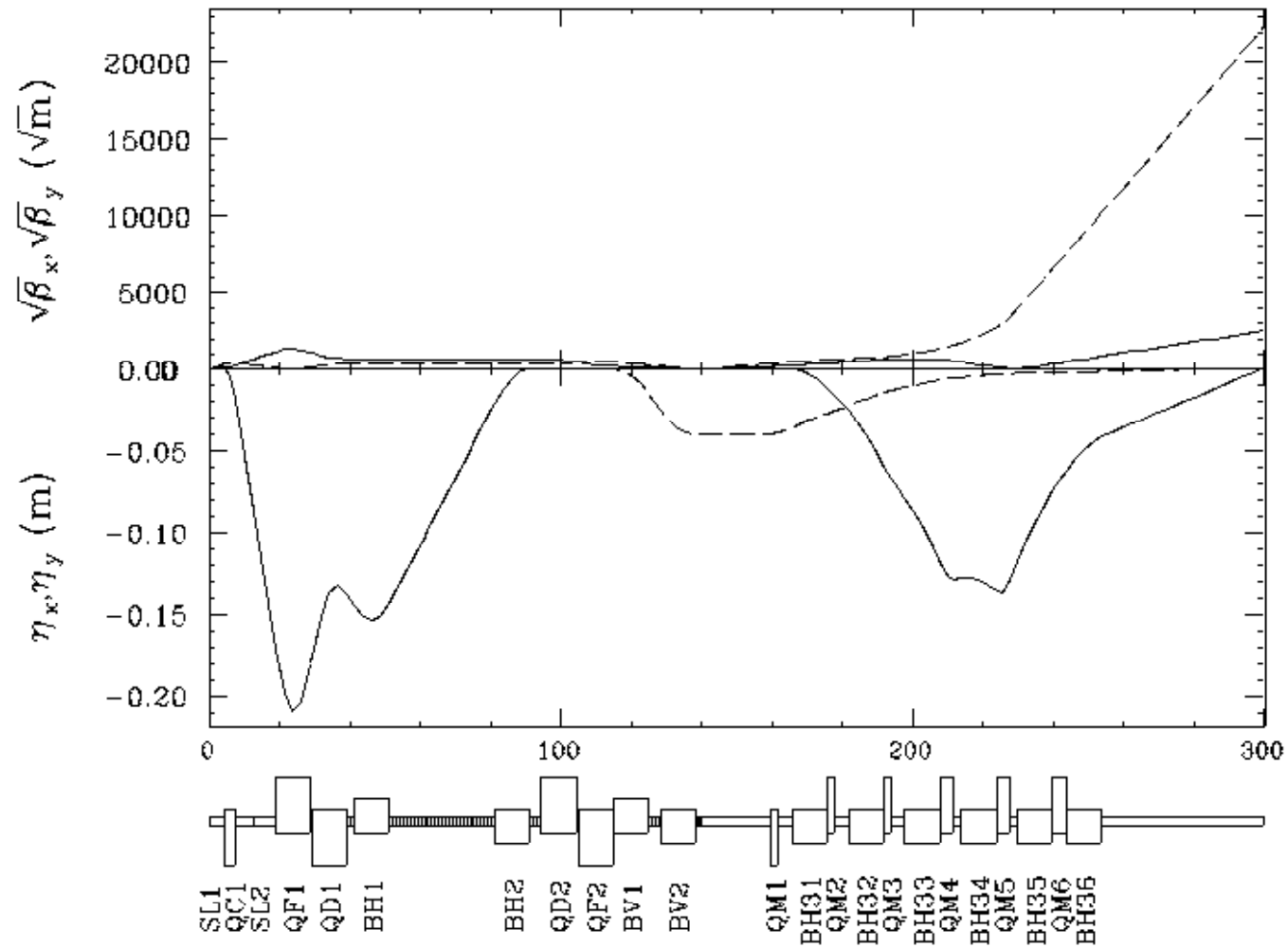
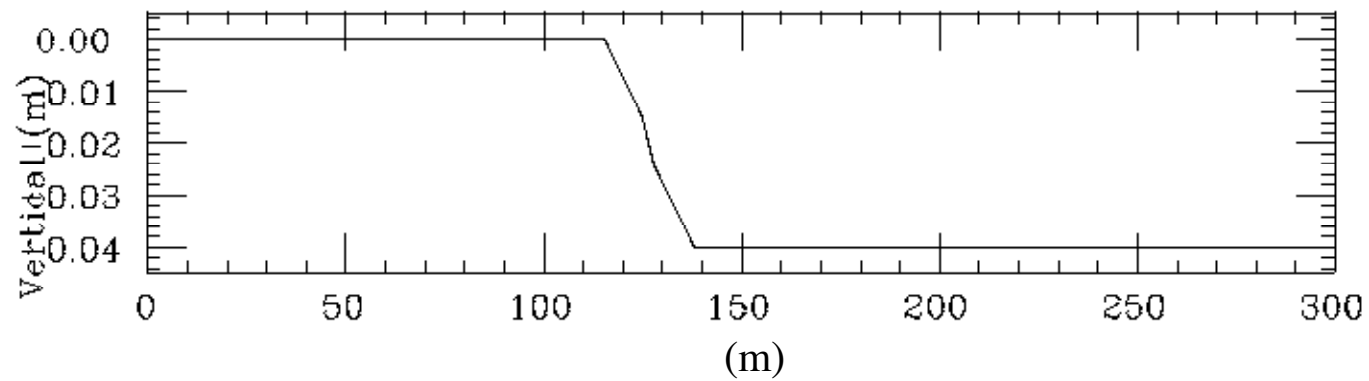
