$$= \frac{c^2}{2}\left(1+a^2\right)\cos 2\pi f_0 \tau + a\frac{c^2}{2}\cos 2\pi f_0 \tau_0 \cos 2\pi f_0 \tau$$

$$C_y(\tau) = \frac{c^2}{2}\cos 2\pi f_0 \tau \left(1 + a^2 + 2a\cos 2\pi f_0 \tau_0\right)$$

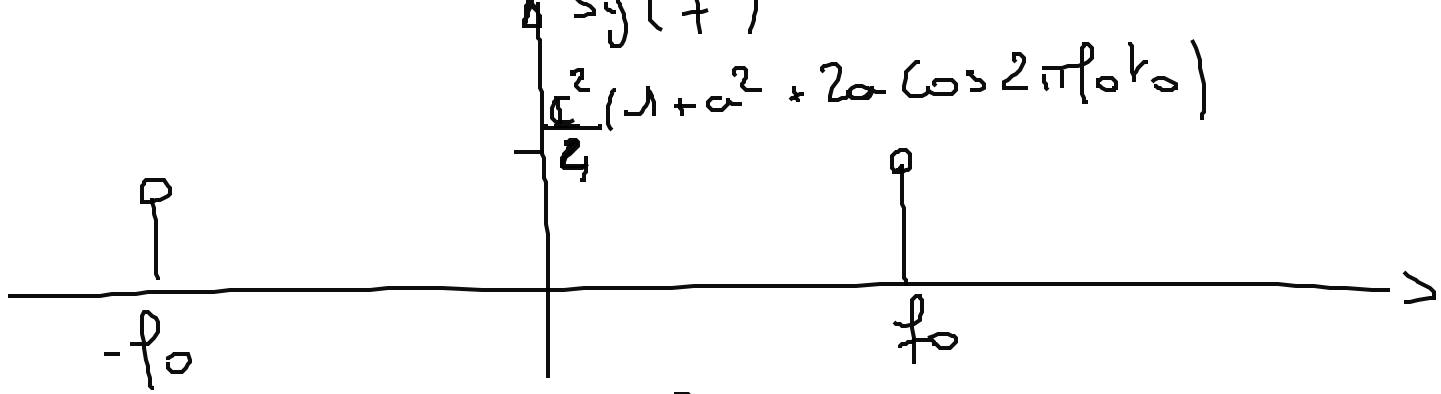
$\cos(a-b) + \cos(a+b) = 2\cos a \cos b.$

$$S_y(f) = TF(C_y(\tau))$$

costo indipendente da τ

$$= \frac{c^2}{2} TF(\cos 2\pi f_0 \tau) * TF(1 + a^2 + 2a\cos 2\pi f_0 \tau_0)$$

$$= \frac{c^2}{2}\left(\frac{1}{2}\delta(f-f_0) + \frac{1}{2}\delta(f+f_0)\right) \cdot \left(1 + a^2 + 2a\cdot\cos 2\pi f_0 \tau_0\right)$$



$$P_y = \int S_y(f)\,df = \frac{c^2}{2}\left(1 + a^2 + 2a\cos 2\pi f_0 \tau_0\right)$$

$$= C_y(0) < \infty$$