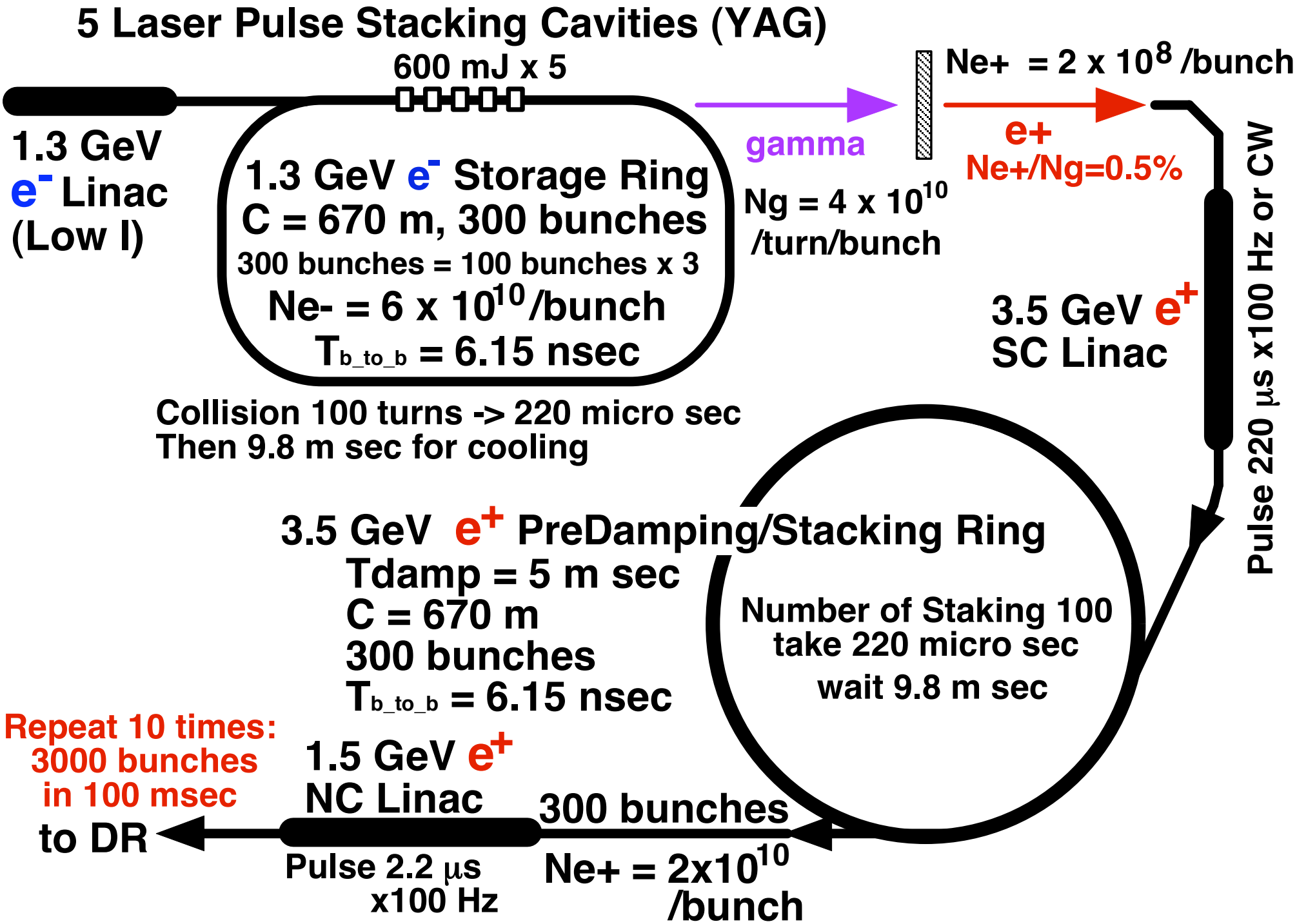
5 Laser Pulse Stacking Cavities (YAG)
600 mJ x 5
1.3 GeV
e- Linac
(Low I)
1.3 GeV e- Storage Ring
C = 670 m, 300 bunches
300 bunches = 100 bunches x 3
Ne- = 6 x 10^10 /bunch
Tb_to_b = 6.15 nsec
gamma
Ng = 4 x 10^10
/turn/bunch
Ne+ = 2 x 10^8 /bunch
e+
Ne+/Ng=0.5%
3.5 GeV e+
SC Linac
Pulse 220 µs x100 Hz or CW
Collision 100 turns -> 220 micro sec
Then 9.8 m sec for cooling
3.5 GeV e+ PreDamping/Stacking Ring
Tdamp = 5 m sec
C = 670 m
300 bunches
Tb_to_b = 6.15 nsec
Number of Staking 100
take 220 micro sec
wait 9.8 m sec
Repeat 10 times:
3000 bunches
in 100 msec
to DR
1.5 GeV e+
NC Linac
300 bunches
Pulse 2.2 µs
x100 Hz
Ne+ = 2x10^10
/bunch