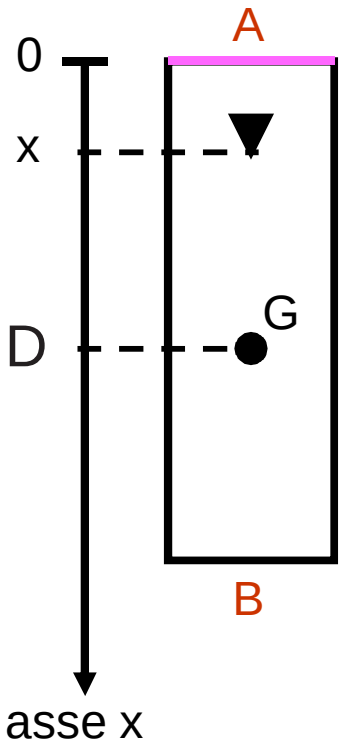
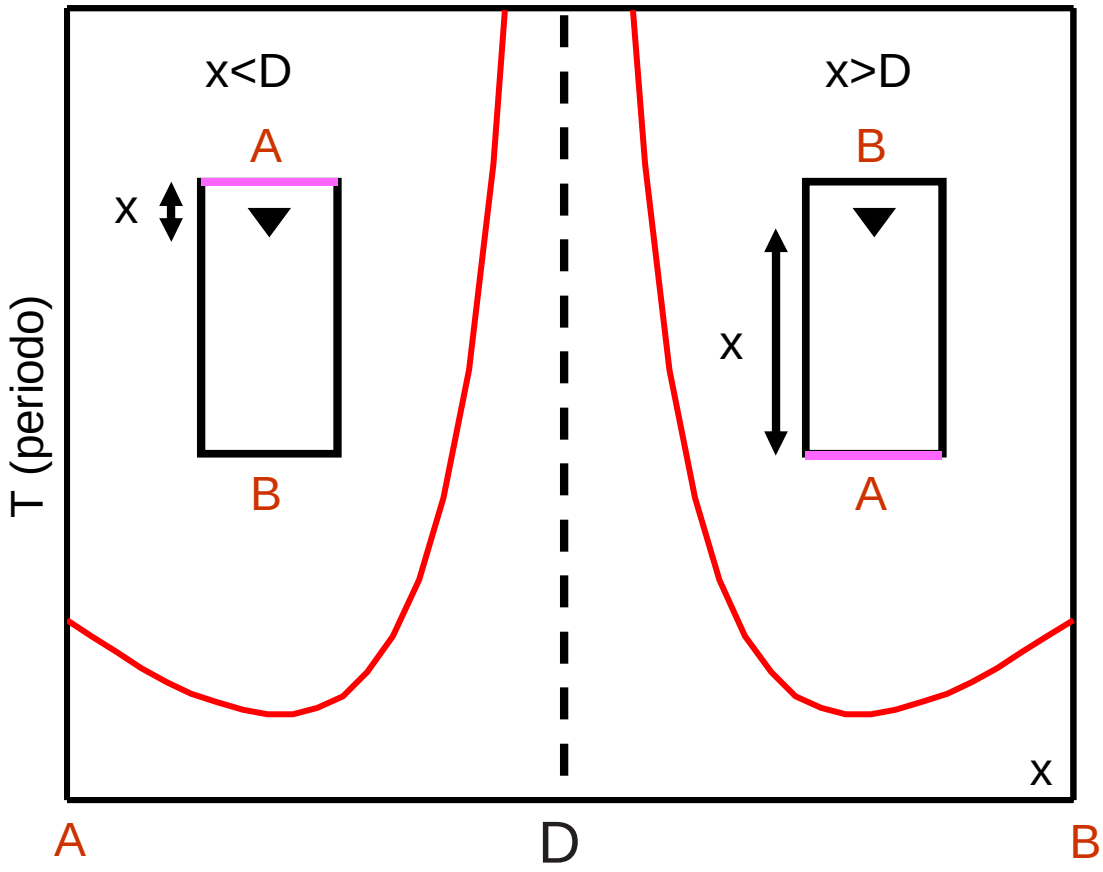
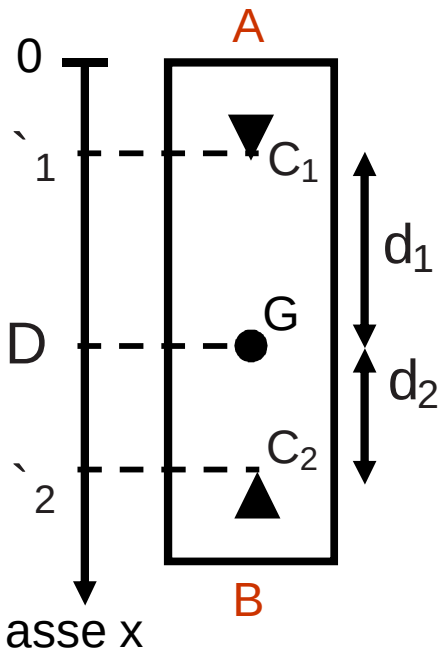


$$T = 2 \sqrt{\frac{I_0 + M(D - x)^2}{MgjD - xj}}$$

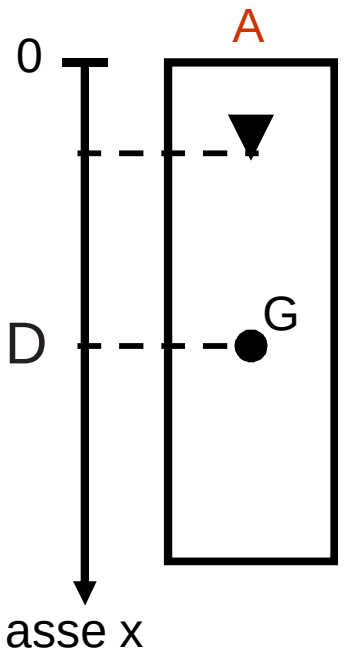


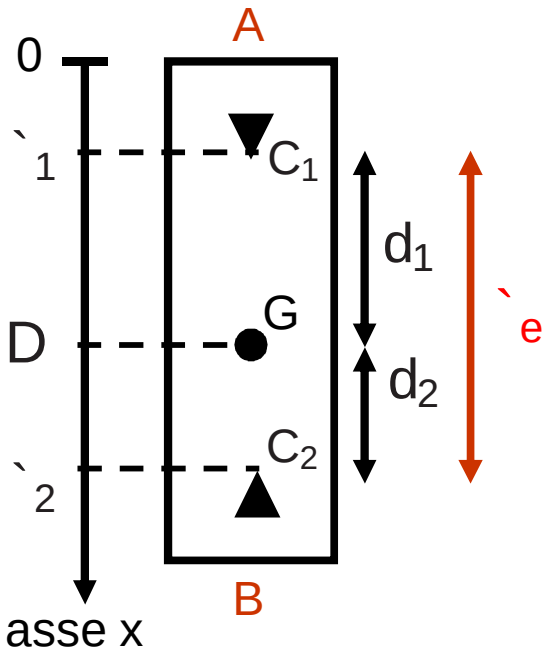


Pendolo composto con posizione del coltello variabi le in modo che esistano almeno 2 posizioni con lo stes so periodo di oscillazione.

