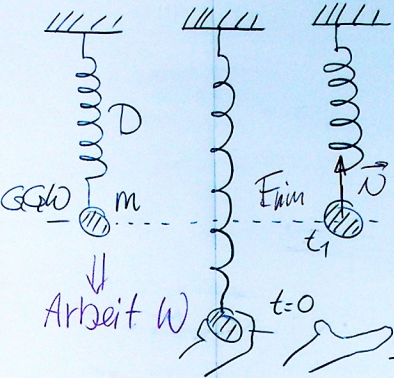


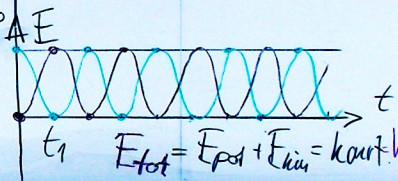
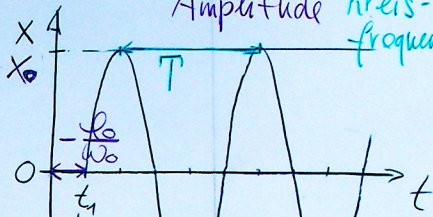
Energiebetrachtung



harmonische Schwingung

$$x(t) = x_0 \sin(\omega_0 t + \varphi_0)$$

Amplitude x_0 Kreisfrequenz ω_0 Phase φ_0



$$E_{pot} = \frac{1}{2} D x^2$$

$$E_{kin} = \frac{1}{2} m \dot{x}^2$$

- geg. durch Schwing-System
- Anfangsbedingungen

$$E_{tot} = E_{pot} + E_{kin} = k \cdot a_{eff} \cdot W$$