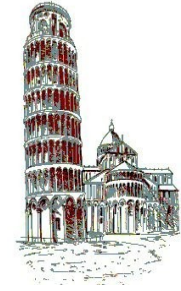
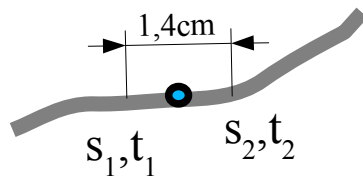


# Fisica a1

## Cinematica - Velocita' scalare



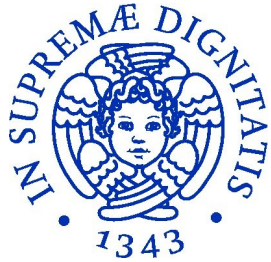
velocita' media



$$v_m = \frac{s(t_2) - s(t_1)}{t_2 - t_1}$$

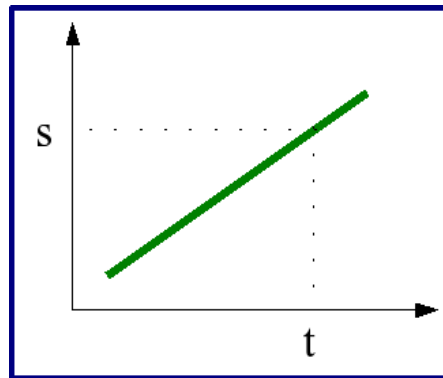
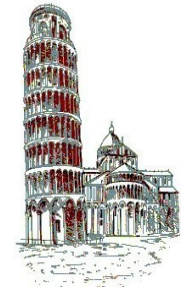
velocita' istantanea

$$v = \lim_{\Delta t \rightarrow 0} v_m = \lim_{\Delta t \rightarrow 0} \frac{s(t_2) - s(t_1)}{t_2 - t_1} = \lim_{\Delta t \rightarrow 0} \frac{\Delta s}{\Delta t} = \frac{ds}{dt}$$



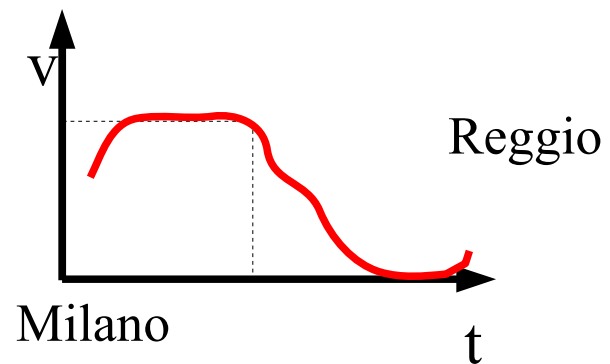
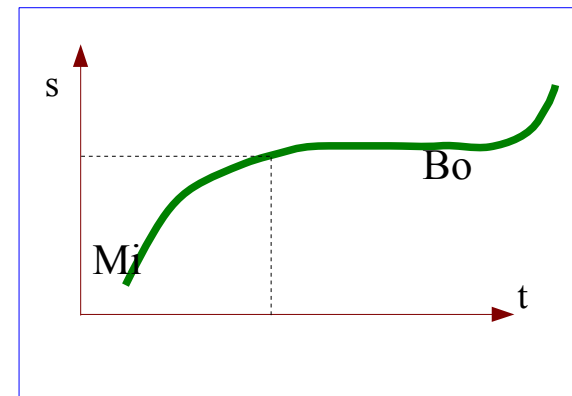
# Fisica a1

