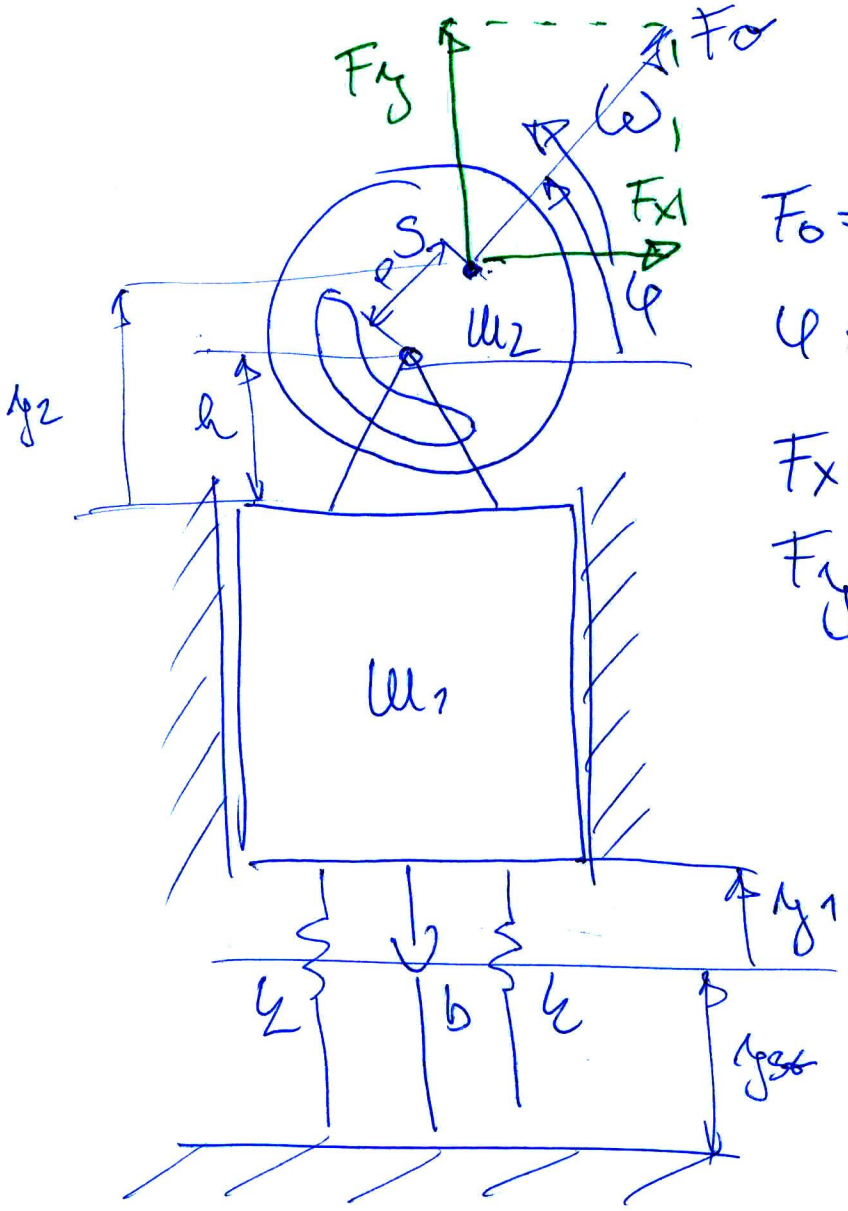

$$F_0 = m_2 \cdot e \cdot \omega^2$$

$$\varphi = \omega \cdot t$$

$$F_x = F_0 \cdot \cos\varphi$$

$$F_y = F_0 \cdot \sin\varphi$$

$$(m_1 + m_2)\,\ddot{y}_1 = -2c\,y_1 - b\cdot\dot{y}_1 + F_y$$

$$\rightarrow F_y = F_0 \cdot \sin\varphi$$

$$F_y = m_2 e \omega^2 \cdot \sin\omega t$$

analogie $F_0 = m_2 e \omega^2$

(unde ω = const.)

$$\ddot{y}_1 + \frac{b}{m_1+m_2}\dot{y}_1 + \frac{2c}{m_1+m_2}y_1 = \frac{m_2 e \omega^2}{m_1+m_2}\sin\omega t$$