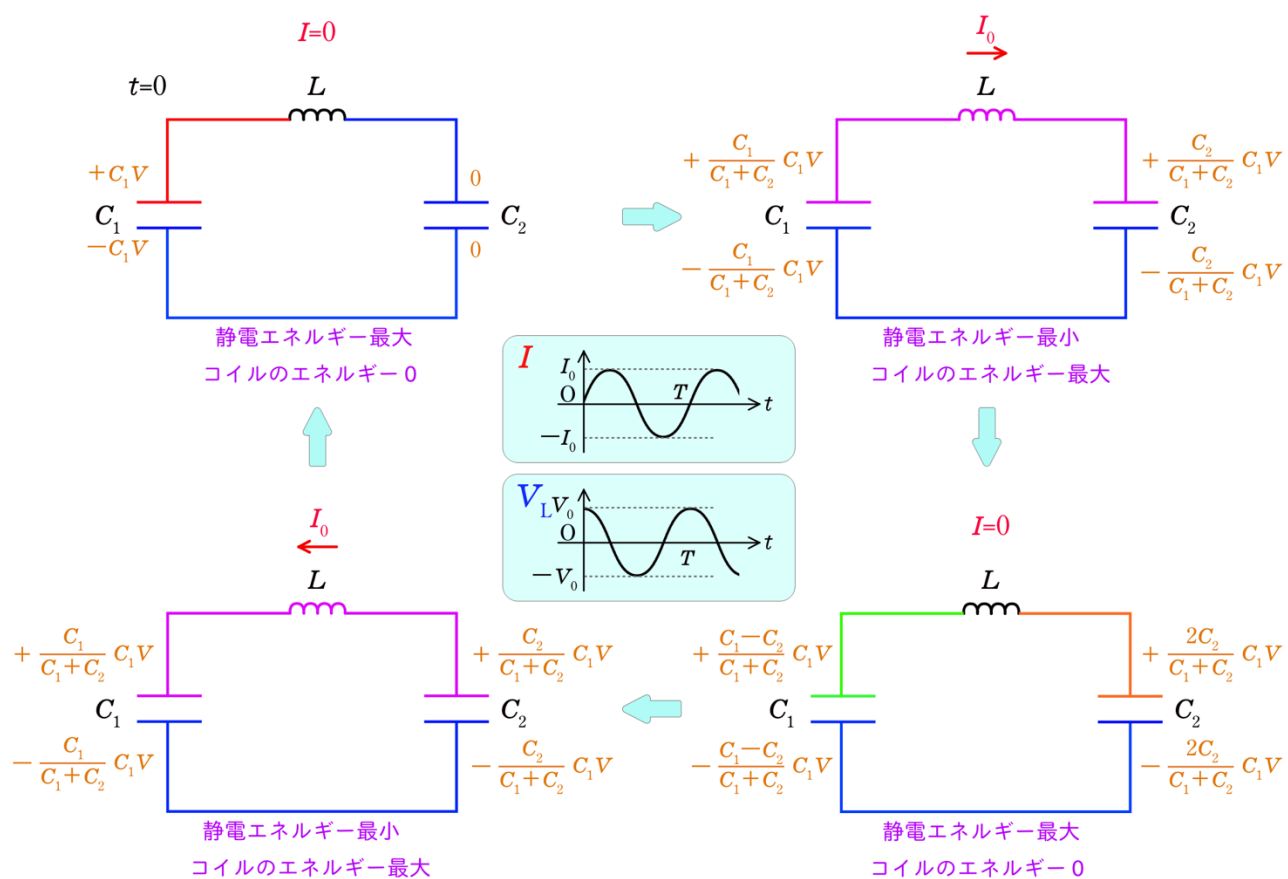
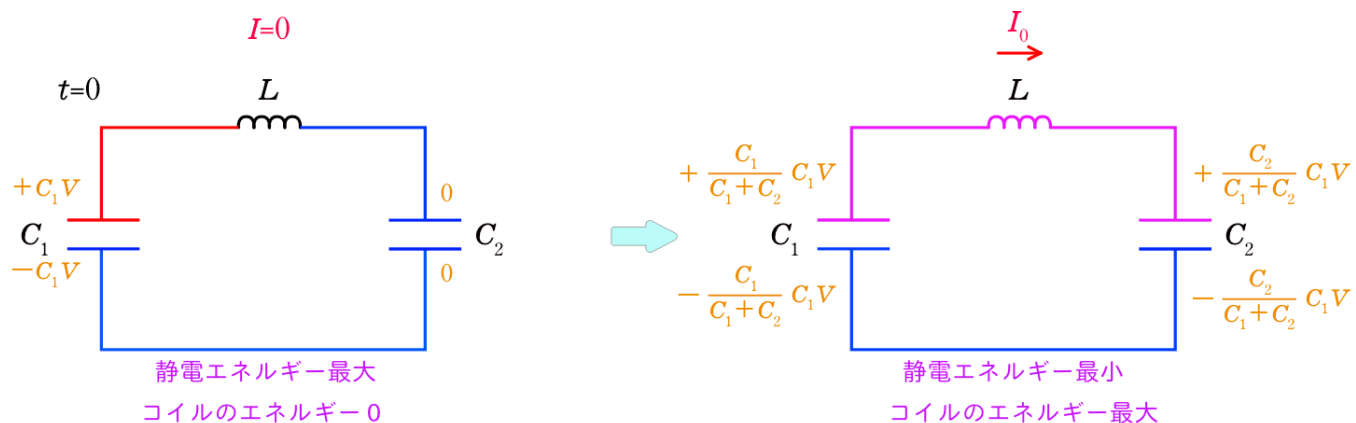