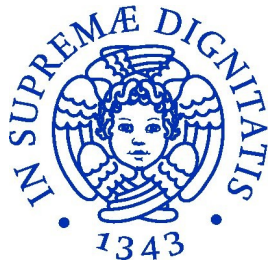
## Cinematica - Velocita' scalare



$s = s(t)$  Equazione oraria

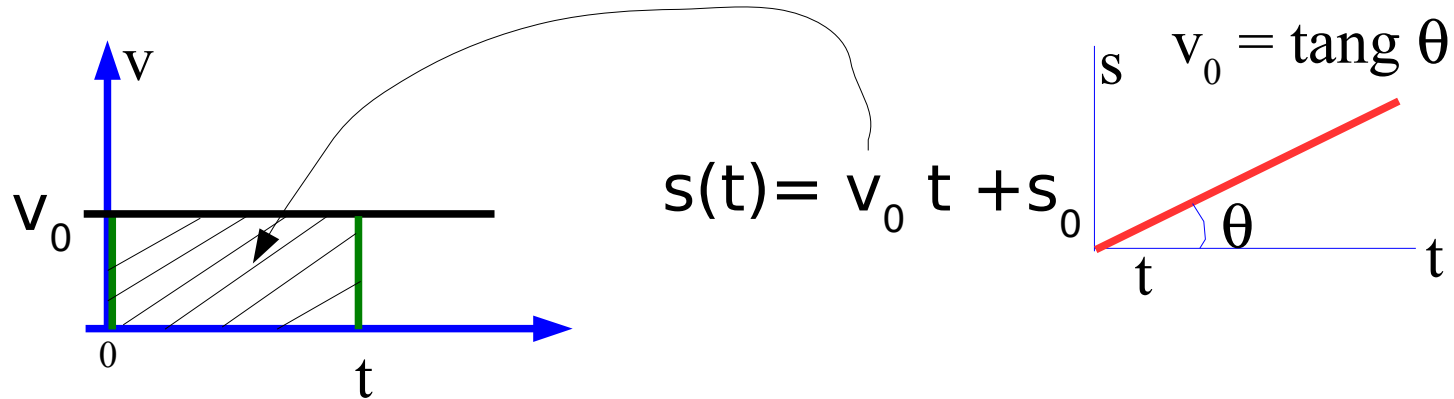
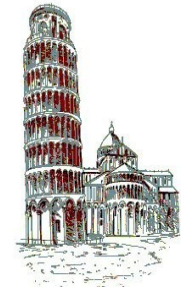
Tabelle orarie





# Fisica a1

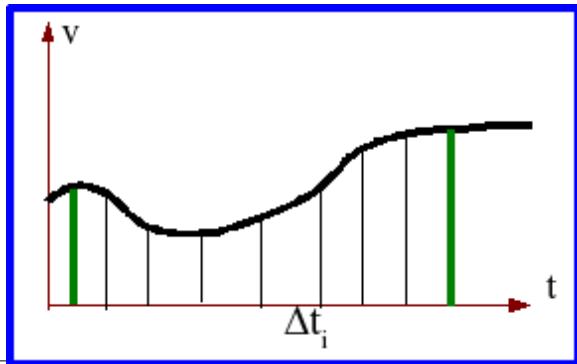
## velocita' <-> spazio

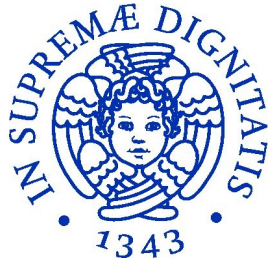


$$S(t) = \sum_1^n \Delta s_i + S_0 = \sum_1^n v_i \Delta t_i + S_0$$

$$t = \sum_1^n \Delta t_i + t_0$$

$$S = \int_{t_0}^{t_2} v(t) dt + S_0$$



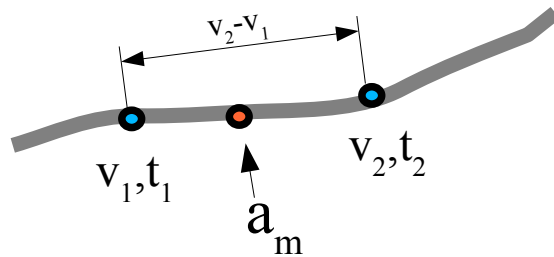


# Cinematica

## Accelerazione scalare



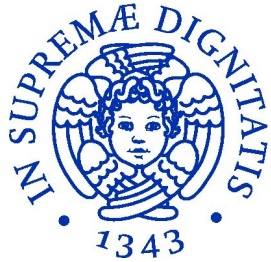
### Accelerazione media



$$a_m = \frac{v(t_2) - v(t_1)}{t_2 - t_1}$$

istantanea

$$a = \lim_{\Delta t \rightarrow 0} \frac{(v_f - v_i)}{(t_f - t_i)} = \lim \frac{\Delta v}{\Delta t} = \frac{dv}{dt}$$



# Cinematica

## accelerazione $\leftrightarrow$ velocità'