$$T_1 = T_2 \qquad \frac{I_1}{Md_1} = \frac{I_2}{Md_2} = \ `_e \qquad \frac{I_0 + Md_1^2}{Md_1} = \frac{I_0 + Md_2^2}{Md_2}$$

$$Md_1d_2(d_1 \quad d_2) = I_0(d_1 \quad d_2) \qquad \text{se} d_1 \text{ e } d_2 \qquad I_0 = Md_1d_2$$


A
0
G
D
asse x



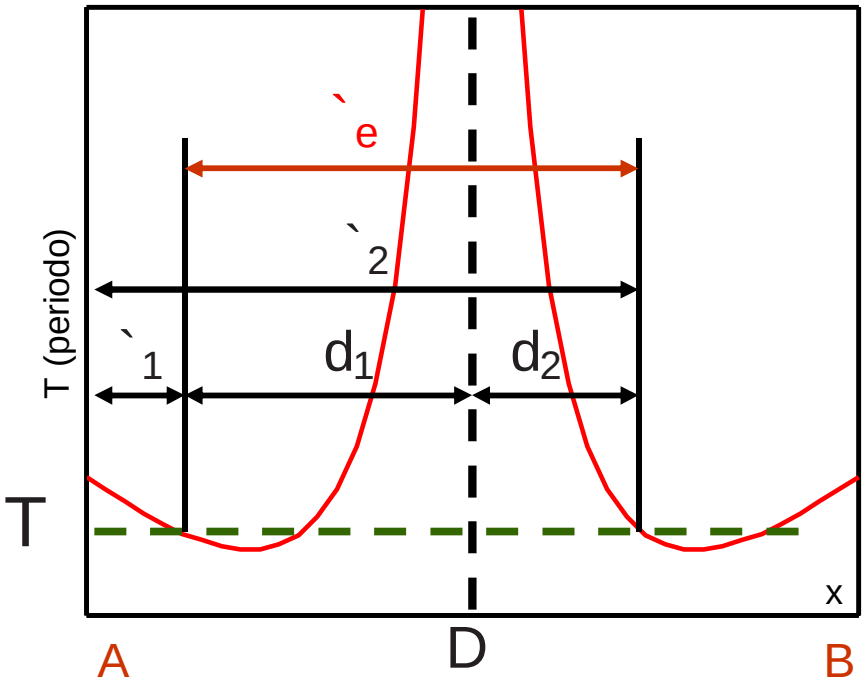
Pendolo composto con posizione del coltello variabi le in modo che esistano almeno 2 posizioni con lo stes so periodo di oscillazione.

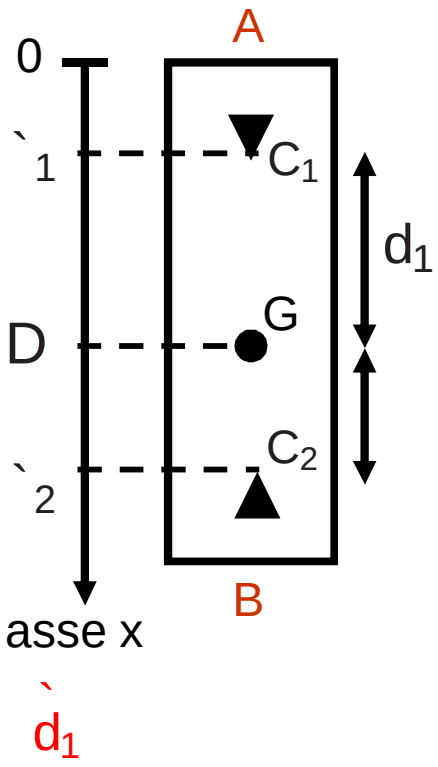
$$T_1 = T_2 \qquad \frac{I_1}{Md_1} = \frac{I_2}{Md_2} = \ell_e \qquad \frac{I_0 + Md_1^2}{Md_1} = \frac{I_0 + Md_2^2}{Md_2}$$

$$Md_1d_2(d_1 - d_2) = I_0(d_1 - d_2) \quad \text{se } d_1 \neq d_2 \qquad I_0 = Md_1d_2$$

