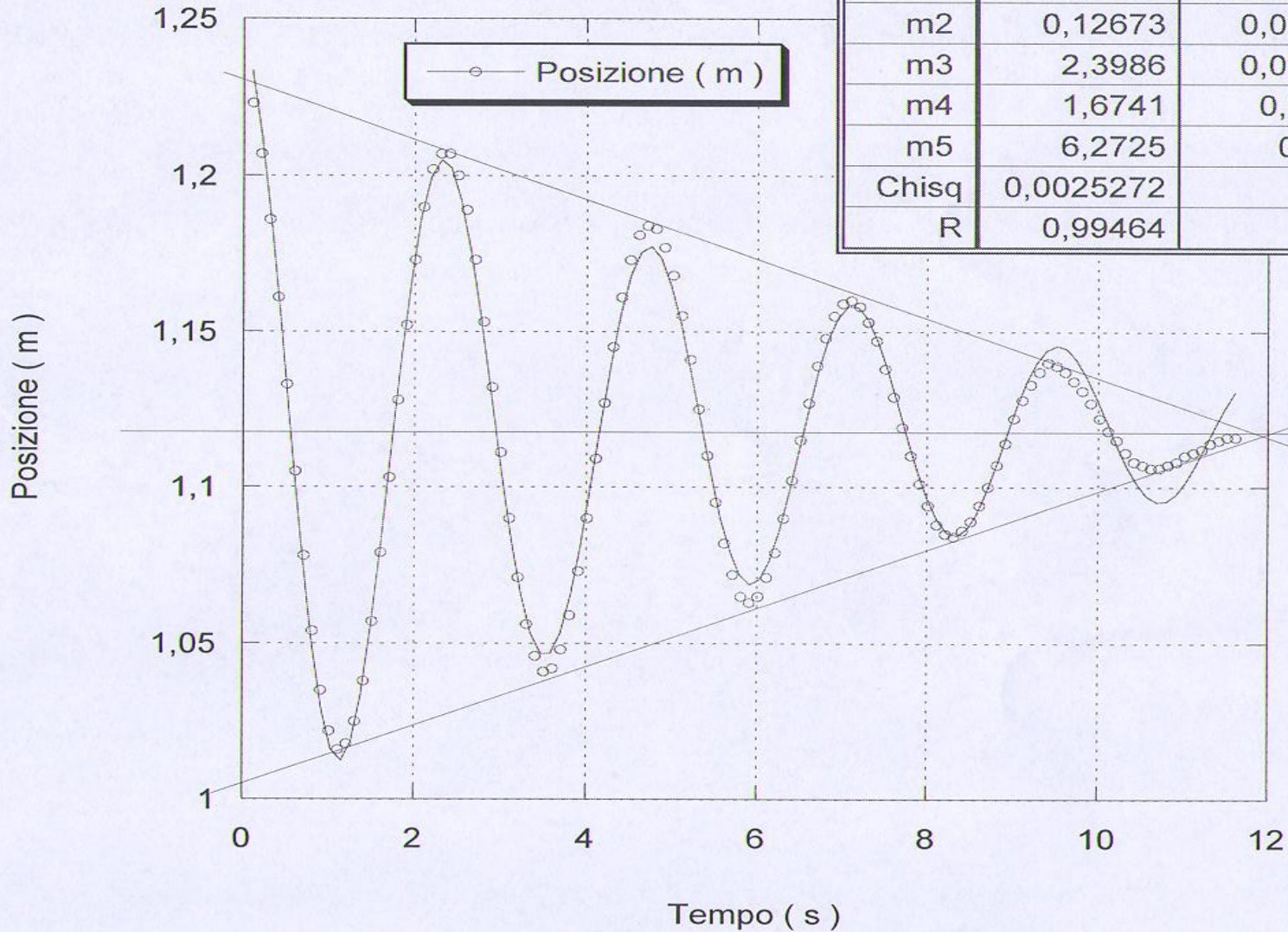


**Oscillazioni smorzate:
fit con KALEIDAGRAPH**

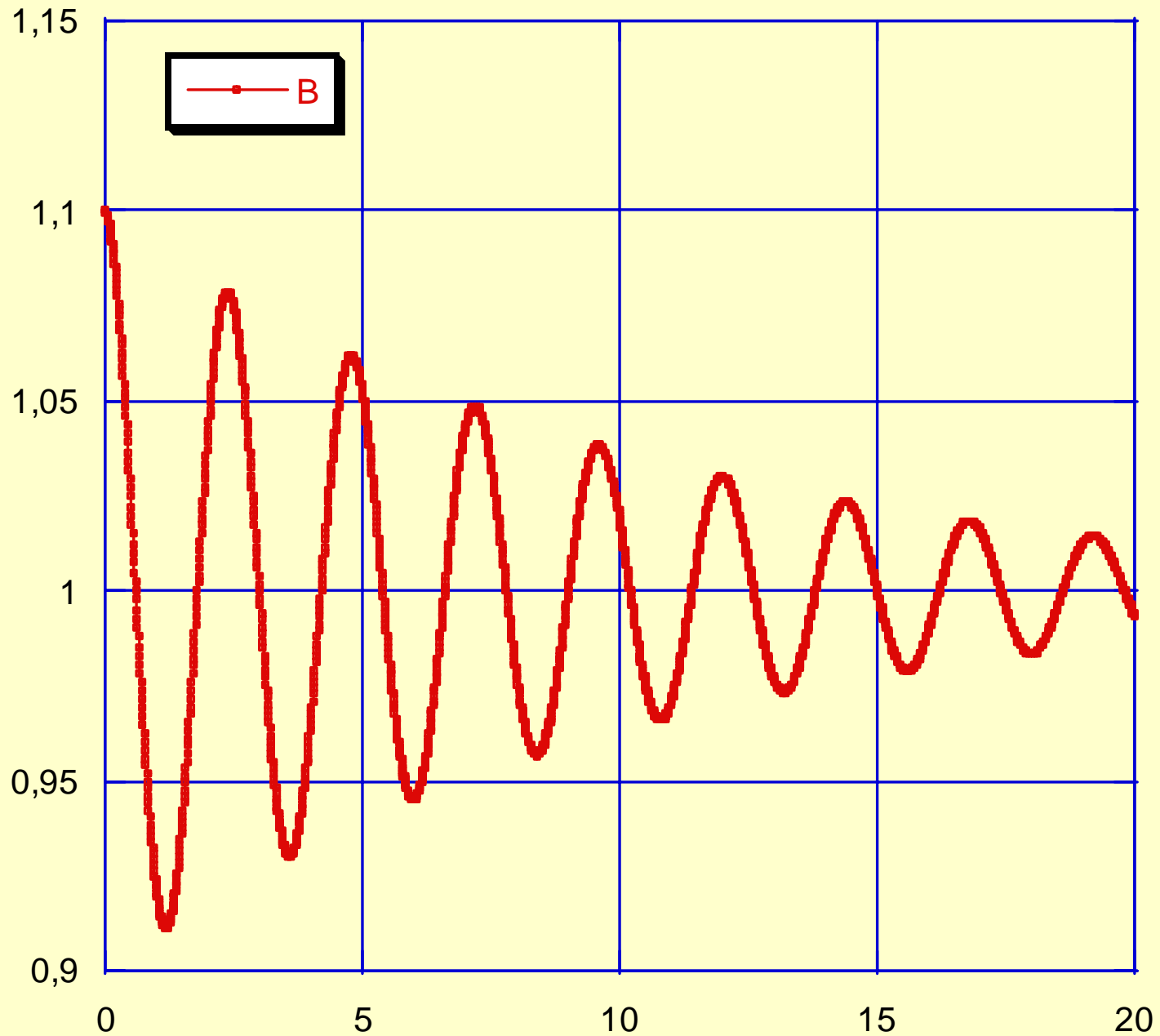
$$m1 + m2 \cdot \exp(-x/m5) \cdot \sin(2 \cdot \pi \cdot x/m3 + m4); m1=1.12; m2=0.11; m3=2.4; m4=1.57; m5=10$$

posizione carrello vuoto_230511



y = m1 + m2*exp(-x/m5)*sin(2...		
	Value	Error
m1	1,1179	0,00044888
m2	0,12673	0,0019529
m3	2,3986	0,0035114
m4	1,6741	0,014711
m5	6,2725	0,15613
Chisq	0,0025272	NA
R	0,99464	NA

$$Y = 1 + 0.1 \cdot \exp(-x/10) \cdot \sin(2 \cdot 3.14 \cdot x / 2.4 + 1.57)$$



file = posizione canello vuoto_230511.QDA

file = Plot_posizione - canello - vuoto_230511.QPC

$$y = A + B * () * \sin()$$

+ 1.117470

$$\frac{1.230422 - 1.117470}{0.112952}$$