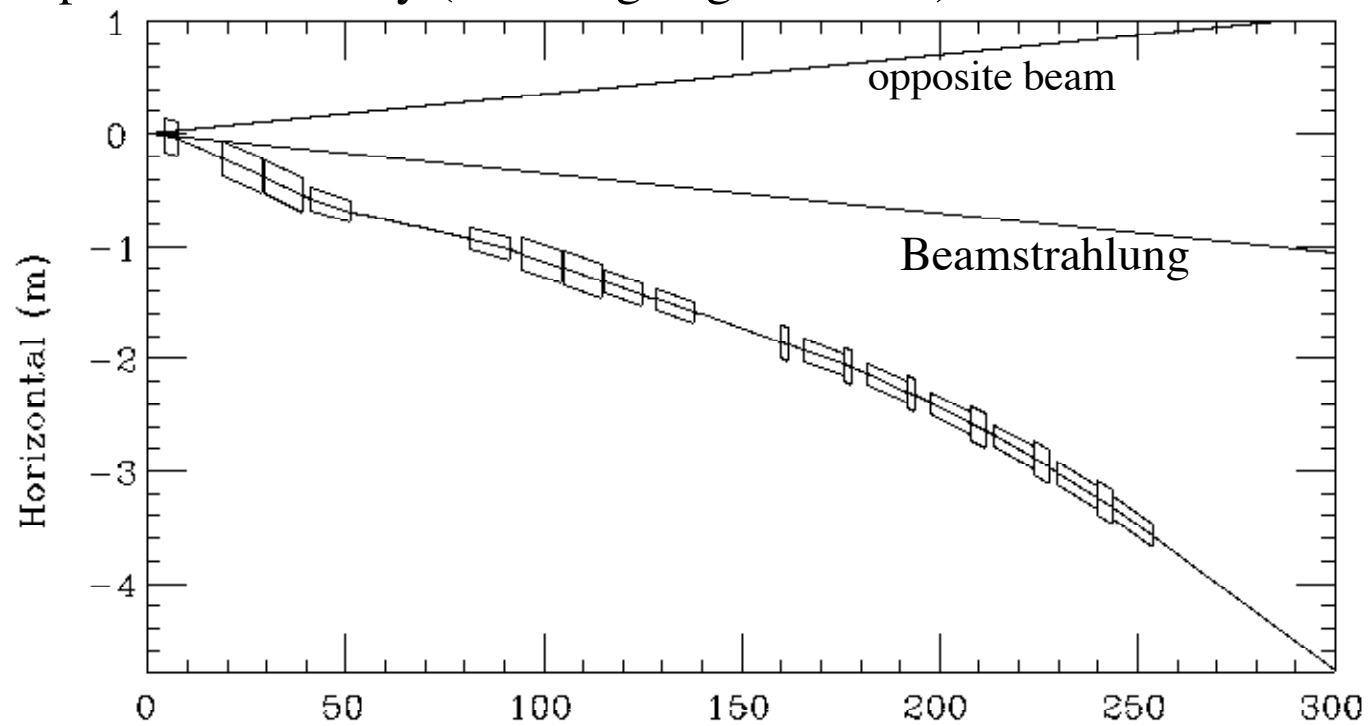