$$d_1 + d_2 = d_1 + \frac{I_0}{Md_1} = \frac{I_0 + Md_1^2}{Md_1} = \ell_e$$

$$\ell_e = d_1 + d_2 = \ell_2 - \ell_1$$

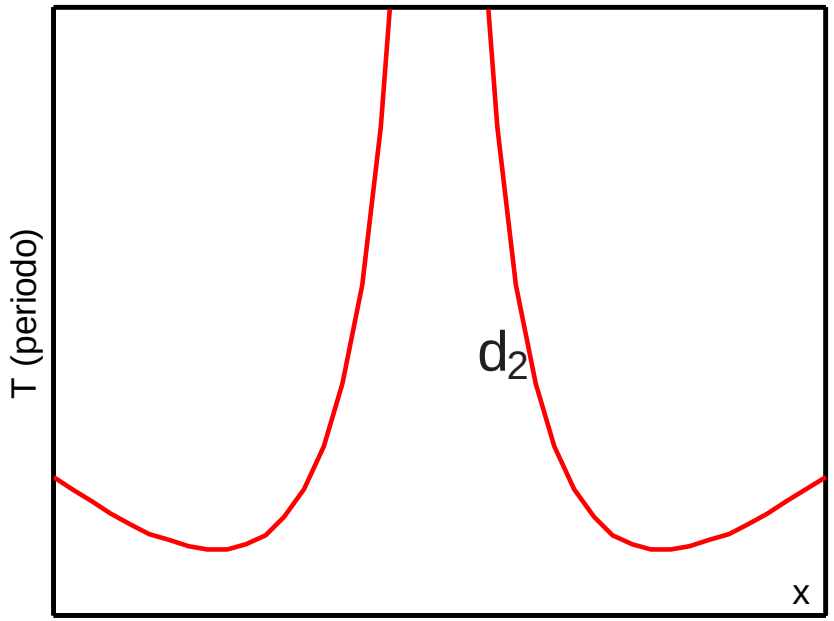


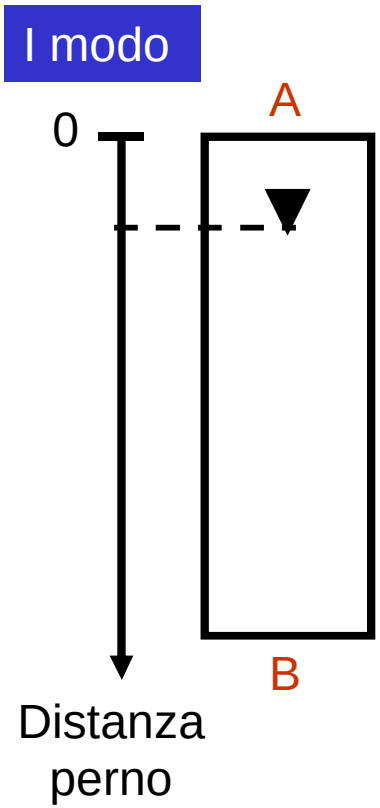


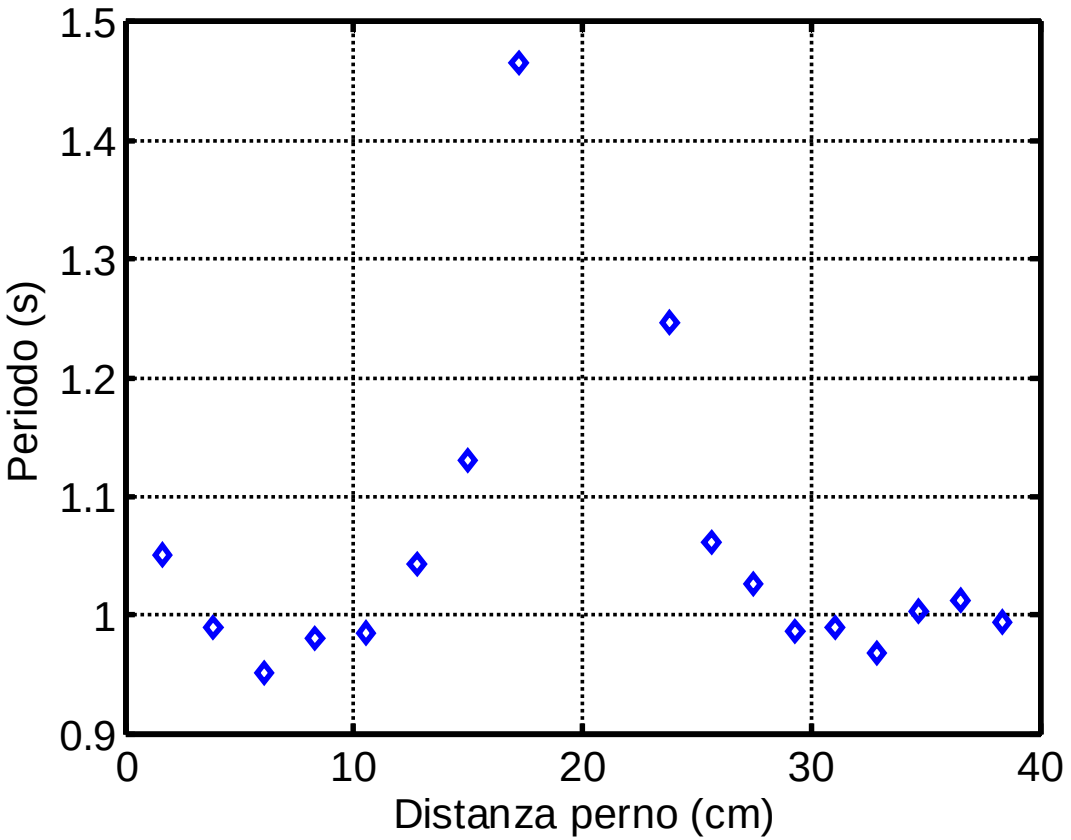
Pendolo composto con posizione del coltello variabi le in modo che esistano almeno 2 posizioni con lo stes so periodo di oscillazione.

$$T_1 = T_2 \qquad \frac{I_1}{Md_1} = \frac{I_2}{Md_2} = \ `_e \qquad \frac{I_0 + Md_1^2}{Md_1} = \frac{I_0 + Md_2^2}{Md_2}$$

$$Md_1d_2(d_1 \quad d_2) = I_0(d_1 \quad d_2) \qquad I_0 = Md_1d_2$$

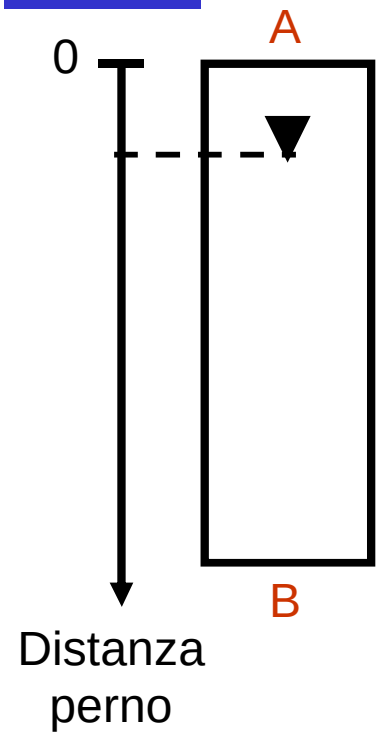


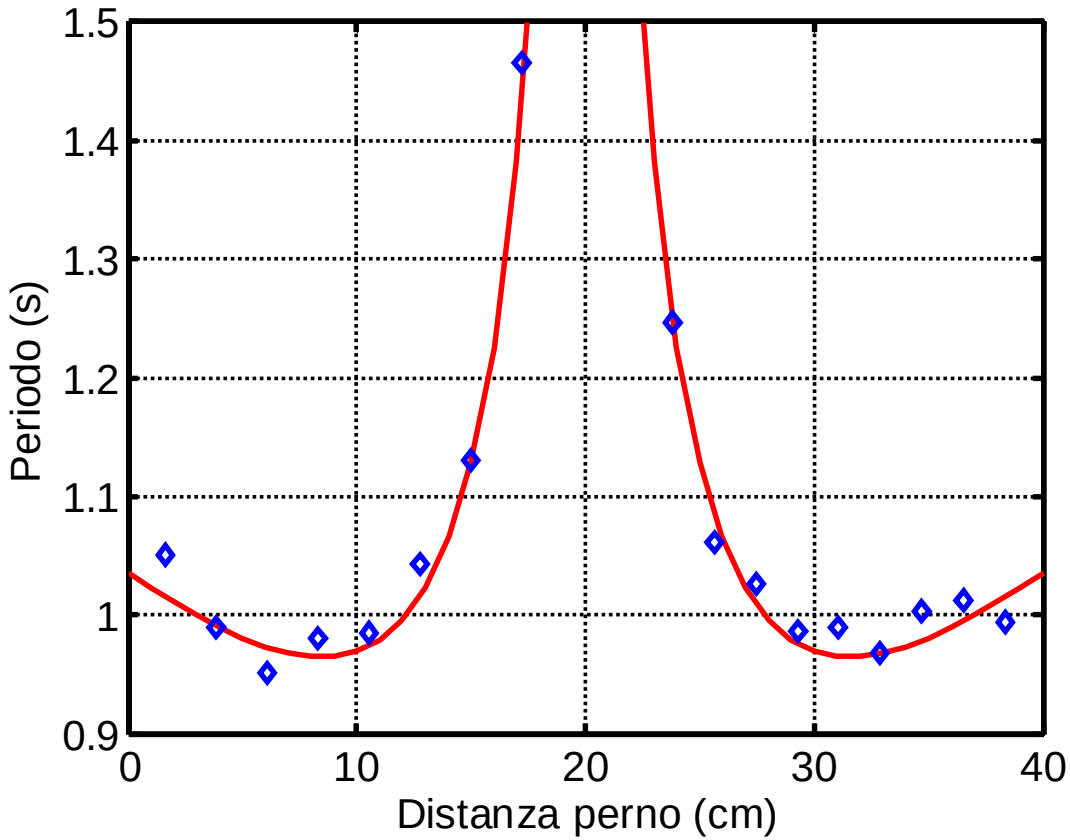




Misuro il periodo T al variare della posizione dell ’asse di oscillazione.