☆コンデンサー 2 個の電気振動



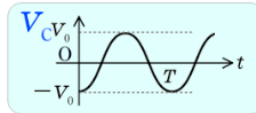
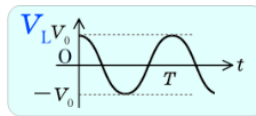
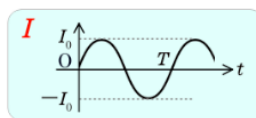
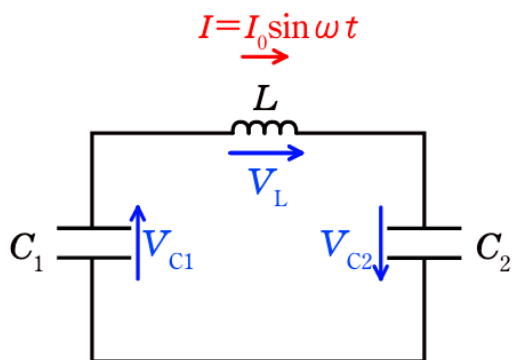
※電流の最大値



※電気振動のエネルギー

$$\frac{1}{2} C_1 V^2 = \frac{1}{2} L I_0^2 + \frac{(C_1 V)^2}{2(C_1 + C_2)}$$

※電気振動の周期



$$V_L = \omega L I_0 \cos \omega t$$

$$V_{C1} = -\frac{1}{\omega C_1} I_0 \cos \omega t$$

$$V_{C2} = -\frac{1}{\omega C_2} I_0 \cos \omega t$$

キルヒホッフ 2

$$V_L + V_{C1} + V_{C2} = 0$$

$$\left(\omega L - \frac{1}{\omega C_1} - \frac{1}{\omega C_2} \right) I_0 \cos \omega t = 0$$

$$\left(\omega L - \frac{1}{\omega C_1} - \frac{1}{\omega C_2} \right) = 0$$

$$\omega = \sqrt{\frac{C_1 + C_2}{LC_1 C_2}}$$

$$T = \frac{2\pi}{\omega} = 2\pi \sqrt{\frac{LC_1 C_2}{C_1 + C_2}}$$

※直列の合成容量と $2\pi \sqrt{LC}$ で計算できる