

Lab

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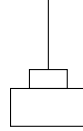
1 Massa con anello (cock ring)

Se mettiamo un cock ring sopra una massa con raggio r , allora

$$G = C_t \frac{2}{\pi} \frac{L}{r^4} \quad (1)$$

$$C_t = I_{AN} \frac{4\pi^2}{T_2^2 - T_1^2} \quad (2)$$

Figura 1: culo



$$I_{AN} = \frac{1}{2} m_{AN} (R_i^2 + R_l^2) \quad (3)$$

Poiché:

$$\begin{cases} T_1 = 2\pi \sqrt{\frac{I_{lm}}{C_t}} \\ T_2 = 2\pi \sqrt{\frac{I_{lm} + I_{AN}}{C_t}} \end{cases}$$

La propagazione dell'errore allora:

$$\frac{\Delta G}{G} = \frac{\Delta L}{L} + 4 \frac{\Delta d}{d} + \frac{\Delta I_{AN}}{I_{AN}} + \frac{2T_2 \Delta T_2 + 2T_1 \Delta T_1}{T_2^2 - T_1^2}$$

Allora si ha che:

$$\frac{\Delta I_{AN}}{I_{AN}} = \frac{\Delta m_{AN}}{m_{AN}} - \frac{2R_i \Delta R + 2R_l \Delta R_c}{R_i^2 + R_l^2}$$