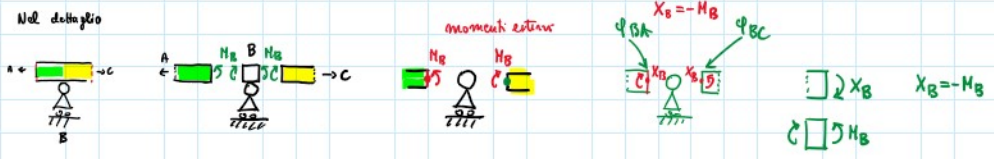
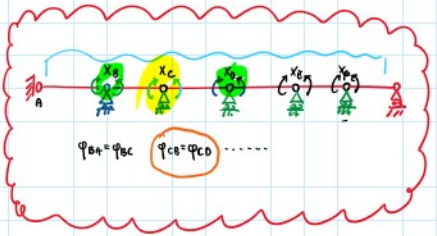


5 volte iperstatica



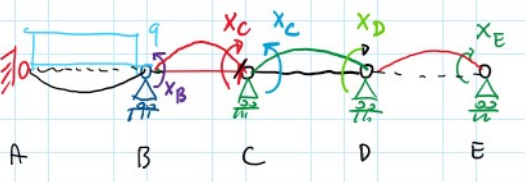
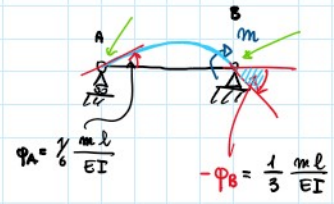
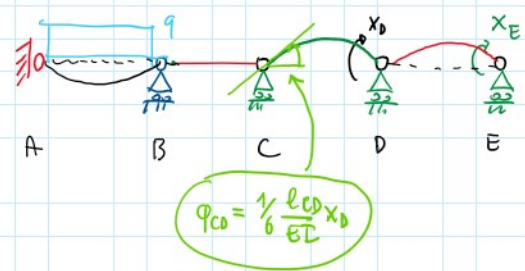
Notazione: φ_{BA} rotazione nell'estremo destro del tratto AB.
 φ_{BC} rotazione nell'estremo sinistro del tratto BC.
 Condizione congr.: $\varphi_{BA} = \varphi_{BC}$

Sistema principale



Equazione dei tre momenti

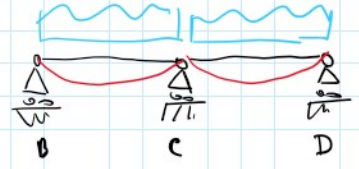
$$\varphi_{CB}^{(0)} - \frac{X_C l_{BC}}{3EI} - \frac{X_B l_{BC}}{6EI} - \frac{\delta_C - \delta_B}{l_{BC}} = \varphi_{CD}^{(0)} + \frac{X_C l_{CD}}{3EI} + \frac{X_D l_{CD}}{6EI} - \frac{\delta_D - \delta_C}{l_{CD}}$$



$$\varphi_{CD} = \frac{X_C l_{CD}}{3EI} + \frac{X_D l_{CD}}{6EI}$$

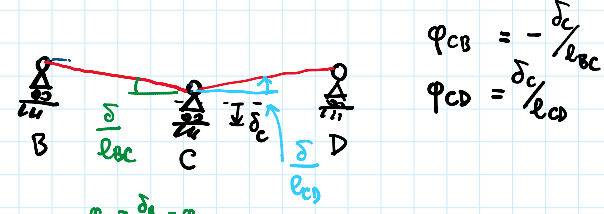
$$\varphi_{CB} = -\frac{X_C l_{BC}}{3EI} - \frac{X_B l_{BC}}{6EI}$$

• Effetto carichi $\rightarrow \varphi_{CB}^{(0)}, \varphi_{CD}^{(0)}$



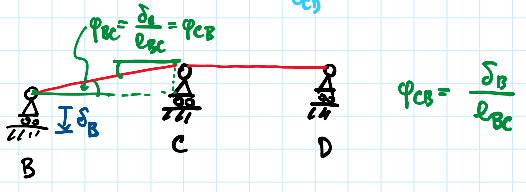
• Effetto dei cedimenti

. Effetto dei cedimenti:

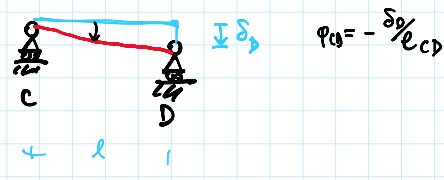


$$\varphi_{cb} = -\frac{\delta_c}{l_{bc}}$$

$$\varphi_{cd} = \frac{\delta_c}{l_{cd}}$$



$$\varphi_{cb} = \frac{\delta_b}{l_{bc}}$$



$$\varphi_{cd} = -\frac{\delta_d}{l_{cd}}$$