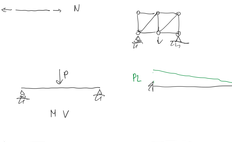
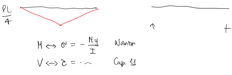
Taglio della TRAVE 10





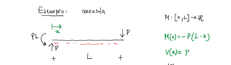
$M \leftrightarrow \sigma = -\frac{My}{I}$ Navier

$V \leftrightarrow \tau = \dots$ Cap. 12

2) Equazione differenziale di taglio e momento flettente

(3.5) $V = \frac{dM}{dx}$

Esempio: mensola

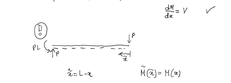


$M : [0, L] \to \mathbb{R}$

$M(x) = -P(L-x)$

$V(x) = P$

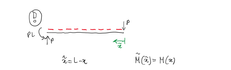
$\frac{dM}{dx} = V$ ✓



$\tilde{x} = L - x$ $\quad \tilde{M}(\tilde{x}) = M(x)$

$\tilde{M} : [0, L] \to \mathbb{R}$ $\quad \tilde{M}(\tilde{x}) = -P\tilde{x} = -P(L-x)$

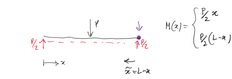
$\frac{d\tilde{M}}{d\tilde{x}} = -P = -V$



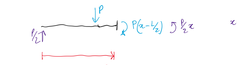
$\tilde{x} = L - x$ $\quad \tilde{M}(\tilde{x}) = M(x)$

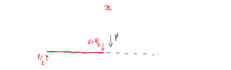
$\tilde{M} : [0, L] \to \mathbb{R}$ $\quad \tilde{M}(\tilde{x}) = +P\tilde{x} = +P(L-x)$

$\frac{d\tilde{M}}{d\tilde{x}} = +P = +V$

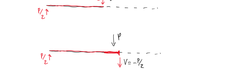


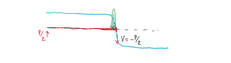
$M(x) = \begin{cases} P/2\, x & \text{se } 0 \le x \le L/2 \\ P/2\,(L-x) & \text{se } L/2 \le x \le L \end{cases}$ $\quad V(x) = \begin{cases} P/2 & \text{se } 0 \le x < L/2 \\ -P/2 & \text{se } L/2 < x \le L \end{cases}$

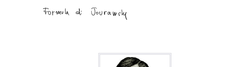




$x = L$







Formula di Jurawsky

Dmitrij Ivanovič Žuravskij

1881

Biografia [modifica | modifica wikitesto]

Frequentò a partire dal 1838 l'Istituto di Ingegneria della strada e delle comunicazioni di San Pietroburgo. L'Istituto, fondato nel 1809 da ingegneri francesi provenienti dalla Scuola politecnica di Parigi, fu diretto per 30 anni da Augustin de Betancourt (Pierre Fabre Fabre Fab