I modo

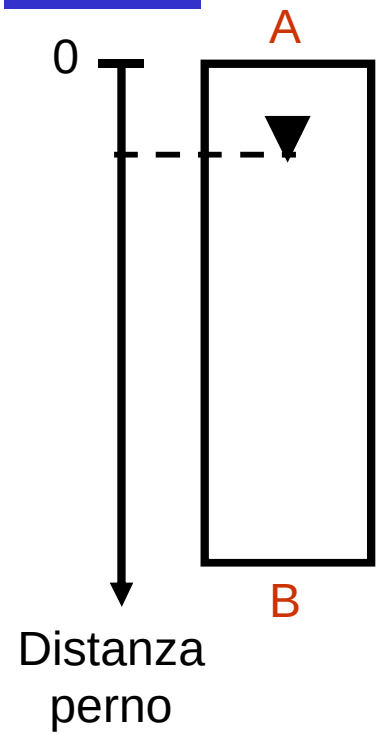


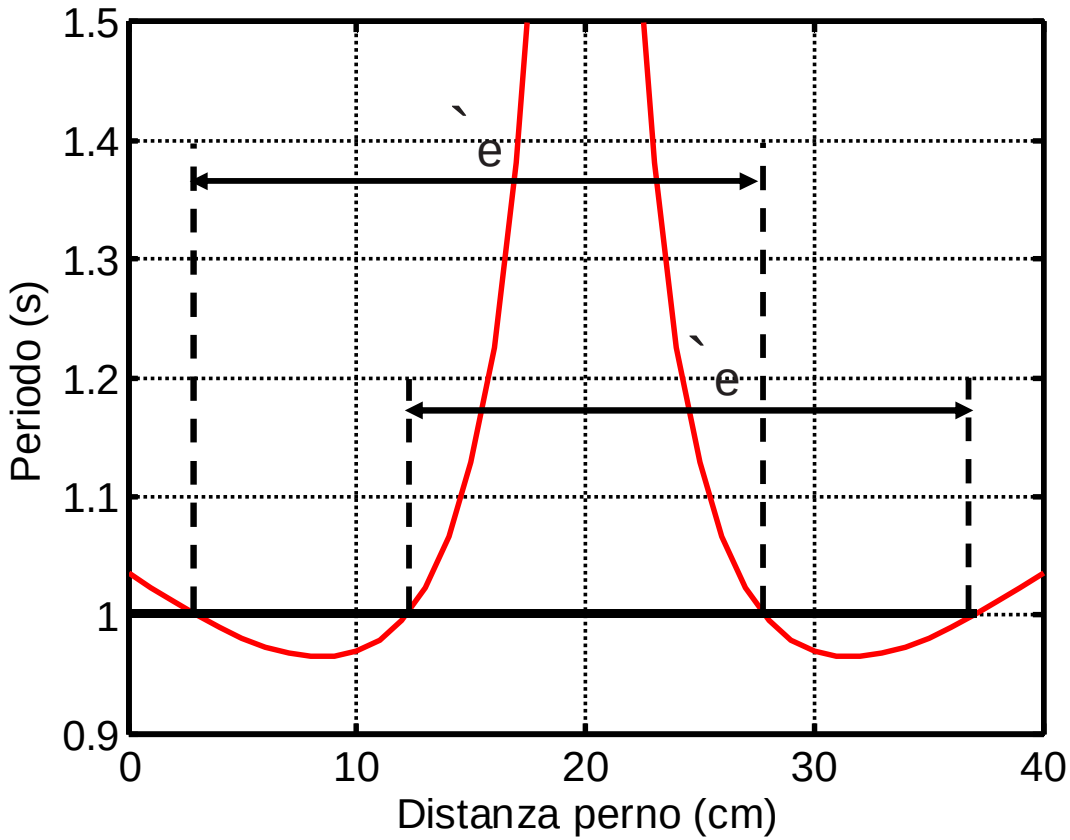


Misuro il periodo T al variare della posizione dell ’asse di oscillazione.

Disegno le curve che meglio approssimano le misure.

I modo



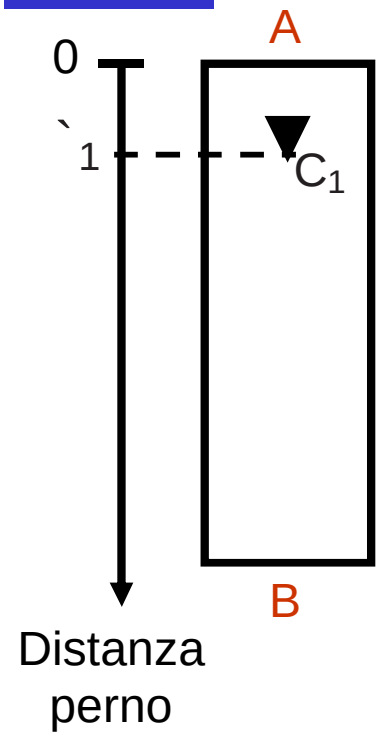


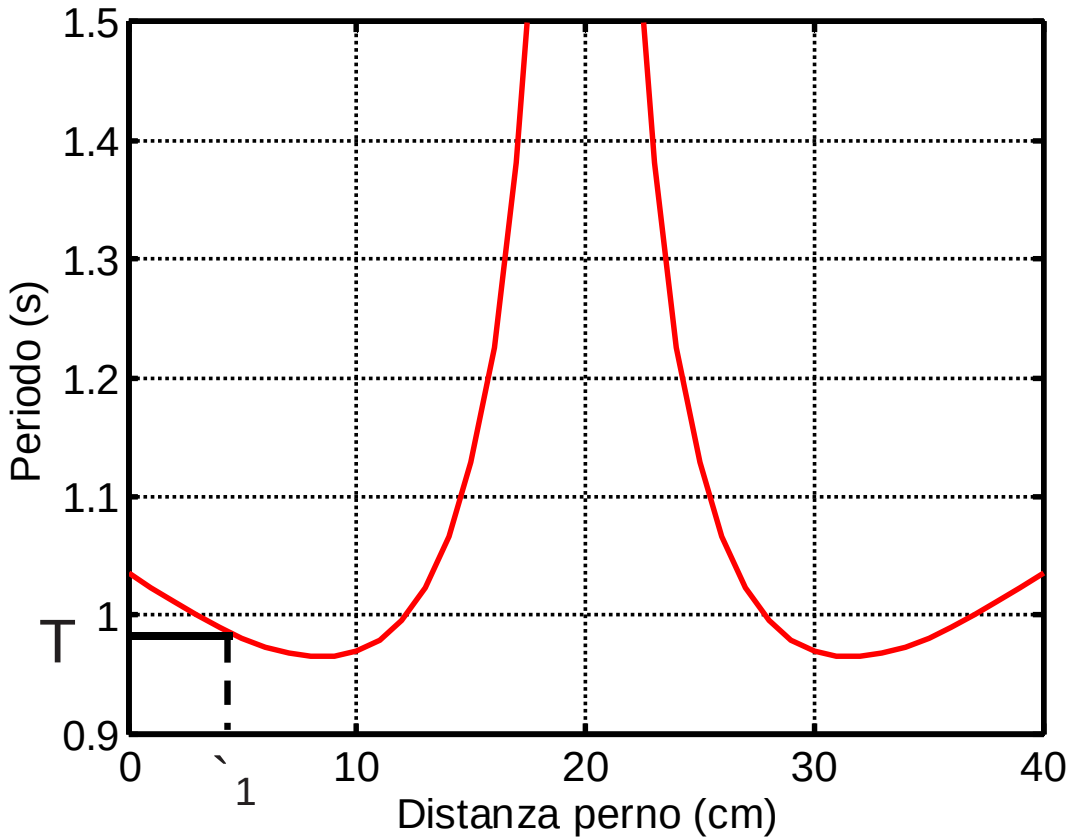
Misuro il periodo T al variare della posizione dell ’asse di oscillazione.

