

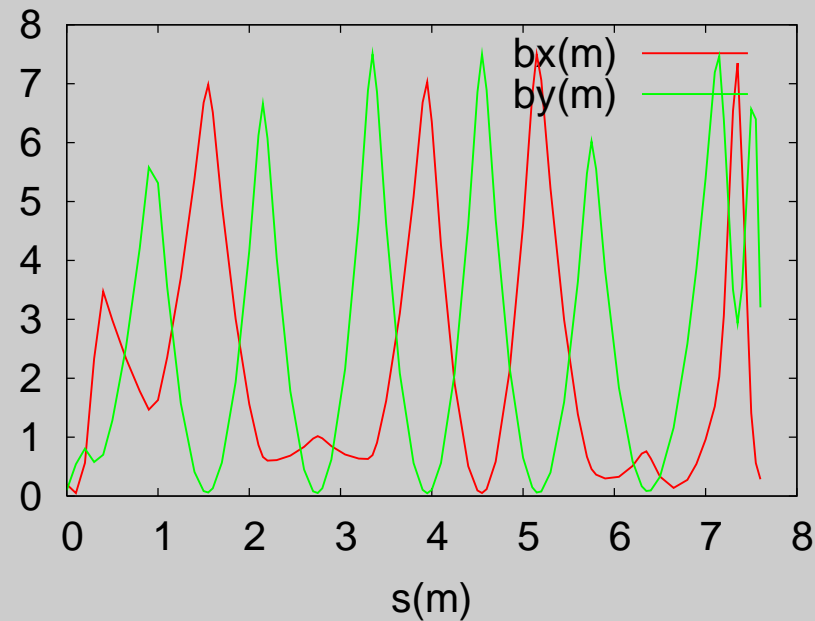
## Broad Band Chopper for ACD2

Small voltage available:  $\Delta V \simeq 600$  V (Sergei)

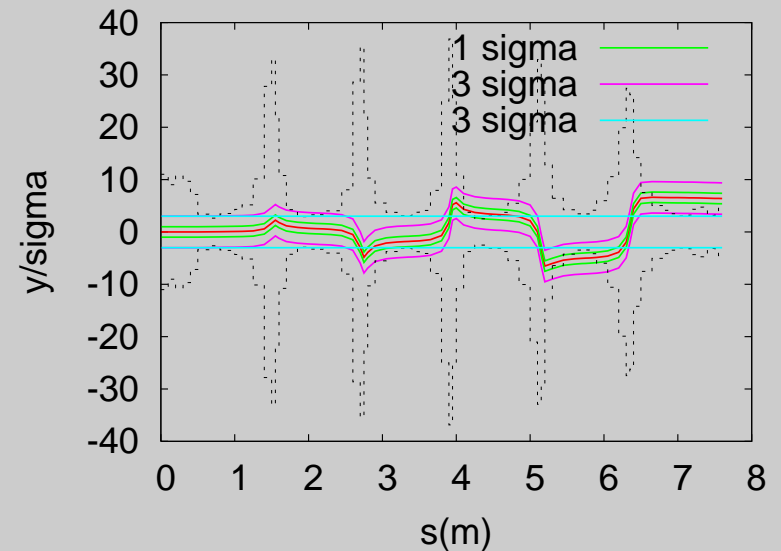
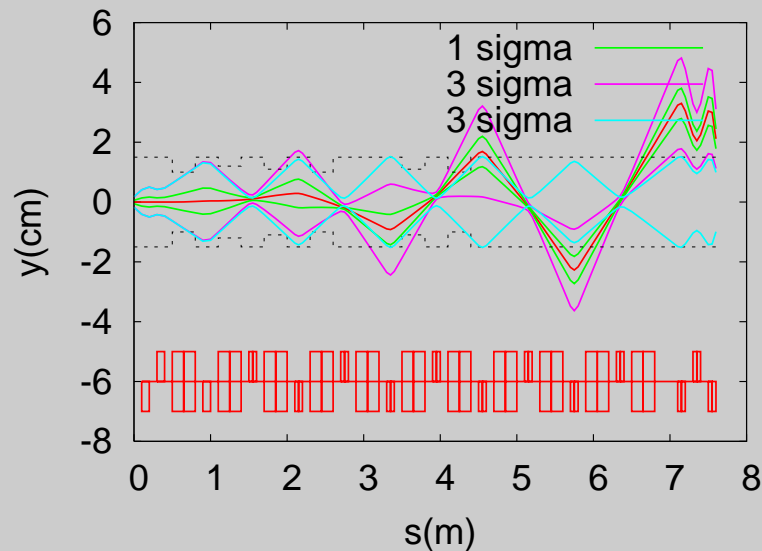
Chopping at 2.5 MeV, right after RFQ,  $\epsilon_x = \epsilon_y = 3.4$  mm mrad,  $\epsilon_z = 70$  KeV deg

One possible scheme uses 6 vertical kickers, each 30 cm long, interleaved with quadrupoles and provides room for a RF buncher.