$$\frac{1.230422 - 1.117470}{12} t$$

L = 0.009412666

$$2\pi t = 2.61799t$$
$$\frac{4.766667 - 2.366667}{= 2.4}$$

$$m_1 + m_2 * \exp(-x/m_5) * \sin(2 * \pi * x / (m_3 + m_4)) ;$$

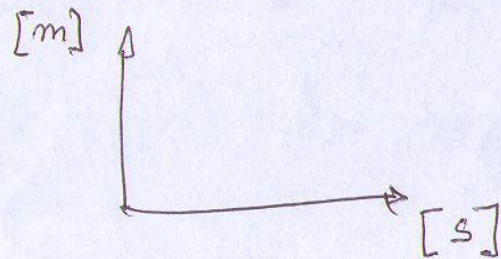
$$m_1 = 1 ; \quad \leftarrow 1,12$$

$$m_2 = 1 ; \quad \leftarrow 0,11$$

$$m_3 = 1 ; \quad \leftarrow 2,4$$

$$m_4 = 1 ; \quad \leftarrow \pi/2 \sim 1,57$$

$$m_5 = 1 ; \quad \leftarrow ~~10~~$$



$$m_1 = (1,11790 \pm 0,00045)$$

$$m_2 = (0,1267 \pm 0,0020)$$

$$m_3 = (2,3986 \pm 0,0035)$$

$$m_4 = (1,674 \pm 0,015)$$

$$m_5 = (6,27 \pm 0,16) \rightarrow \frac{\sigma(\tau)}{\tau} = 2\%$$

$$\sigma_{fit} = \sqrt{\frac{0,0025272}{116 - 5}} = 0,0048$$

$\frac{\sigma(\tau)}{\tau} = 0,00459$ (1%)

(2%)

5025