Disegno le curve che meglio approssimano le misure.

Scelgo un periodo e leggo sul grafico la lunghezza equivalente `e

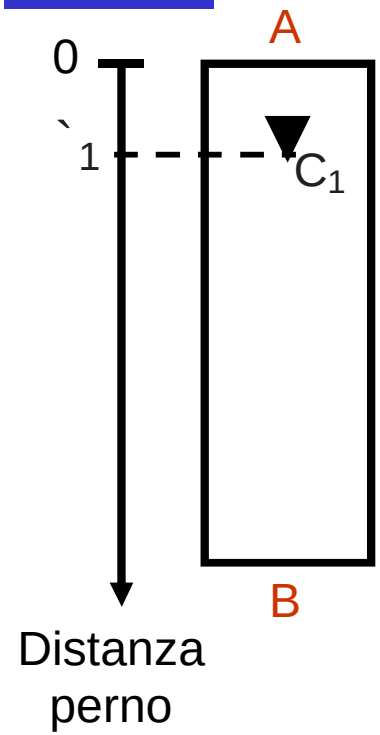
II modo

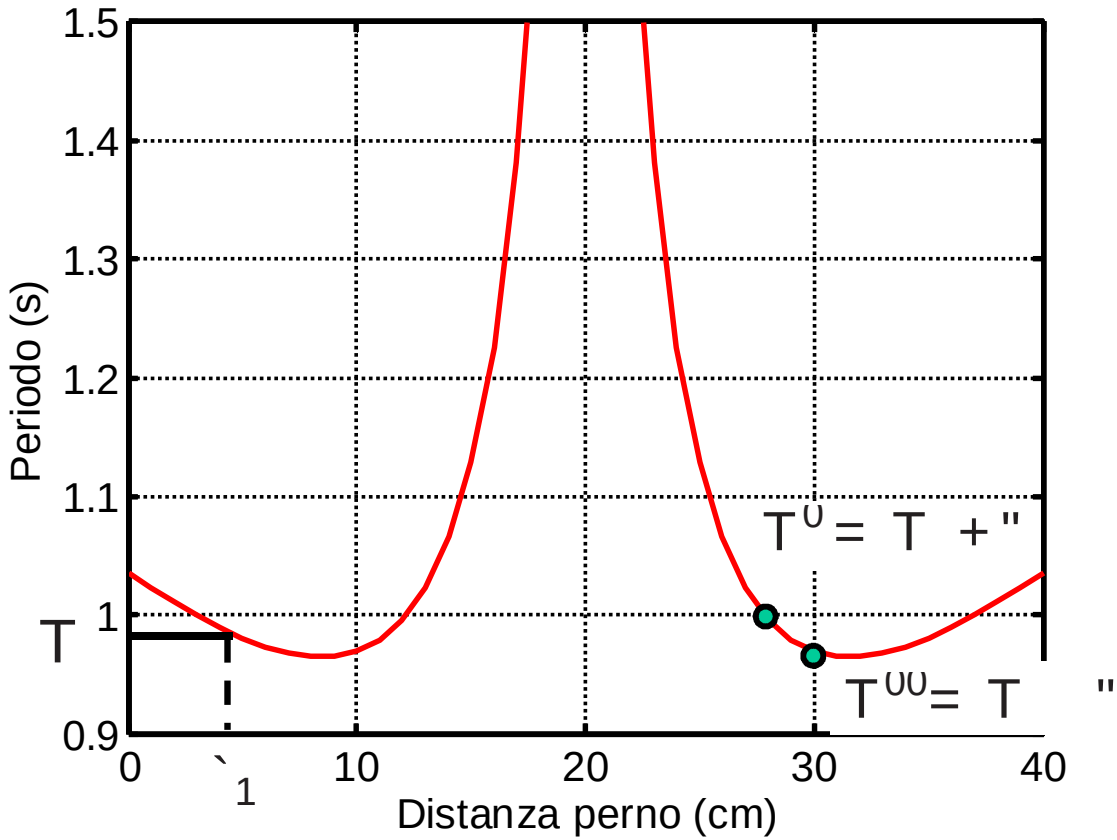




Fisso una posizione del coltello C $_1$ e misuro il periodo T*.