MAD-X



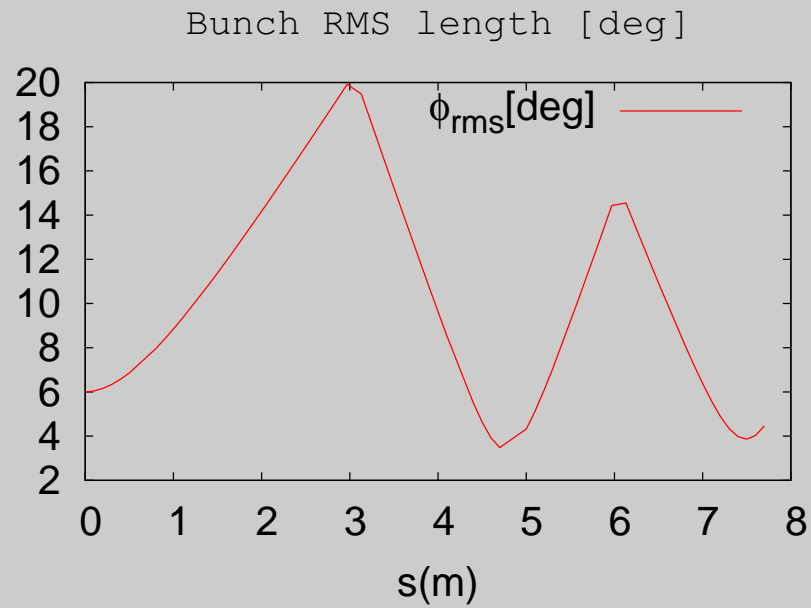
Variable gap height (between 2 and 2.4 cm), depending on beam size, for maximum field. No losses for the un-kicked beam without space charge.



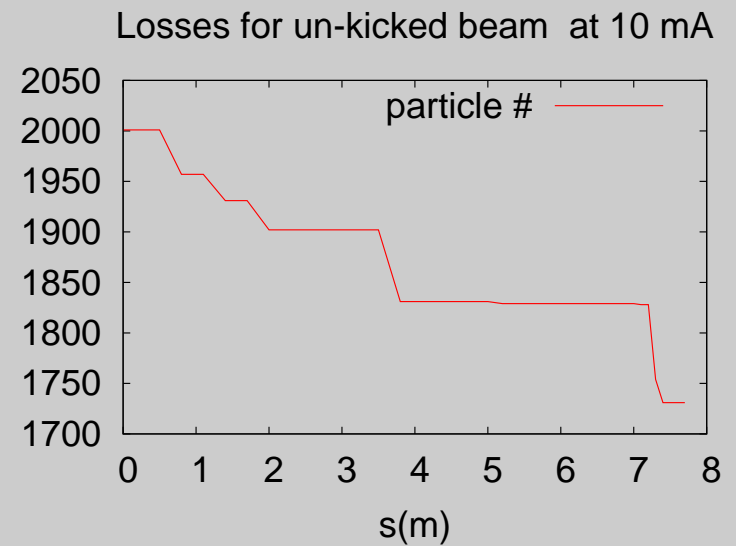
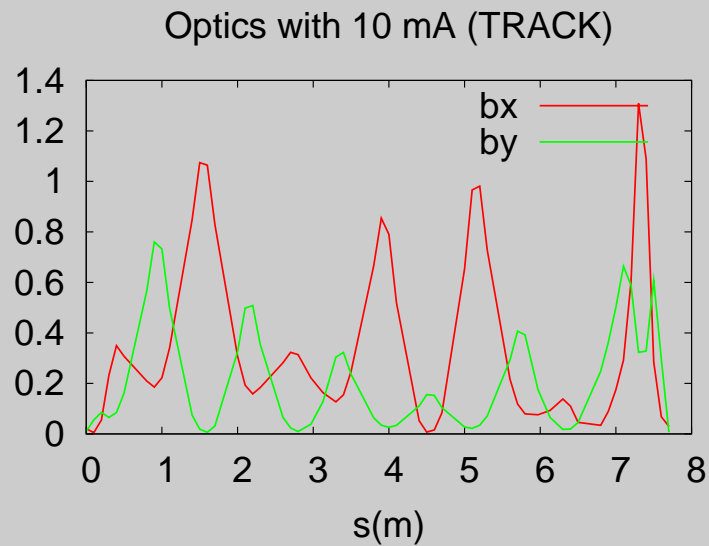
11 kickers shown, but only 1th to 4th and 6th and 7th powered.

Two bunchers at 3 m and 6 m (field map from ICD1, aperture embedded in file!)  
Frequency: 162.5 MHz

## TRACK



$I=10$  mA at 162.5 MHz: large losses also for the un-kicked beam!



Optics needs to be re-matched.