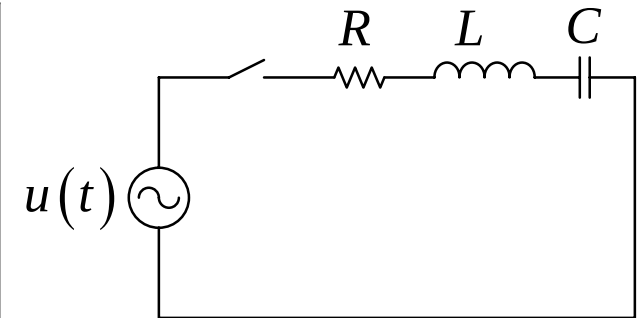
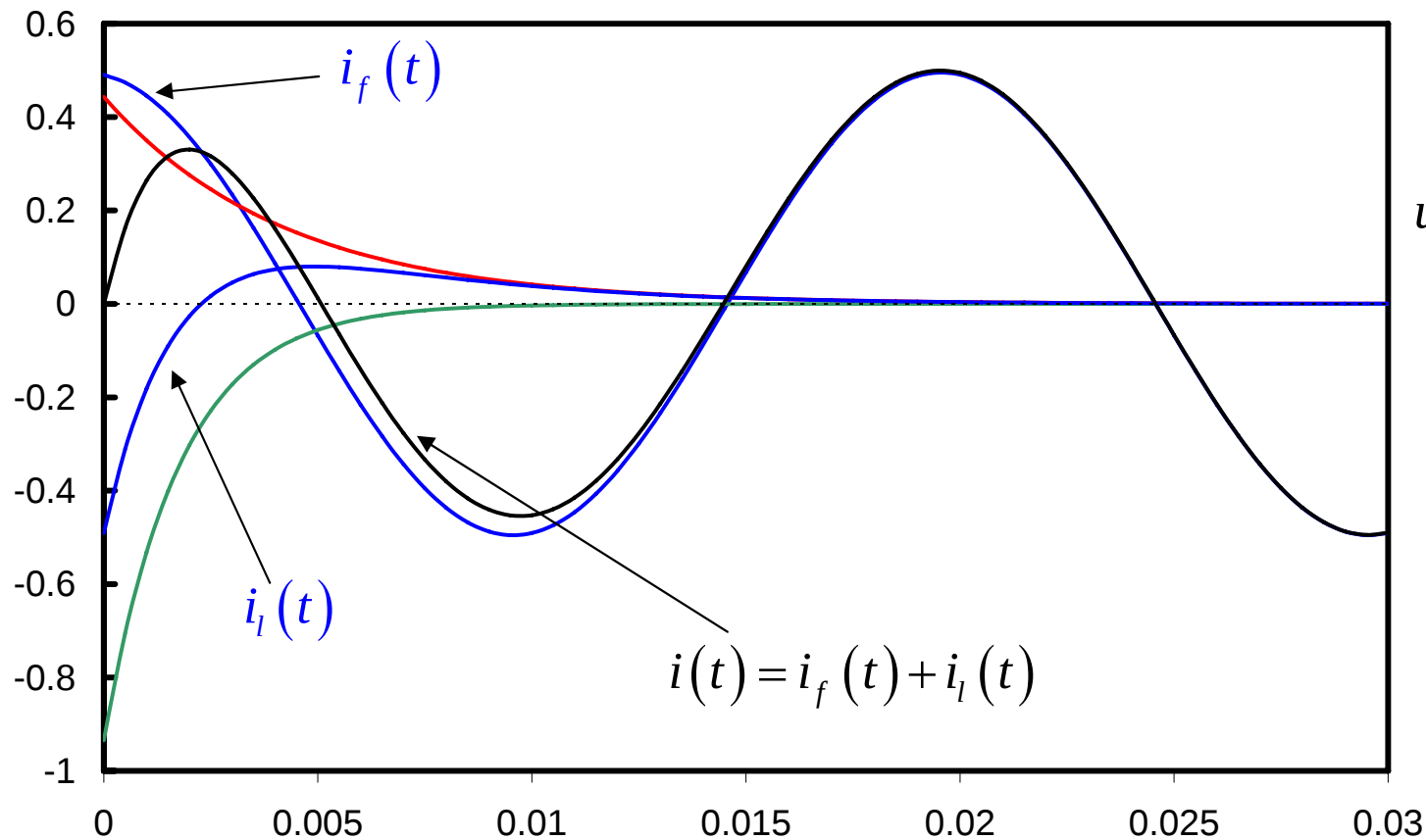


Transitório num circuito RLC série.

O interruptor é ligado em $t=0$ e o condensador está inicialmente descarregado.



$$u(t) = 20 \cos(\omega t)$$

$$R = 40\Omega \quad L = 50\text{mH}$$

$$C = 150\mu\text{F}$$

$$f = 50\text{Hz}$$

$$i_f(t) = 0.495 \cos(\omega t + 0.137) \quad (\text{A})$$

$$i_l(t) = \left[0.4435 \exp(-236.7t) \right] + \left[-0.9342 \exp(-563.3t) \right] \quad (\text{A})$$