$$n_+ = \frac{q_+}{2e}$$

$$\rho_+ = \frac{2\pi}{\Phi_0} \phi_+$$

$$\rho_x = \frac{2\pi}{\Phi_0} \Phi_x$$

$$E_{ct} = \frac{e^2}{2\frac{c}{2}} = \frac{e^2}{2}$$

$$E_{Jt} = 2E_J$$

$$E_L = \frac{1}{2L_C} \left( \frac{\Phi_0}{2\pi} \right)$$

$$n_g = ?$$