II modo

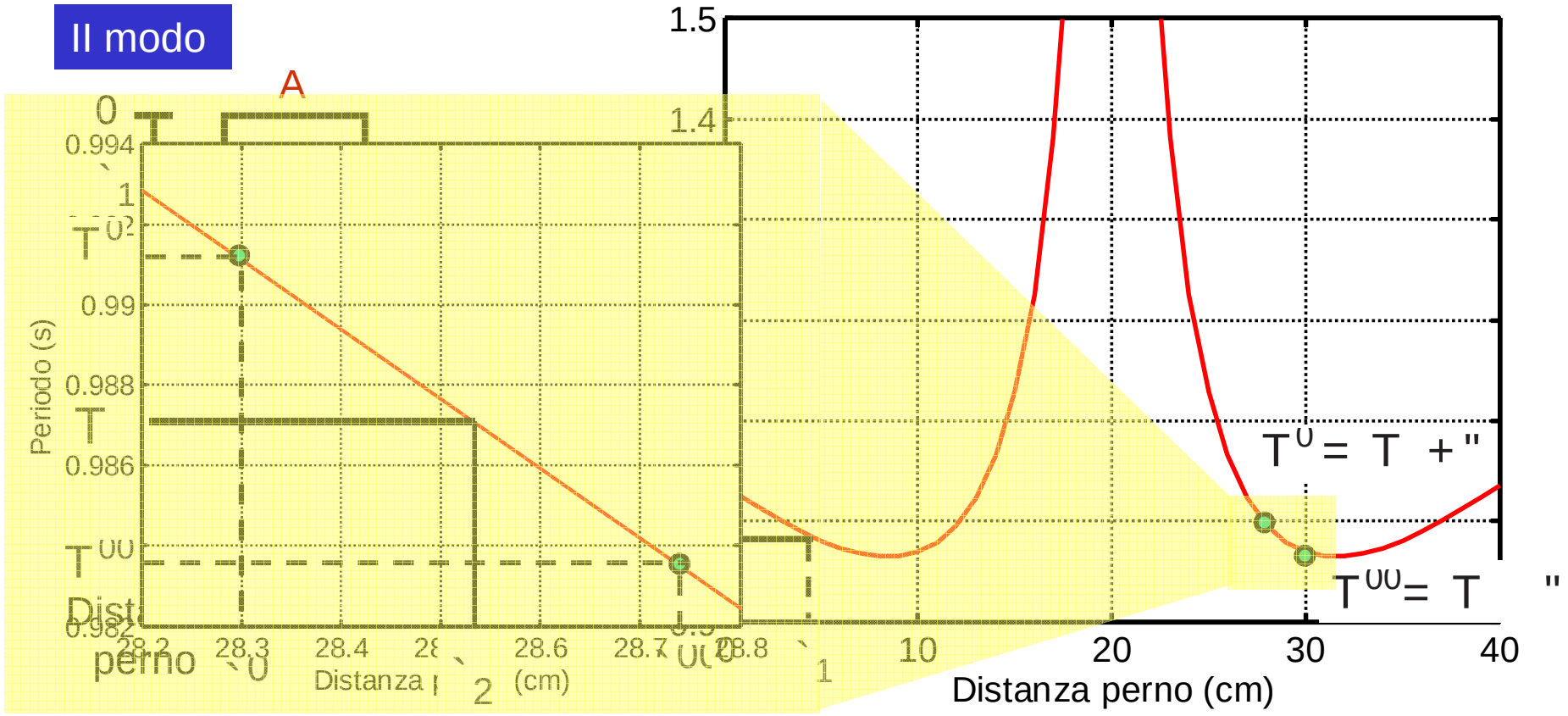




Fisso una posizione del coltello C $_1$ e misuro il periodo T*.

Scelgo la posizione di C $_2$ cosi da avere due periodi di poco differenti da T*.

