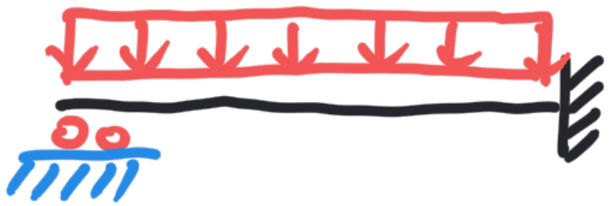
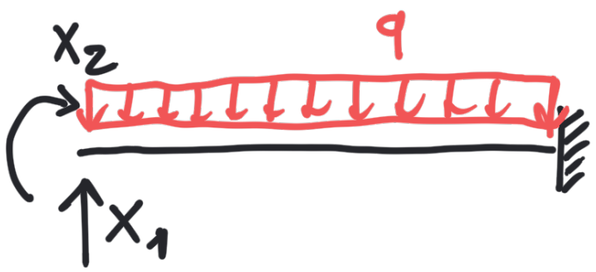
APPLICAZIONE DEL PLV AL METODO DELLE FORZE.

11.3.2 Ilro



sistema principale



$v_A = 0$

$\varphi_A = 0$

$\equiv$

sist. 0

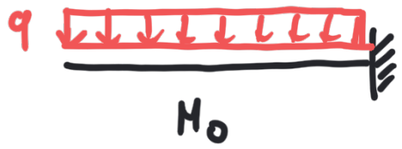
sist. 1

sist. 2

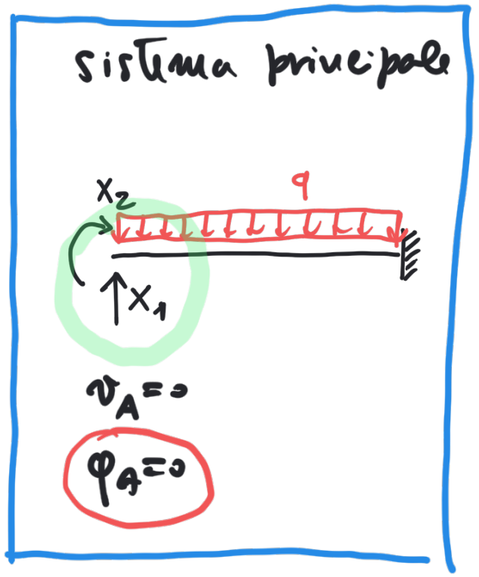
$$M = M_0 + X_1 M_1 + X_2 M_2$$

APPLICAZIONE DEL PLV AL METODO DELLE FORZE.

