

Težka vzmet

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Presekov seminar 2025/26, 6. srečanje

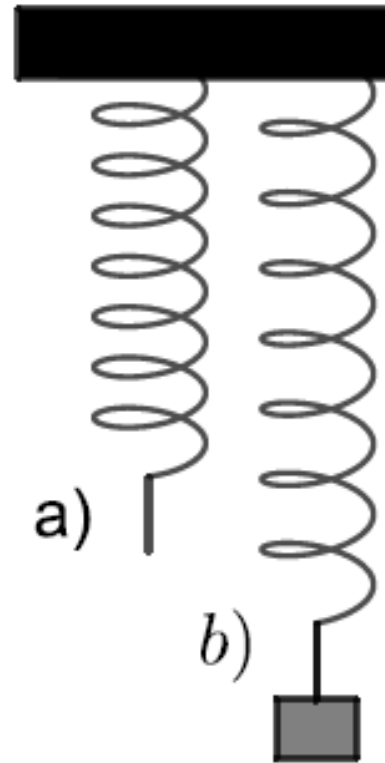
povzeto po *Slinki*, Nada Razpet

samoviseča vzmet

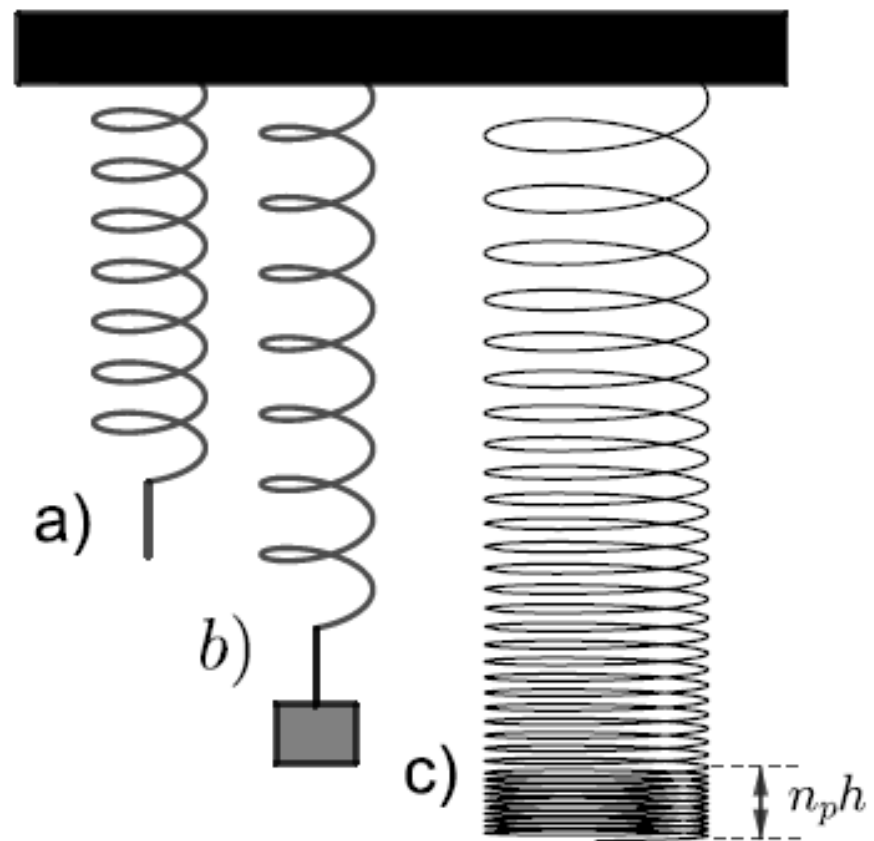
https://www.researchgate.net/publication/301588952_Preprint_The_most_surprising_experiment_in_classical_mechanics



- lahka vzmet
- Hookov zakon $F = k \Delta x$

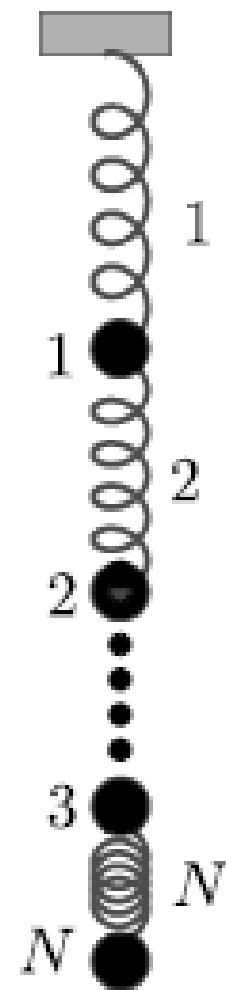


- těžka vzmet?



