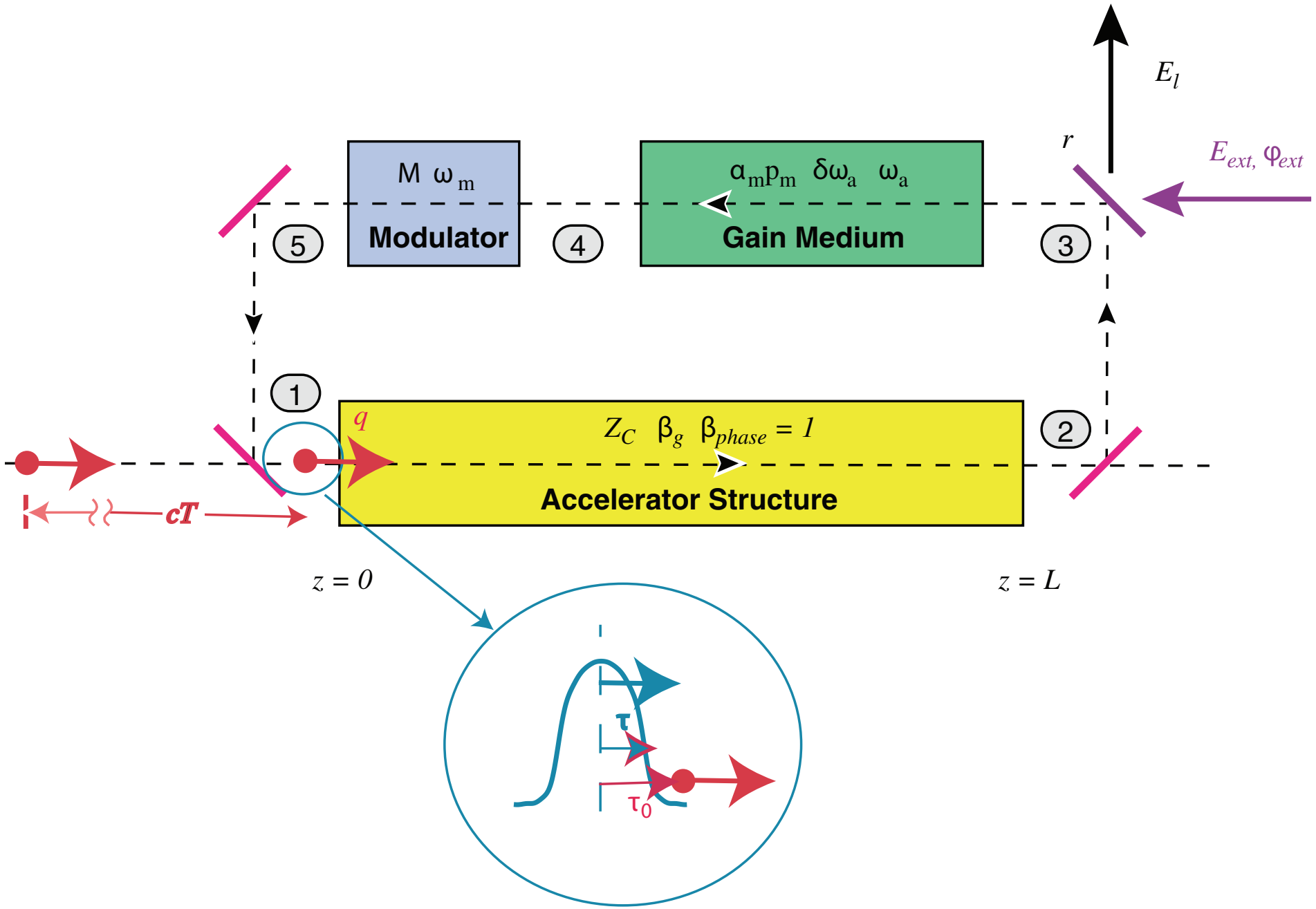

E_l
r
E_{ext}, φ_{ext}
M ω_m
Modulator
$\alpha_m p_m$ $\delta\omega_a$ ω_a
Gain Medium
5
4
3
1
2
q
Z_C β_g $\beta_{phase} = 1$
Accelerator Structure
cT
z = 0
z = L
τ
τ_0