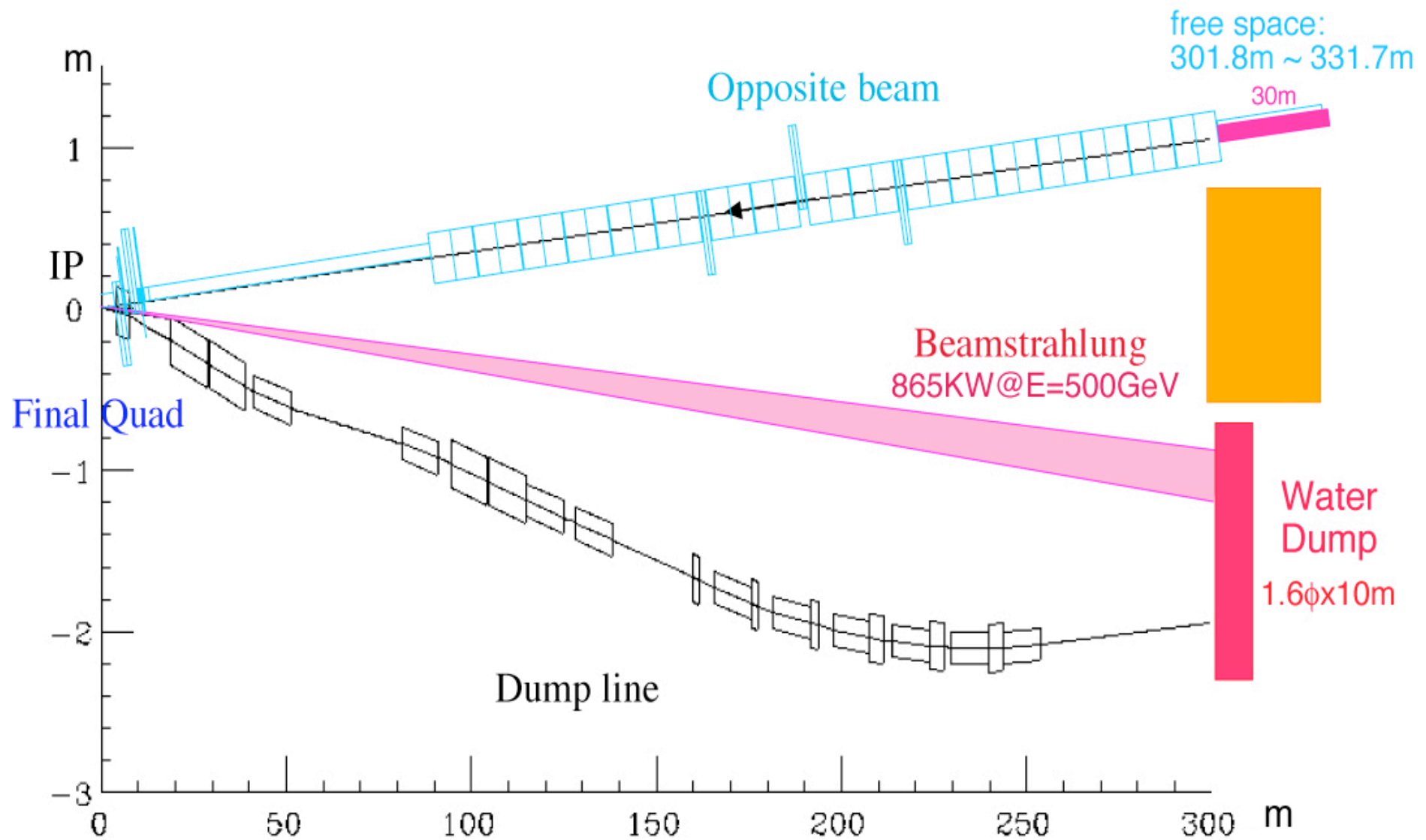
GLC Dump Line Design  
for  
Measurement of Energy Distribution  
K.Kubo (KEK)