$$m_1 = m/N$$

$$k = \dots$$

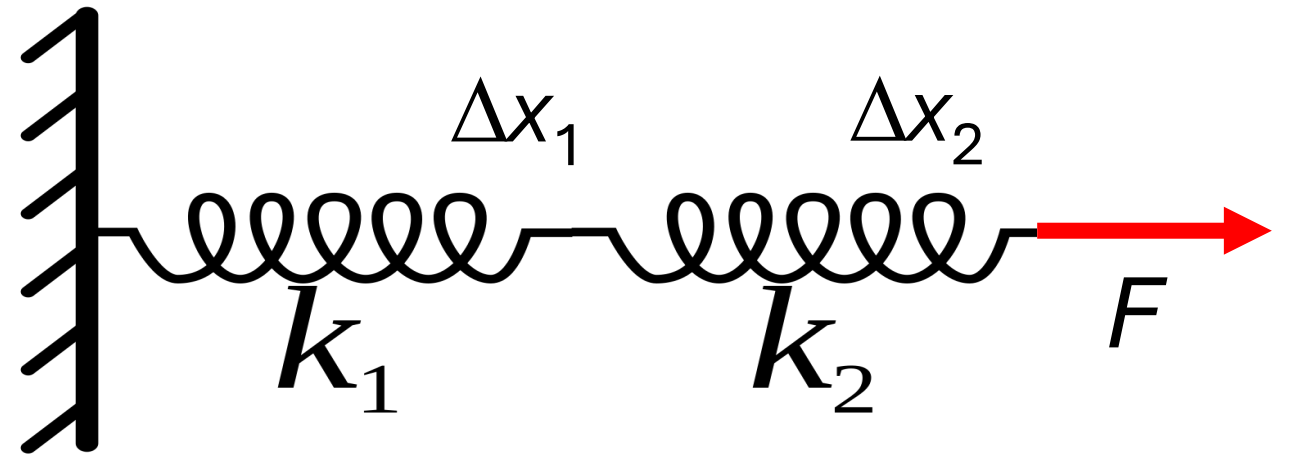
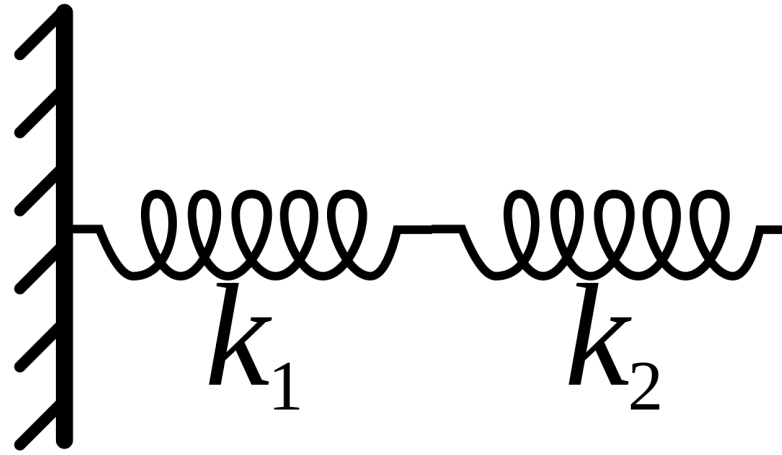


