

$V_N = 5^\circ$

SL0

SLD

SLV

SLC

$V_R = 5^\circ$

T_1

30

50

475

975

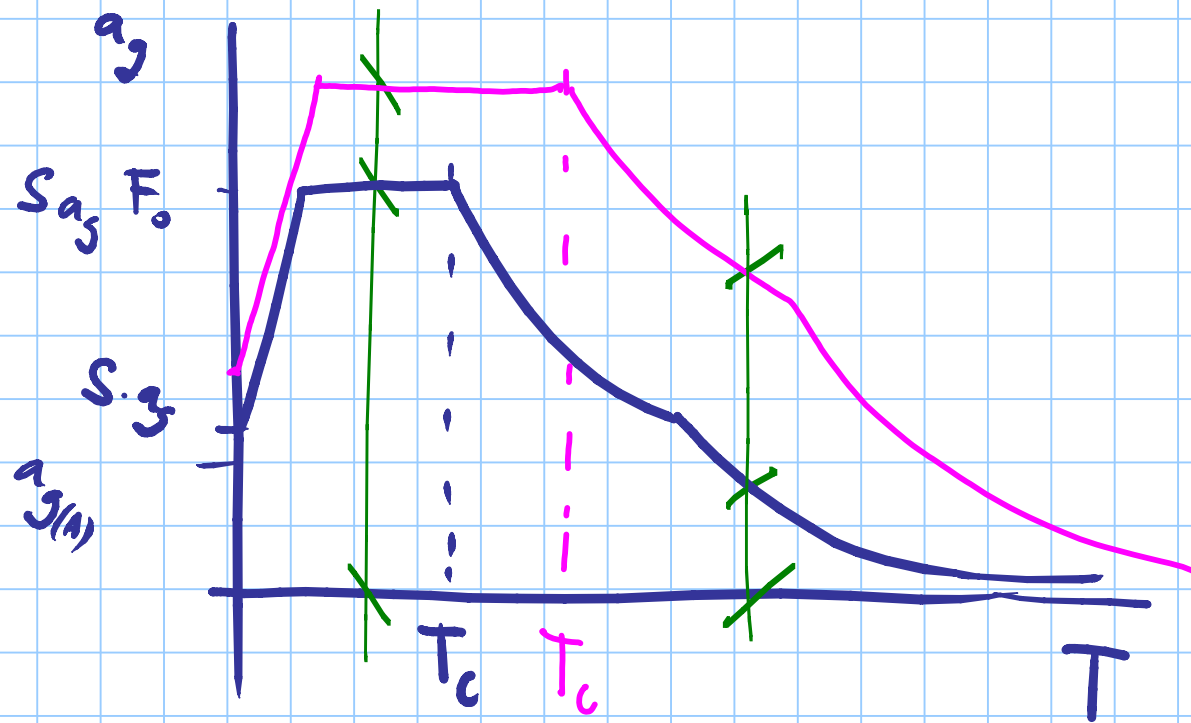
a_g

T_c^*

T_o



in zocchia



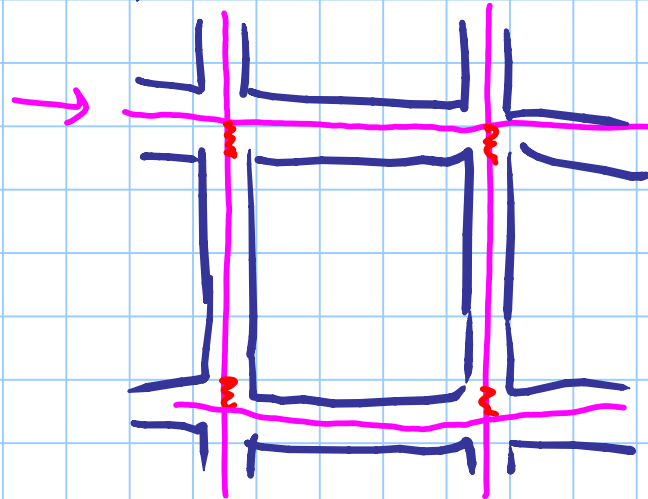
$$T = 2\pi \sqrt{\frac{m}{k}}$$

influenza della modellazione su T

Massa m edificio in c.a. $8 - 11 \text{ kN/m}^2$
(per m^2)