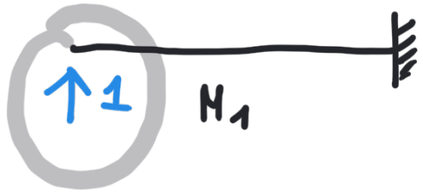
11.3.2 Libro



sist. 0



$\equiv$



sist. 1

sist. 2

$$M = M_0 + X_1 M_1 + X_2 M_2$$

Calcolo di v_A sist. virt. sist. 1

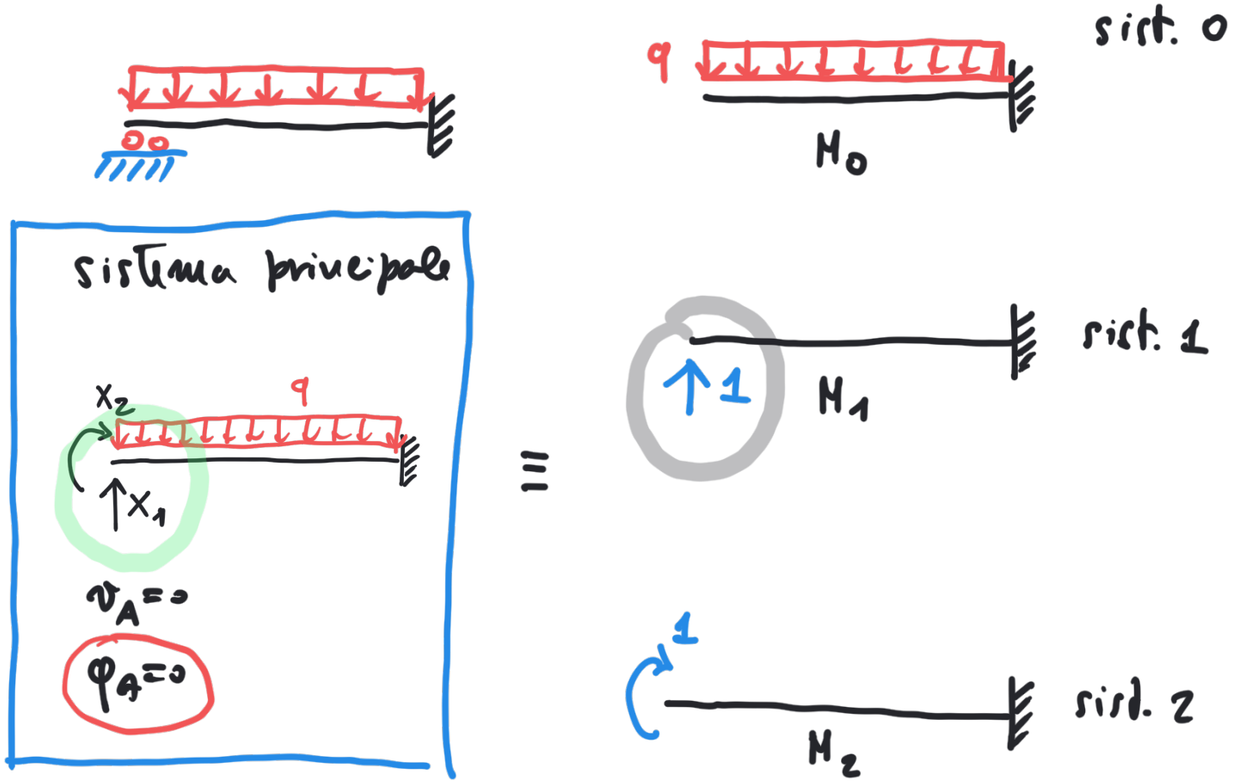
$$L_{ve} = -1 \cdot v_A$$

$$L_{vi} = \int \chi \bar{M}_1 = \int \frac{M}{EI} \bar{M}_1 = \frac{1}{EI} \int (M_0 + X_1 M_1 + X_2 M_2) M_1$$

$$= \frac{1}{EI} \int M_0 M_1 + X_1 \frac{1}{EI} \int M_1^2 + X_2 \frac{1}{EI} \int M_2 M_1 = 0$$

APPLICAZIONE DEL PLV AL METODO DELLE FORZE.

