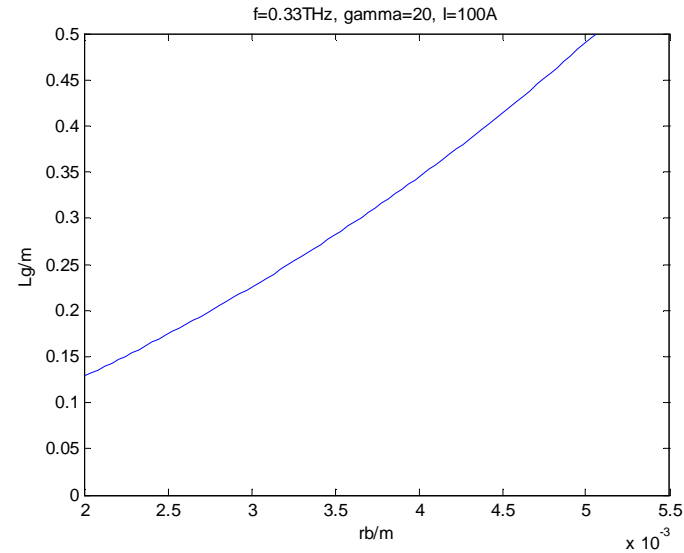
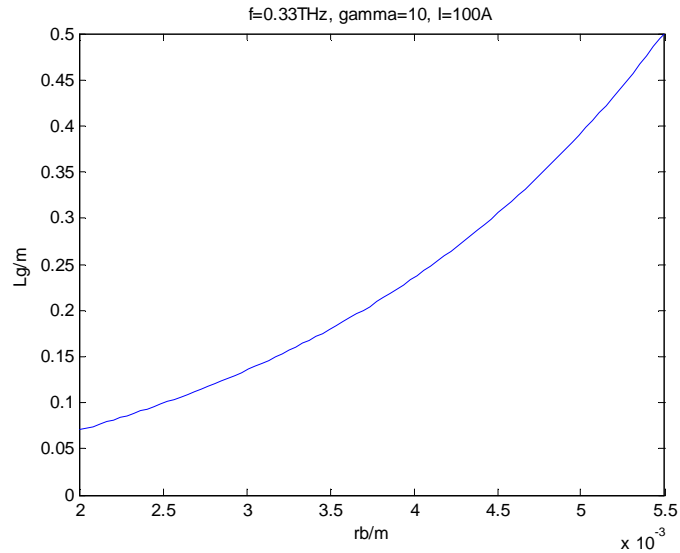


# other parameters

different energy and pipe radius  
still current=100 A and 0.33 THz



for plasma oscillations:

emittance= 1um

beta\_av=2m

gamma=10 --> Sp = 2.56 m

20 10.49 m

30 25.30 m

