

$$e = -N \cdot e \quad E = \sigma / \epsilon_0$$

$$F = \frac{e_1 \cdot e_2}{4\pi\epsilon_0 r^2} = e \cdot E \quad \epsilon_0 = 8,8 \cdot 10^{-12}$$

Homogeno polje:

$$A = Fs = eU$$

$$U = E \cdot h \quad W_e = e \cdot V$$

Kondenzator:

$$C = e / U \quad C = \epsilon_0 \cdot S / d$$

$$\text{vzporedno: } C = C_1 + C_2$$

$$\text{zaporedno: } 1 / C = 1 / C_1 + 1 / C_2$$

$$\text{Upor: } U = IR \quad R_{zice} = \zeta \cdot d / S$$

$$\text{zaporedno: } I = \text{const.}$$

$$U = U_1 + U_2 \quad R = R_1 + R_2$$

$$\text{vzporedno: } U = \text{const.}$$

$$I = I_1 + I_2 \quad 1 / R = 1 / R_1 + \dots \quad I_1 / I_2 = R_2 / R_1$$

$$\text{Moc: } A = Ue = UI \cdot \Delta t = I^2 R = U^2 / R$$

$$\text{Energija: } Q = P \cdot \Delta t = mc \cdot \Delta T$$

$$\text{Sila na vodnik: } F = IBd = B \times v \cdot e$$

$$\text{Gostota polja v tuljavi: } B = \mu_0 \cdot I \cdot n / d$$

$$\text{Vodnik: } E_i = vB \quad U = dE_i \quad U_i = Bvd$$

$$\text{Indukcija: } \Phi = SB \quad U_i = \Delta\Phi / \Delta t$$

$$\text{Lastna indukcija: } U_i \cdot t = I \quad L \cdot I = \Delta\Phi$$

$$\text{Izmenicna napetost: } U_o = nSB\omega \quad P_o = U_o \cdot I_o$$

$$A = \bar{P} \cdot t_o \quad \bar{P} = 1/2 \cdot P_o \quad U_{ef} = \sqrt{2}U_o$$

$$\text{Nihajni krog: } W_{ep} = \frac{CU^2}{2} = \frac{e^2}{2C} \quad A = 1/2 \cdot L \cdot I_o^2$$

$$W_{mp} = \frac{L \cdot I_o^2}{2} \quad I_o = \omega \cdot e_0 = 1 / \sqrt{LC} \cdot e_0 = 2\pi \cdot v \cdot e_0$$

$$v = \frac{1}{2\pi\sqrt{LC}}$$