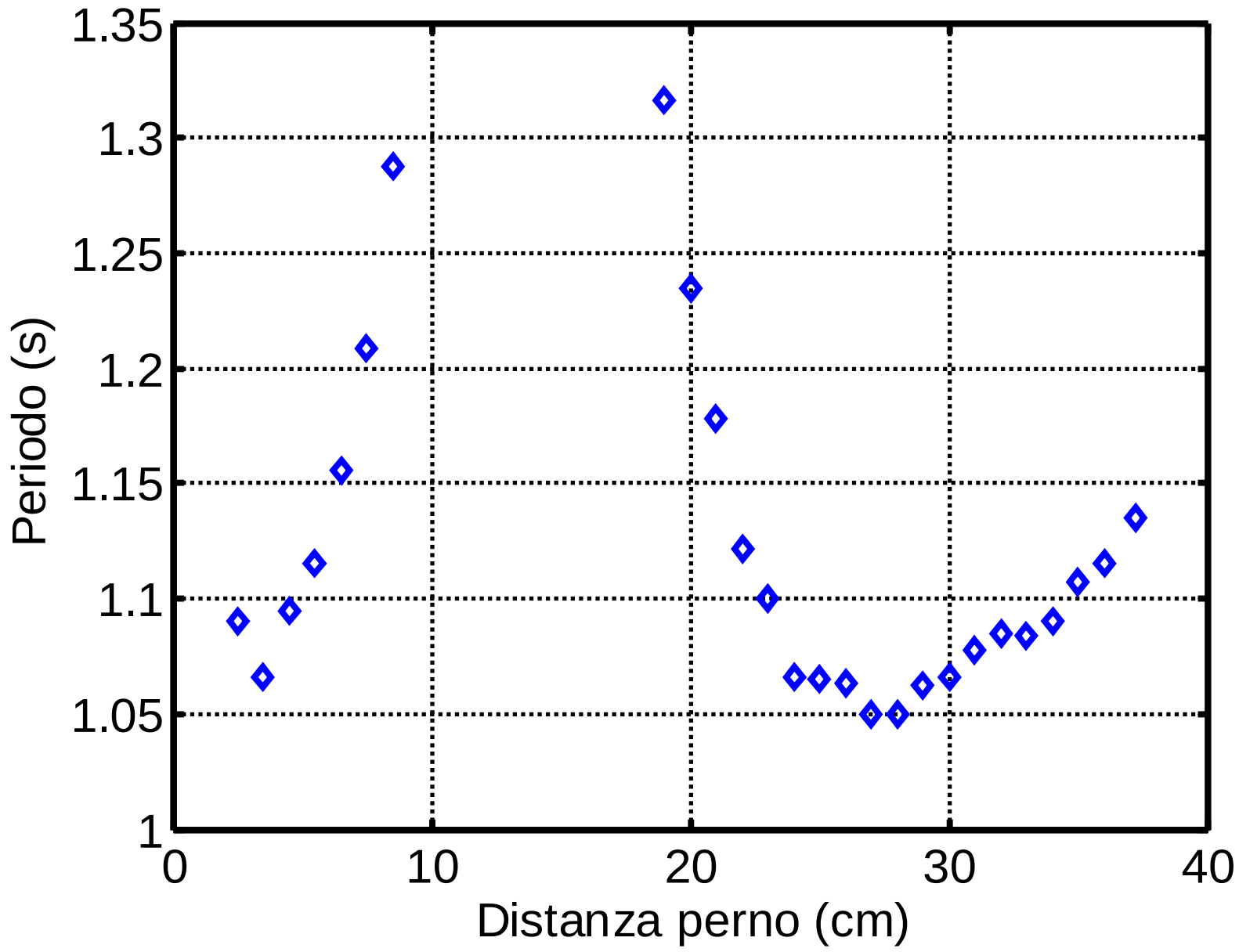
II modo

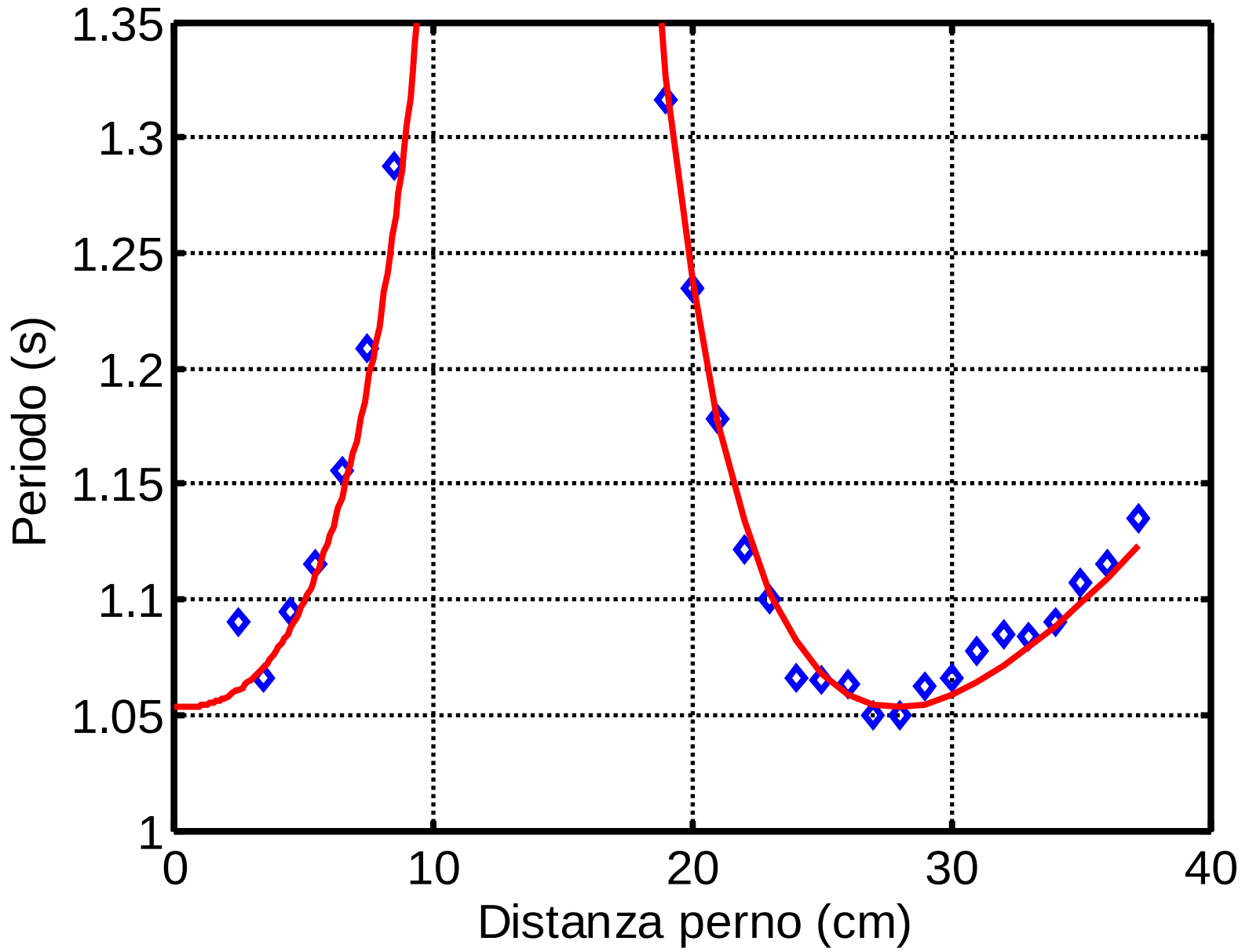


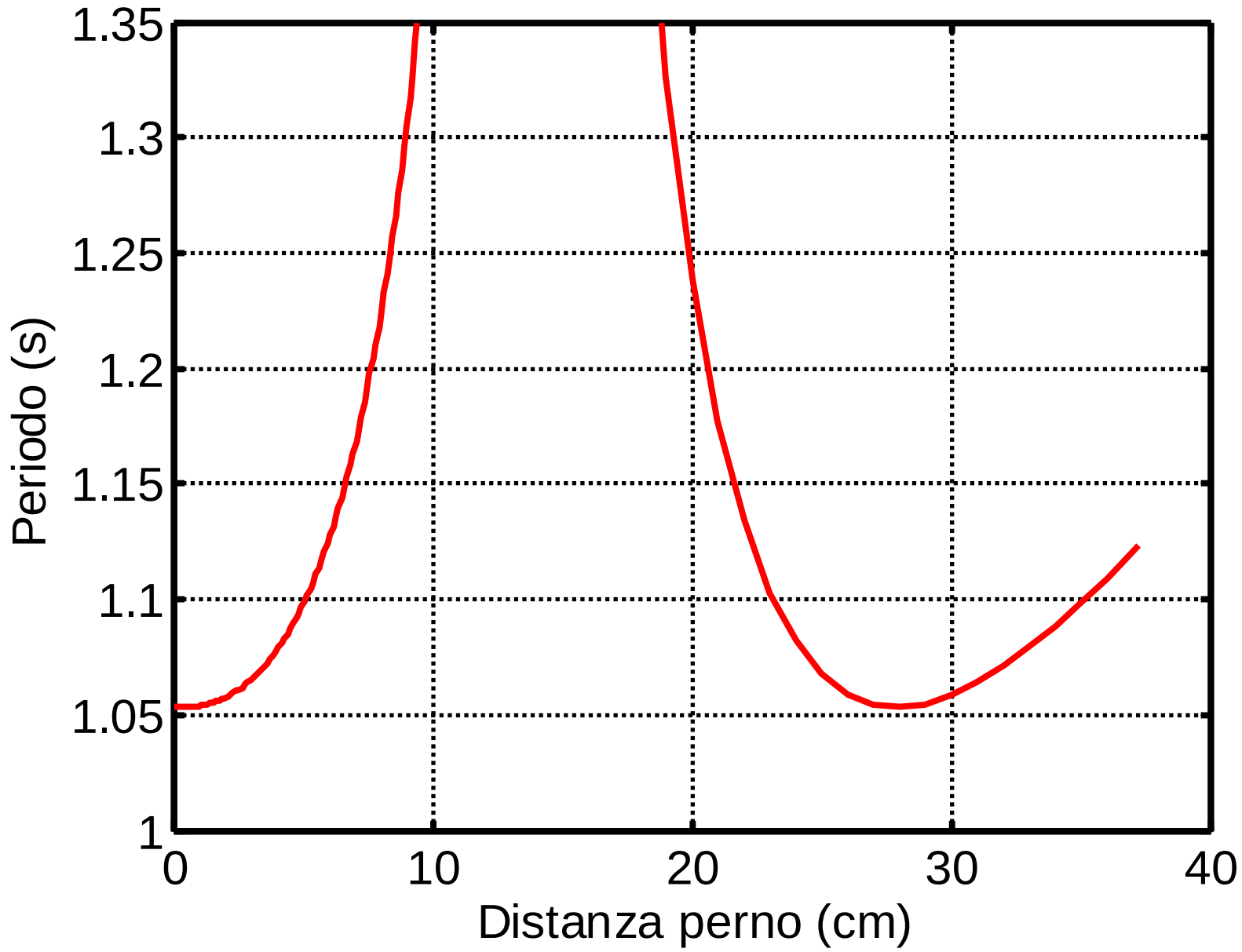
Fisso una posizione del coltello C $_1$ e misuro il periodo T*.