$$F = k \Delta x$$

$$= k (\Delta x_1 + \Delta x_2)$$

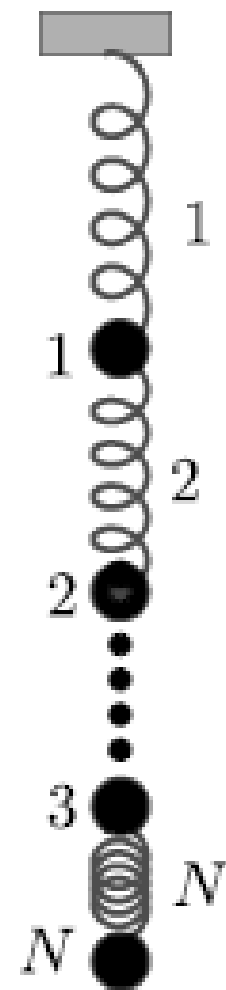
$$= k (F/k_1 + F/k_2)$$

$$1/k = 1/k_1 + 1/k_2$$



$$m_1 = m/N$$

$$k_1 = kN$$



$$m_1 = m/N$$

$$k_1 = kN$$

$$\Delta x = \Delta x_1 + \Delta x_2 + \dots$$

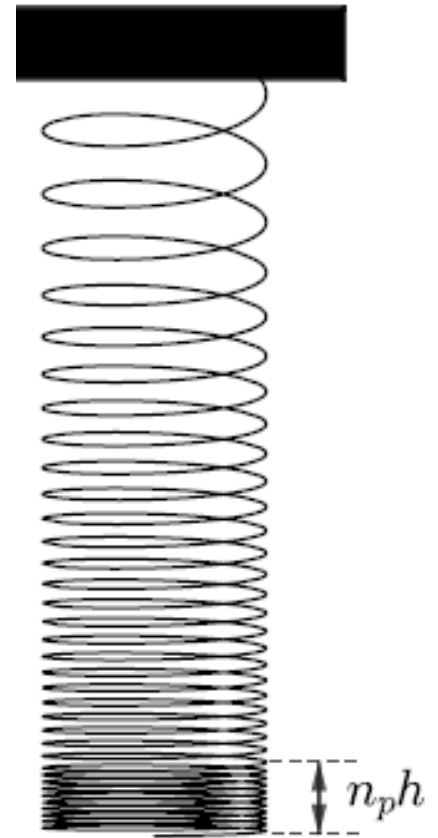
$$\Delta x = m_1 g/k_1 + 2m_1 g/k_1 + \dots =$$

$$= m_1 g/k_1 (1 + 2 + \dots N)$$

$$= m_1 g/k_1 (N(N+1)/2) = mg/2k$$

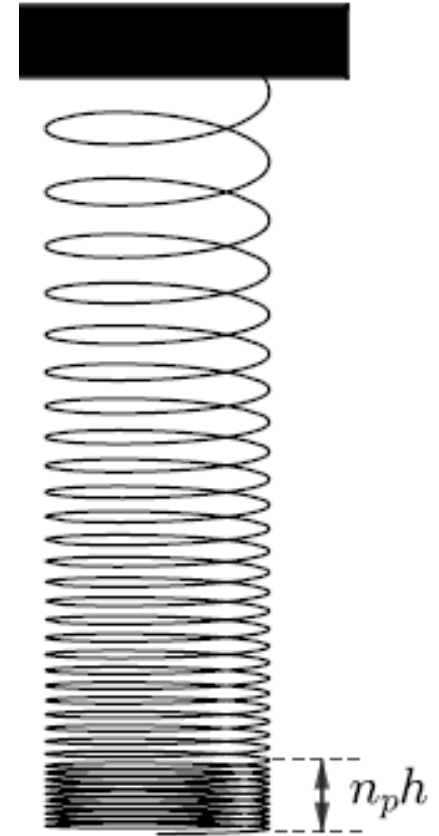
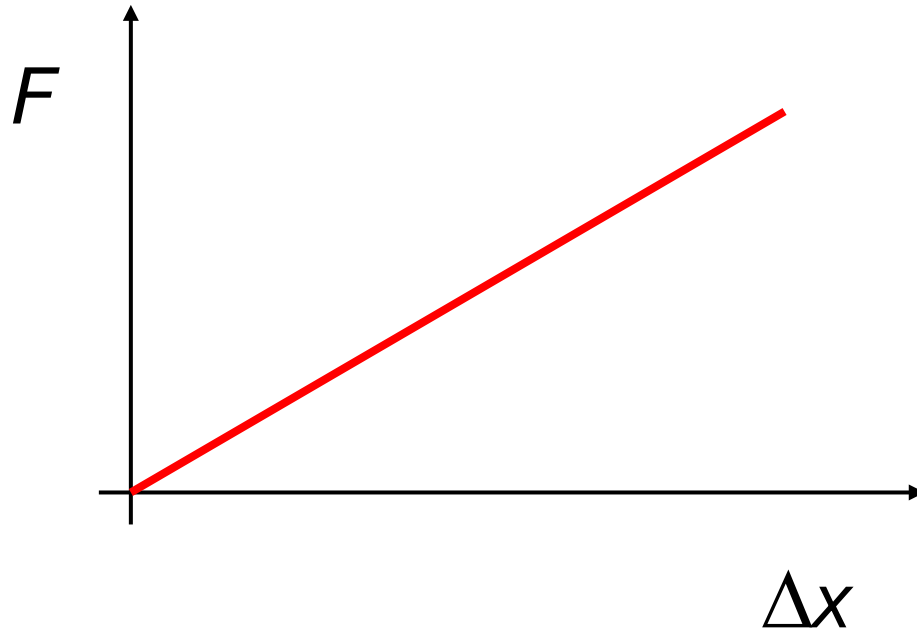