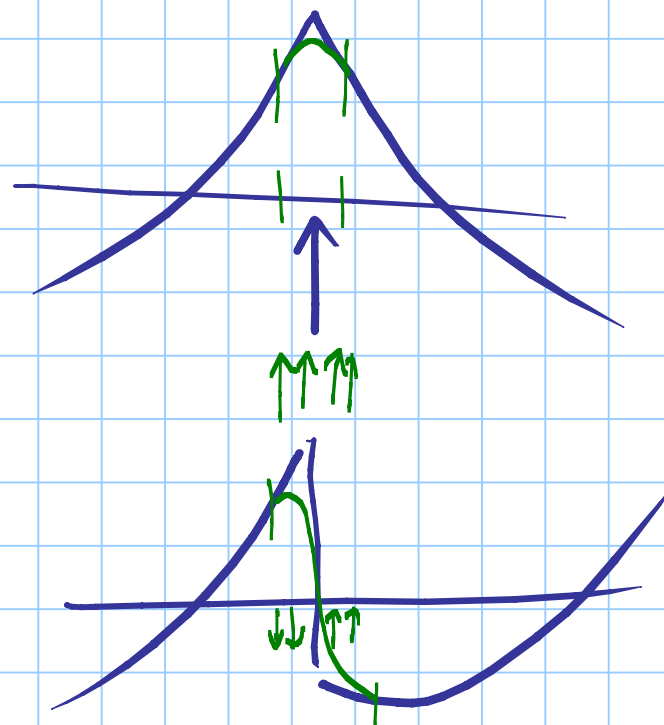
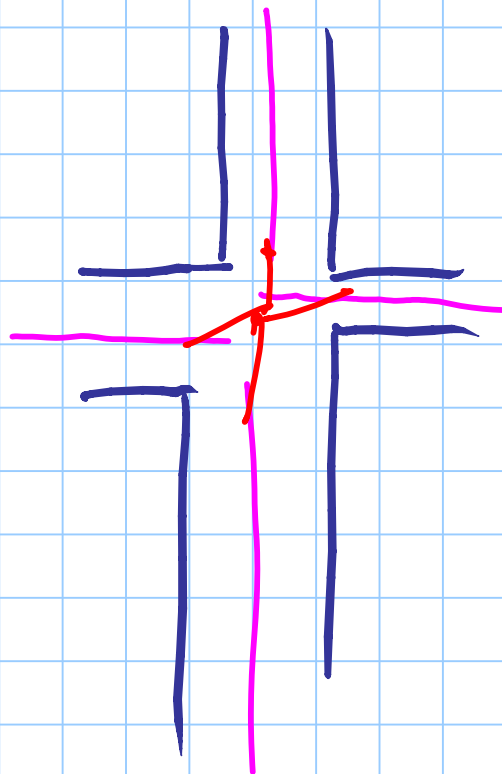
Rigidità influenza temperature

modellazione \rightarrow



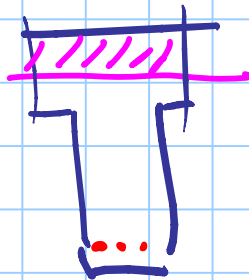
$T_{1.2.3}$
$$\delta = \frac{Fl^3}{12EI}$$

$$K = \frac{12EI}{l^3}$$



considerare la formazione nel c.a.

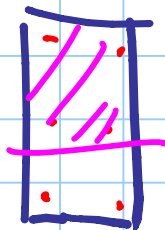
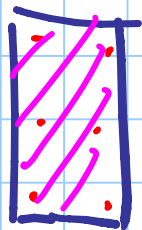
TRAVE



