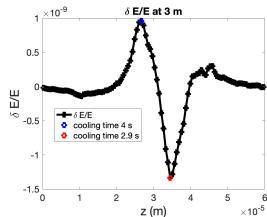
Peak current 75 A, modulator 3 m, remove ion at 2.7 m.



(a) Beam size

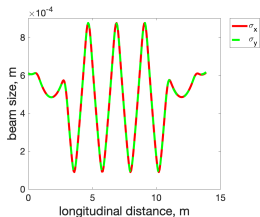


(b) Density modulation

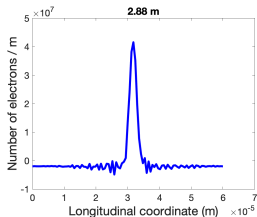


(c) Cooling force

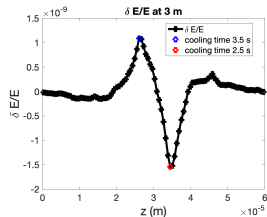
Peak current 75 A, modulator 2.88 m, remove ion at 2.88 m.



(a) Beam size

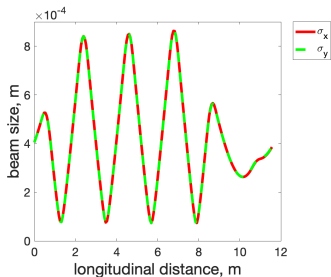


(b) Density modulation

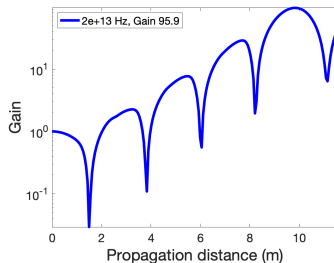


(c) Cooling force

Peak current 50 A, KV emittance  $6 \mu\text{m}$ , waist 0.15 mm, PCA gain.

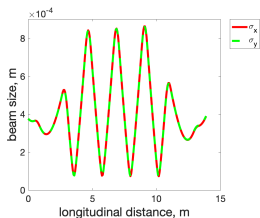


(a)

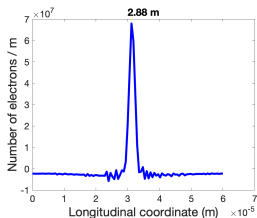


(b)

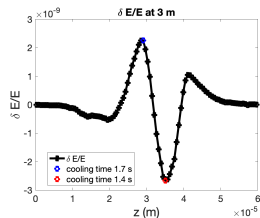
Peak current 50 A, modulator 2.88 m, remove ion at 2.88 m.



(a) Beam size

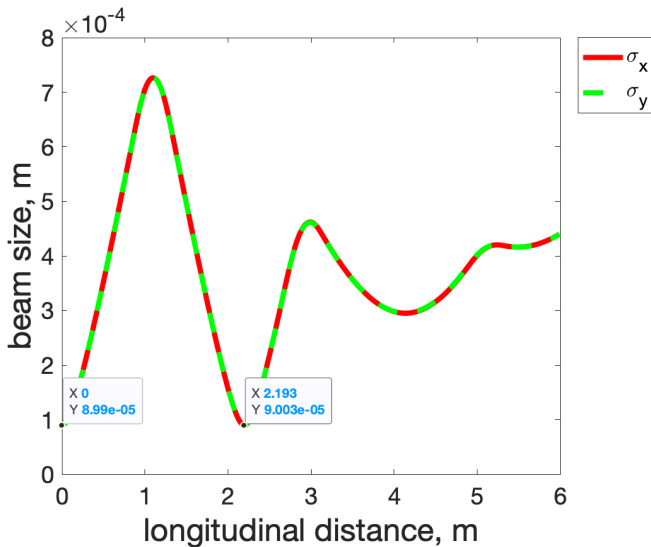


(b) Density modulation



(c) Cooling force

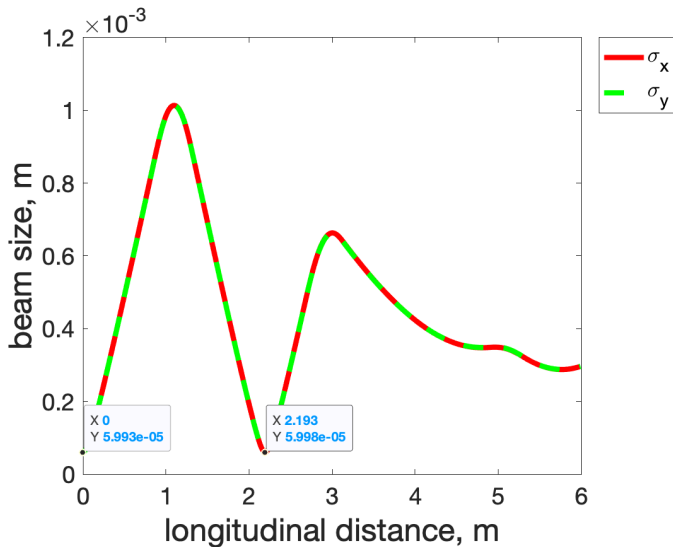
Peak current 50 A, KV emittance  $6 \mu\text{m}$ , waist 0.18 mm.



(a)



Peak current 50 A, KV emittance  $6 \mu\text{m}$ , waist 0.12 mm.



(a)