prednapeta vzmet



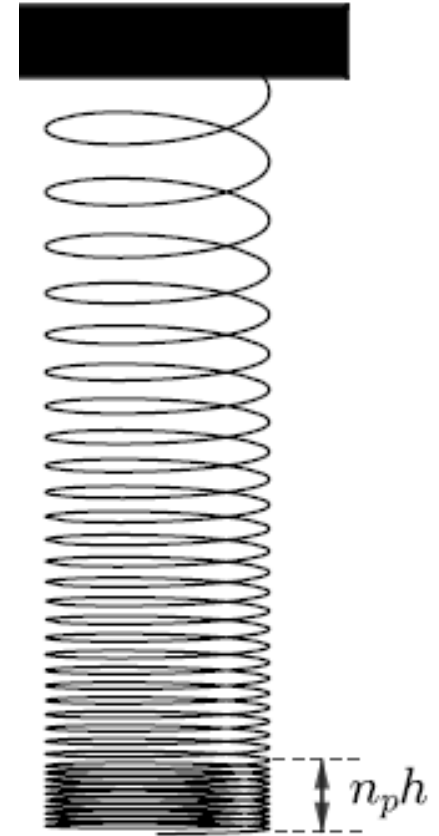
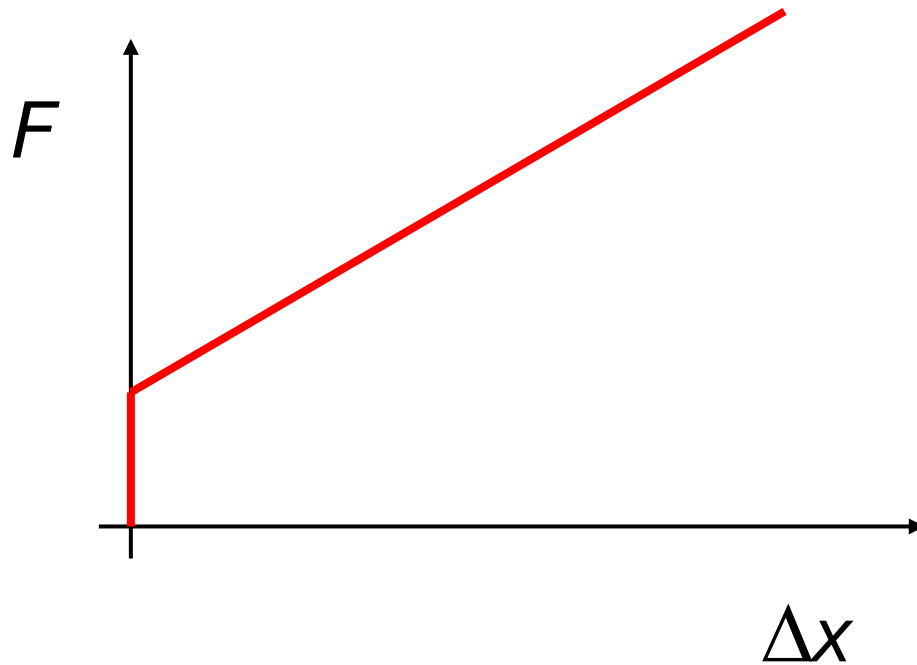
prednapeta vzmet