I sezione agente omogeneizzata

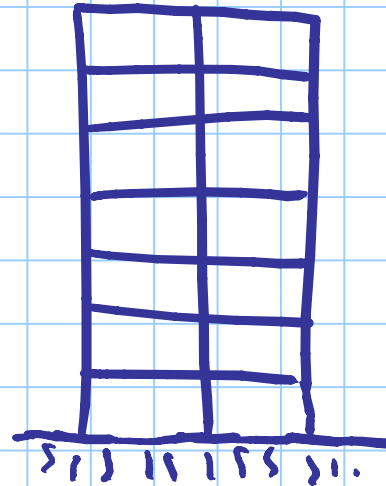
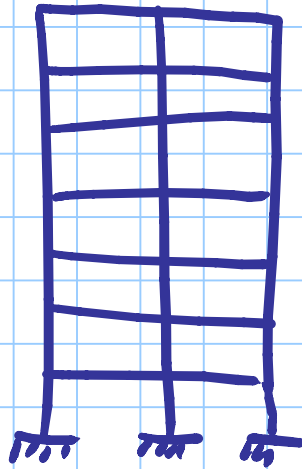
PILASTRO

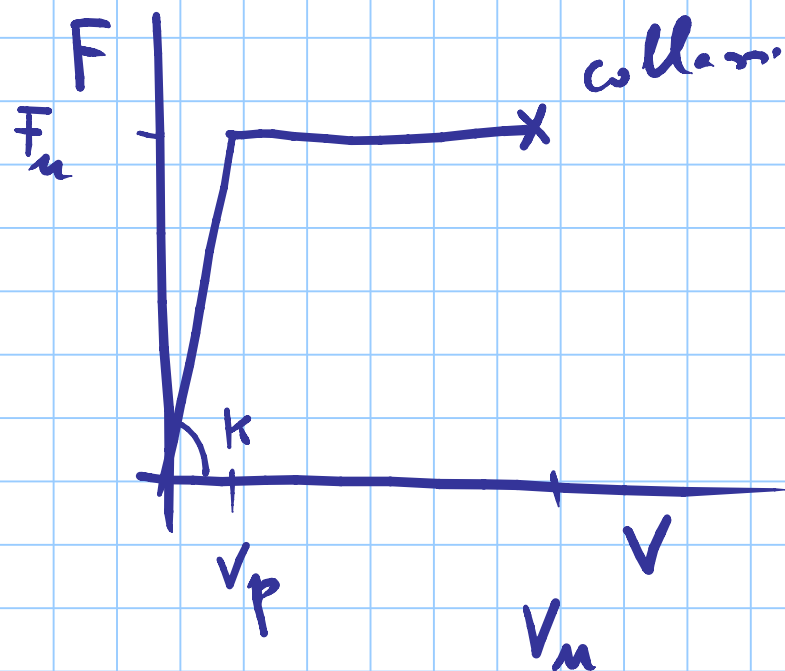
con N



N, M

interazione solo struttura





K	RIFIDEZZA
F_u	RESISTENZA
M	DUTTILITA'