# Dump Line Optics (Crossing angle 7 mrad)

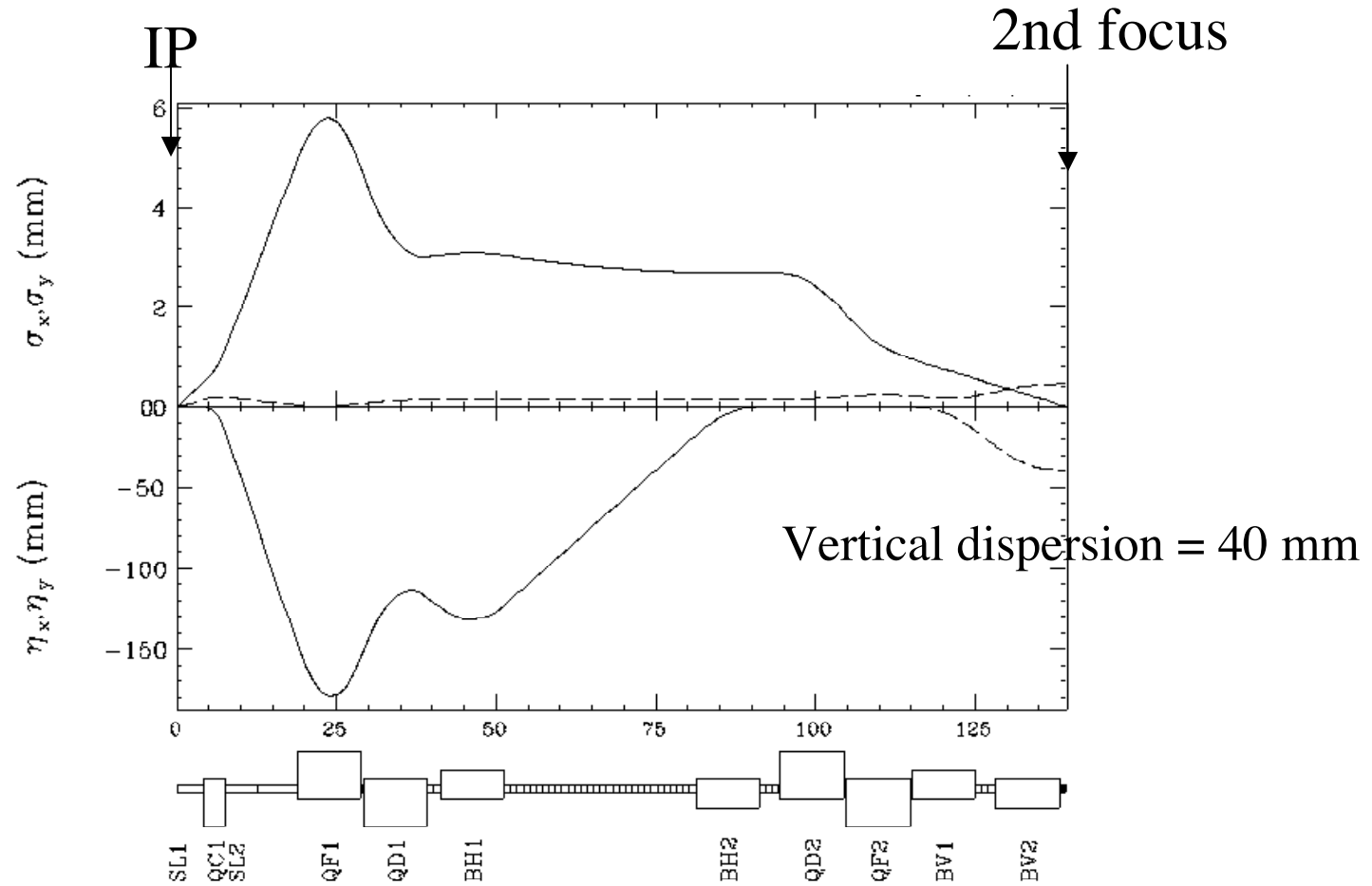


# Dump Line Geometry (Crossing angle 7 mrad)



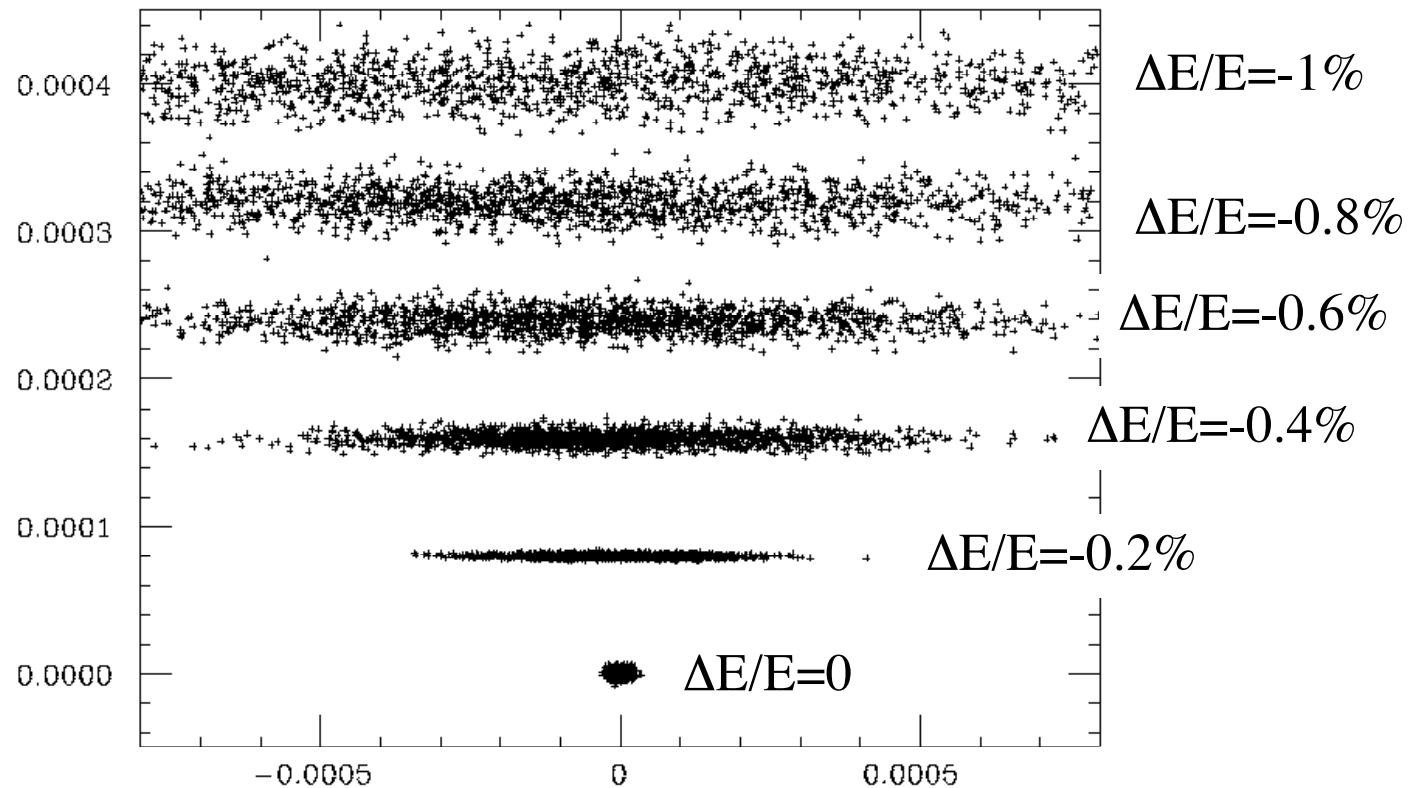


# Optics from IP to 2nd focus.

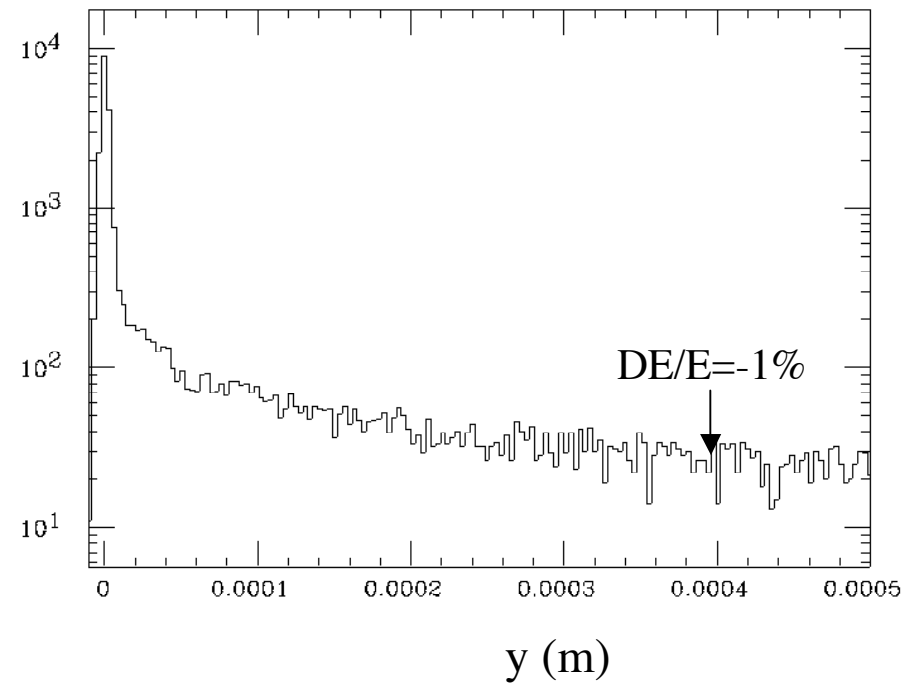
