Primer avance

Miguel Casanova

Energía e inductancia de Josephson

$$E_J = \int_0^t I_0 \sin(\delta) \frac{\hbar}{2e} \frac{d\delta}{dt} dt = \frac{\hbar I_0}{2e} \int_0^\delta \sin(\delta) d\delta = \frac{\hbar I_0}{2e}(1 - \cos(\delta))$$

$$\frac{dI_J}{dt} = I_0 \cos(\delta) \frac{d\delta}{dt} = I_0 \cos(\delta) \frac{2e}{\hbar} V_J$$

$$L_J = \frac{\hbar}{2eI_0 \cos(\delta)}$$

$$E_C = \frac{(2e)^2}{2C}$$

$$E_L = \frac{\hbar^2}{4e^2 L}$$

The end

Has ended sooner