$$M = \frac{V_u}{V_p}$$

S_e

SLV

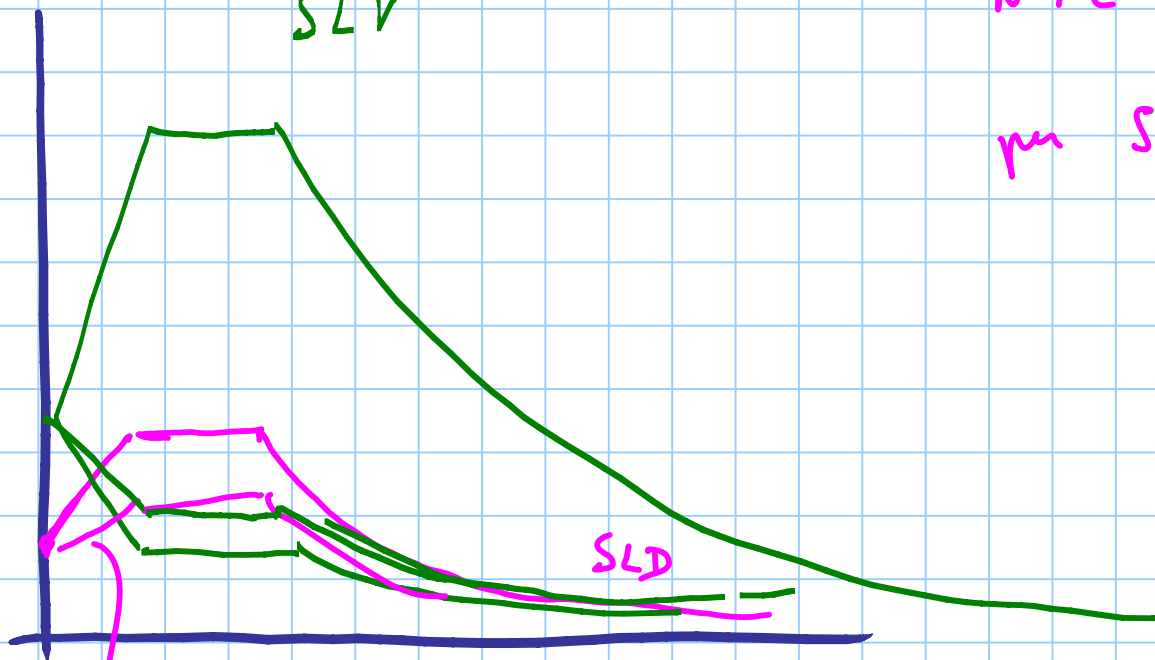
NTC 2013

per SLD $q \approx 1.5$

SLD

SLD mag. (div. 1.5)

T



REGOLARITA'

fattori di comportamento

- duttilità locale
- duttilità globale

unico pilastro crolla
dann A . B

RISCHIO DI MECCANISMI DI PIANO

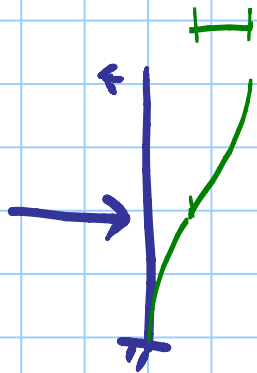
massa	No
rigidità	No
resistenza	Si

sovrarresistenza

PIANO con sovrarresistenza nettamente minore

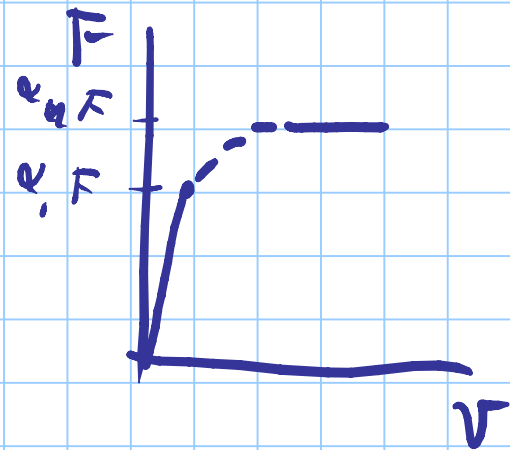
RIGIDEZZA all spostamento orientato

$$\text{rapporto} \quad \frac{T_{\text{eff}}}{\text{spost. relativo}}$$



$$\frac{12 EI}{l^3}$$

$$q = q_0 K_2 \rightarrow \text{reg. lante in alt.}$$



$$3.0 \frac{d q}{d v}$$

l'edificio, che non
può avere nessun riserve

reg. lante in piante

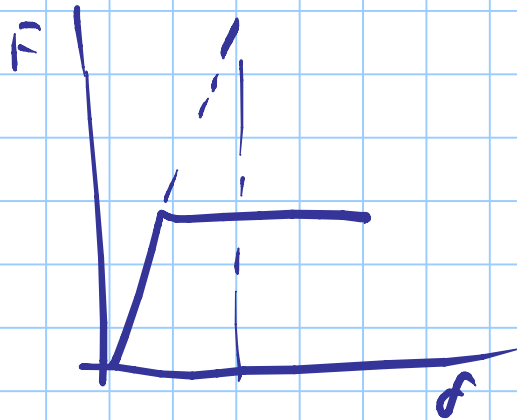
CALCOLO DI SPOSTAMENTI

CALCOLO LINEARE

$$F \rightarrow \delta$$

CON FATTORE DI COMPORTAM. γ

$$\frac{F}{\gamma} \rightarrow \cancel{\delta} \quad \gamma \delta$$



$$\gamma = 1 + (\gamma - 1) \frac{T_c}{T_s}$$

S_1