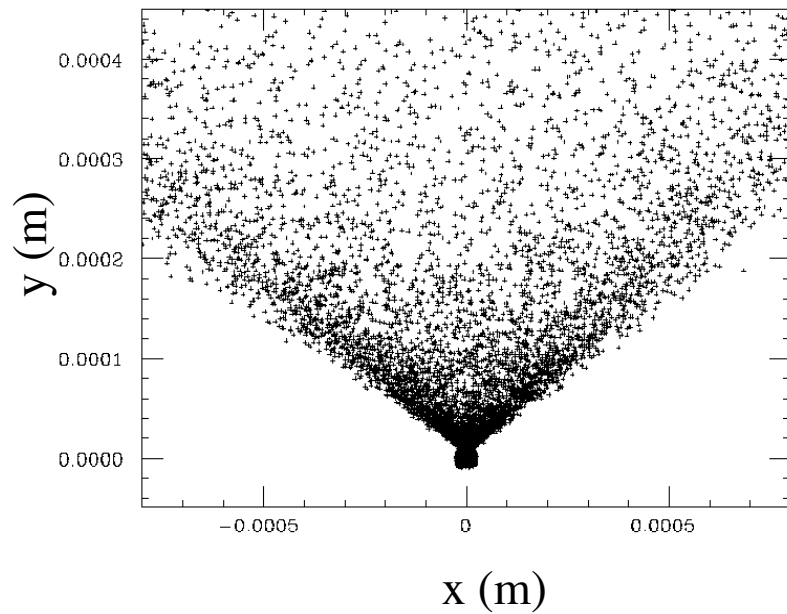


## x-y distribution at 2nd focus for monochromatic beams.

Horizontal laser wire can be used for energy distribution measurement.



**x-y distribution at 2nd focus.**  
Simulated by CAIN(collison) and SAD(beam line).



# Number of $\gamma$ -rays/bunch-crossing vs. laser wire position (rough estimation, Preliminary)

Assumption:

Laser peak power= 10 MW (0.1mJ, 10 ps)

Laser wire size:  $\sigma = 10 \mu\text{m}$  (  $\rightarrow \Delta E/E$  0.025%)

Bunch population:  $N=7E9/\text{bunch}$