11.3.2 Ehlrs



$$M = M_0 + X_1 M_1 + X_2 M_2$$

Calcolo di φ_A sist. virt. sist. 2

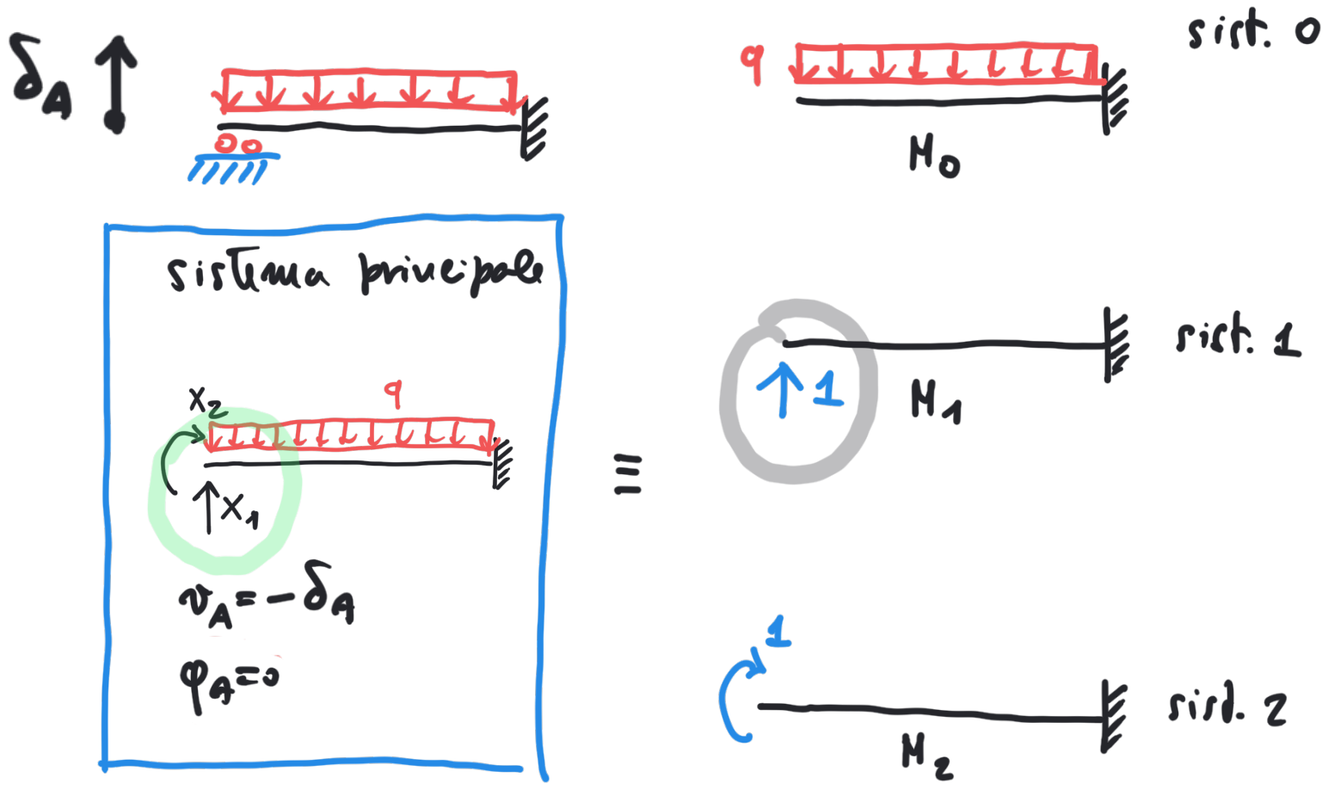
$$L_{ve} = -1 \cdot \varphi_A$$

$$L_{vi} = \int \chi M_2 = \int \frac{M}{EI} M_2 = \frac{1}{EI} \int (M_0 + X_1 M_1 + X_2 M_2) M_2$$

$$= \frac{1}{EI} \int M_0 M_1 + X_1 \frac{1}{EI} \int M_1 M_2 + X_2 \frac{1}{EI} \int M_2^2 = 0$$

APPLICAZIONE DEL PLV AL METODO DELLE FORZE.

11.3.2 Ebro



$v_A = -\delta_A$

$\varphi_A = 0$

$M = M_0 + X_1 M_1 + X_2 M_2$

Calcolo di v_A sist. virt. sist. 1

$L_{ve} = -1 \cdot v_A = \delta_A$

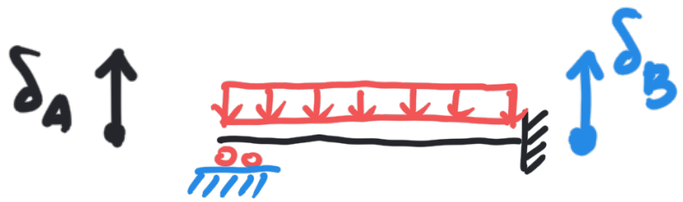
$L_{vi} = \int \chi \bar{M}_1 = \int \frac{M}{EI} \bar{M}_1 = \frac{1}{EI} \int (M_0 + X_1 M_1 + X_2 M_2) M_1$

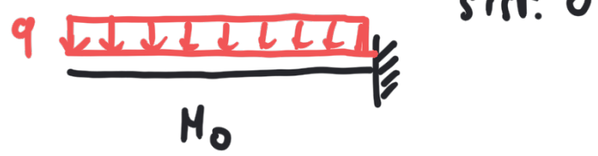
$\bar{M}_1 = M_1$

$= \frac{1}{EI} \int M_0 M_1 + X_1 \frac{1}{EI} \int M_1^2 + X_2 \frac{1}{EI} \int M_2 M_1$

APPLICAZIONE DEL PLV AL METODO DELLE FORZE.

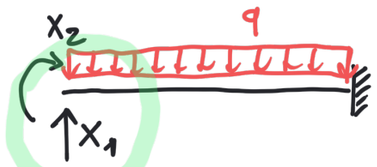
11.3.2 Ehlers





sist. 0

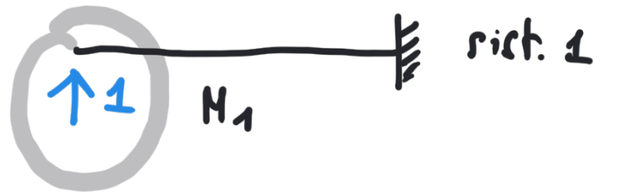
sistema principale



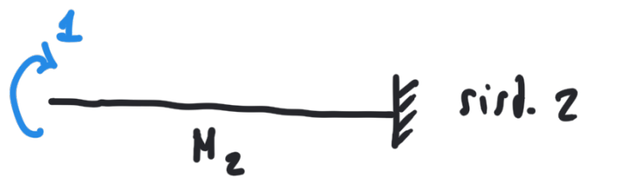
$v_A = -\delta_A$

$\varphi_A = 0$

≡



sist. 1



sist. 2

$M = M_0 + X_1 M_1 + X_2 M_2$

Calcolo di v_A sist. virt. sist. 1

$L_{ve} = -1 \cdot v_A = \delta_A$

$L_{vi} = \int \chi \bar{M}_1 = \int \frac{M}{EI} \bar{M}_1 = \frac{1}{EI} \int (M_0 + X_1 M_1 + X_2 M_2) M_1$

$= \frac{1}{EI} \int M_0 M_1 + X_1 \frac{1}{EI} \int M_1^2 + X_2 \frac{1}{EI} \int M_2 M_1$