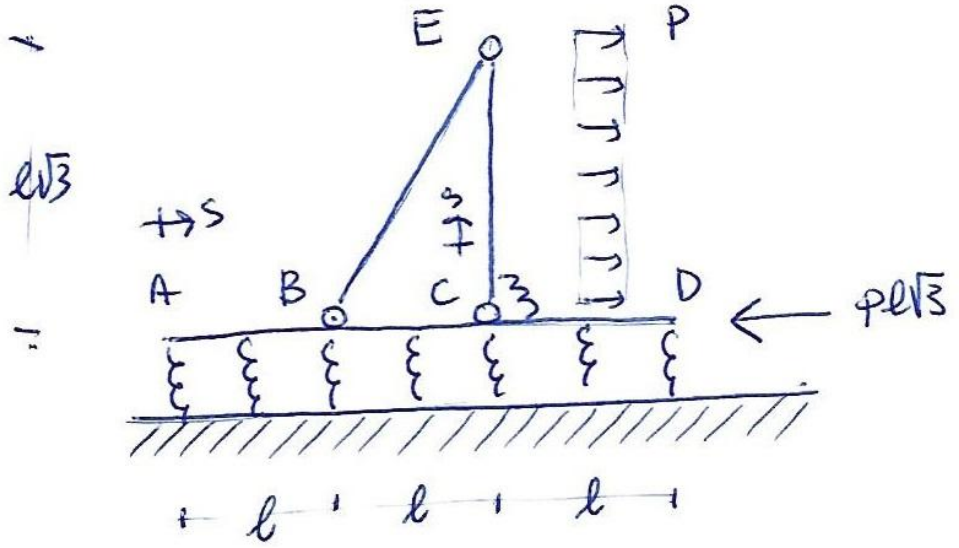


$$v_{AD}(s) = v_A + \vartheta s$$

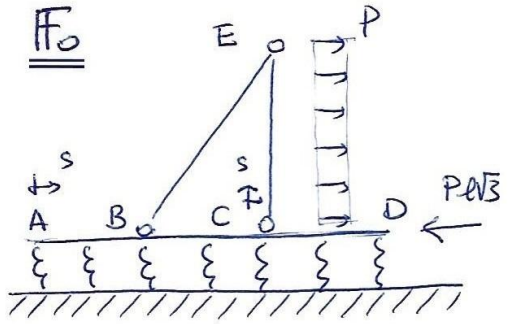
$$\int_{AD} k\, v_{AD} = 0$$

$$\int_{AD} s \cdot k\, v_{AD} = p\ell\sqrt{3} \cdot \frac{\ell\sqrt{3}}{2}$$

da cui $\quad v_A = -\frac{p}{k} \qquad \vartheta = \frac{2}{3}\frac{p}{k\ell}$

$$v_{AD}(s) = \frac{p}{k}\left(-1 + \frac{2}{3}\frac{s}{\ell}\right)$$

ff₀



$$N_{BE} = P\ell\sqrt{3}$$

$$N_{CE} = -\frac{3}{2}P\ell$$

$$T_{CE} = \frac{\sqrt{3}}{2}P\ell - Ps$$

$$M_{CE} = \frac{\sqrt{3}}{2}P\ell s - P\frac{s^2}{2}$$

$$N_{AB} = 0$$

$$N_{BC} = -P\ell\sqrt{3}/2$$

$$N_{CD} = -P\ell\sqrt{3}$$

$$T_{AB} = -Ps + P\frac{s^2}{3\ell}$$

$$T_{BC} = -Ps + P\frac{s^2}{3\ell} + \frac{3P\ell}{2}$$

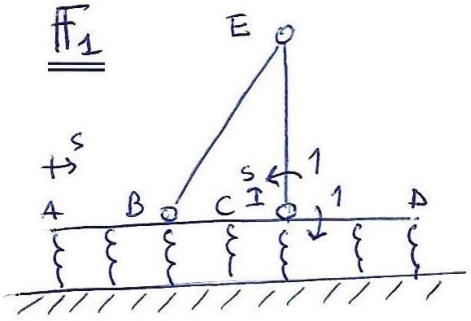
$$T_{CD} = -Ps + P\frac{s^2}{3\ell}$$

$$M_{AB} = P\frac{s^3}{9\ell} - P\frac{s^2}{2}$$

$$M_{BC} = P\frac{s^3}{9\ell} - P\frac{s^2}{2} + \frac{3}{2}P\ell(s-\ell)$$

$$M_{CD} = P\frac{s^3}{9\ell} - P\frac{s^2}{2} + \frac{3}{2}P\ell^2$$

ff₁



$$N_{BE} = -\frac{2}{\ell\sqrt{3}}$$

$$N_{CE} = \frac{1}{\ell}$$

$$T_{CE} = \frac{1}{\ell\sqrt{3}}$$

$$M_{CE} = -1 + \frac{s}{\ell\sqrt{3}}$$

$$N_{AB} = 0$$

$$N_{BC} = \frac{1}{\ell\sqrt{3}}$$

$$N_{CD} = 0$$

$$T_{AB} = 0$$

$$T_{BC} = -\frac{1}{\ell}$$

$$T_{CD} = 0$$

$$M_{AB} = 0$$

$$M_{BC} = 1 - \frac{s}{\ell}$$

$$M_{CD} = 0$$

$$\eta_1 = \eta_{10} + X_1 \cdot \eta_{11}$$

con $\eta_1 = -\frac{X_1}{K_0}$

$$\eta_{11} = \int_{BE} \frac{N_1^2}{EA} + \int_{CE} \frac{M_1^2}{EJ} = \frac{8}{3\ell EA} + \frac{\ell\sqrt{3}}{3EJ}$$

$$\eta_{10} = \int_{BE} N_1\left(\frac{N_0}{EA} - \bar{\epsilon}\right) + \int_{CE} \frac{M_1 M_0}{EJ} = \frac{4}{\sqrt{3}}\left(-\frac{P\ell\sqrt{3}}{EA} + \bar{\epsilon}\right) - \frac{P(\ell\sqrt{3})^3}{24EJ}$$