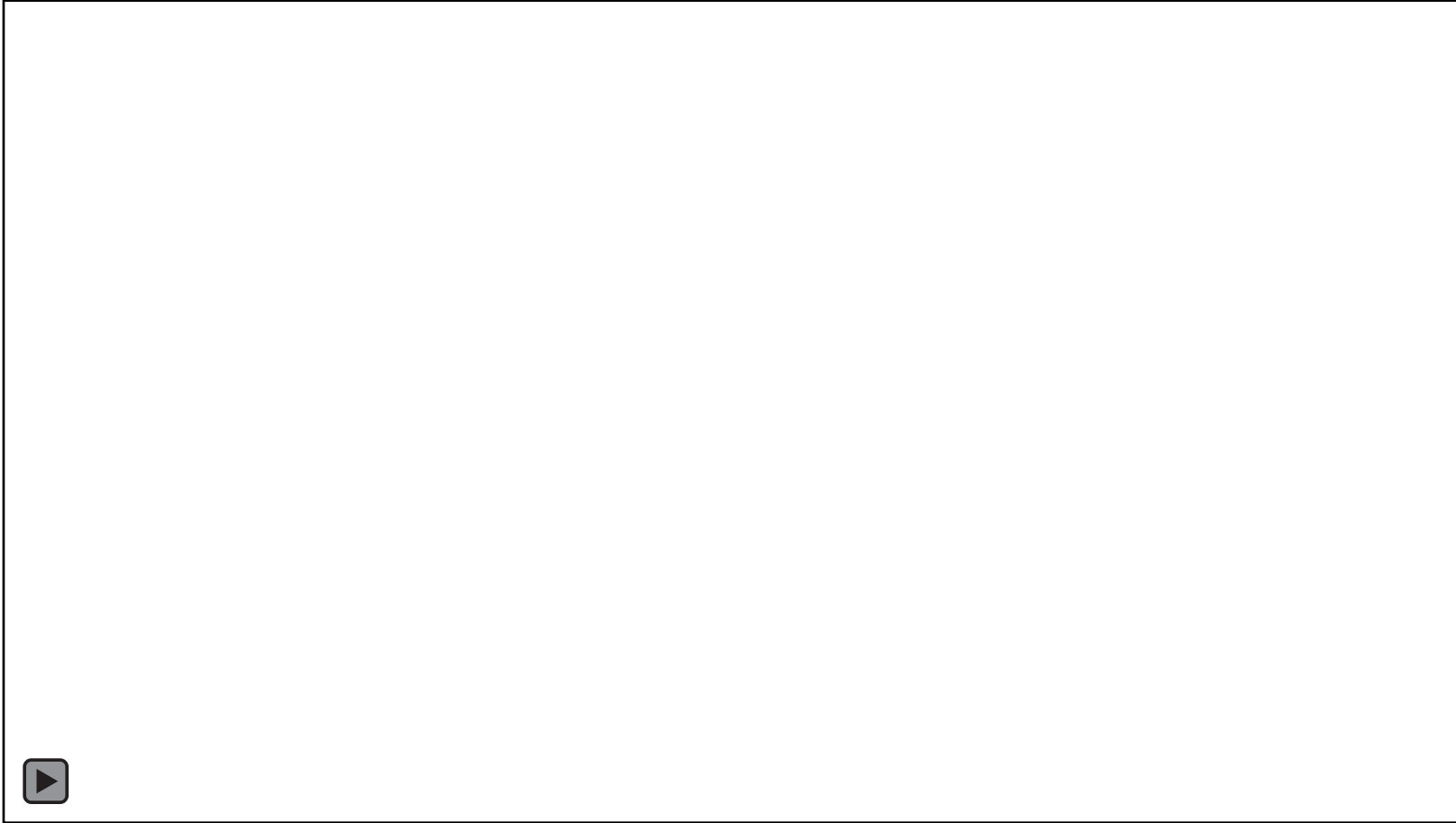
- Hookov zakon $F = k \Delta x$



prednapeta vzmet

- Hookov zakon $F = k \Delta x$





<https://www.youtube.com/watch?v=uiyMuHuCFo4>