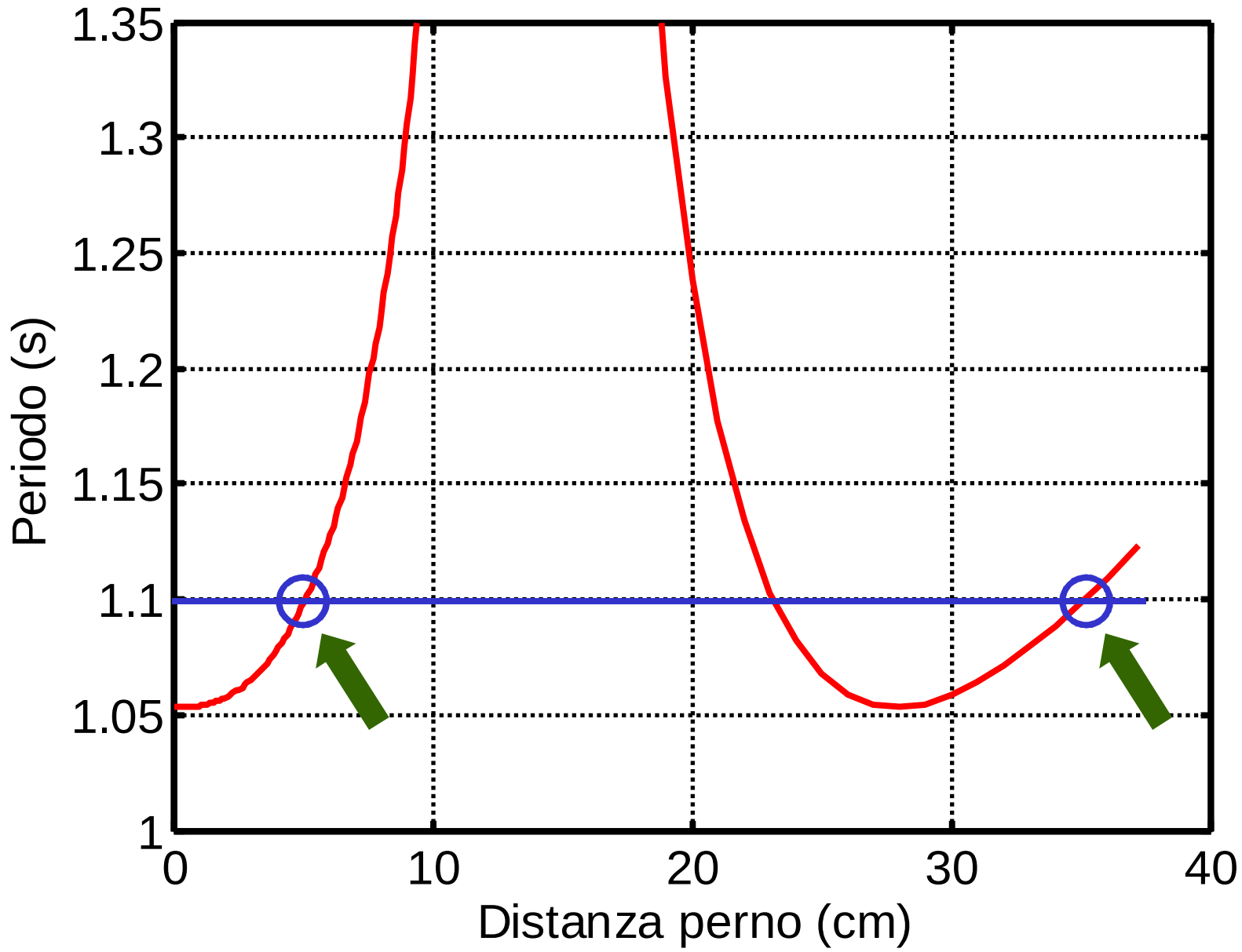
Scelgo la posizione di C $_2$ cosi da avere due periodi di poco differenti da T*.

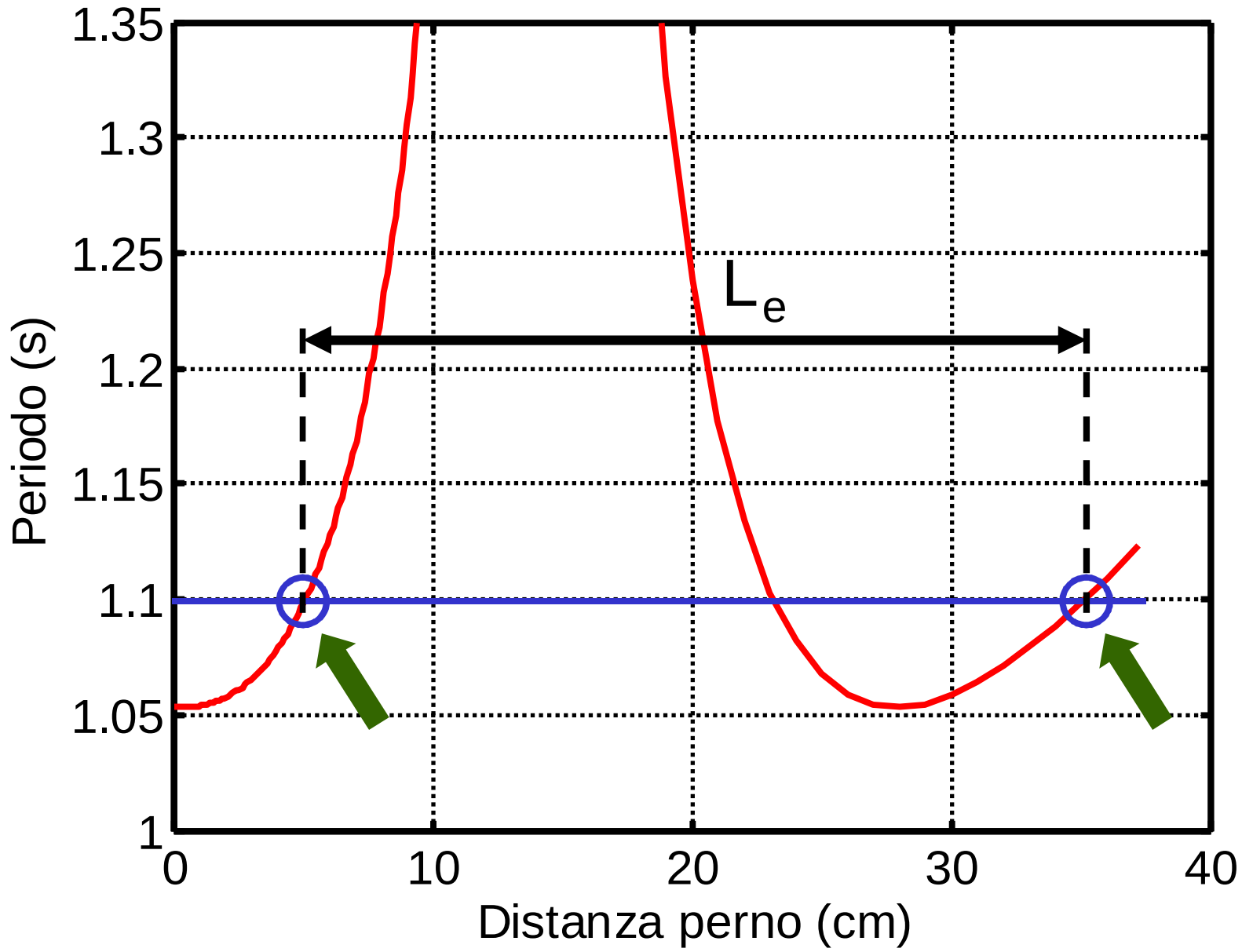
Dalla retta passante per i due periodi ricavo $`_2 \longrightarrow `_e = \frac{`_2 + `_1}{2}$

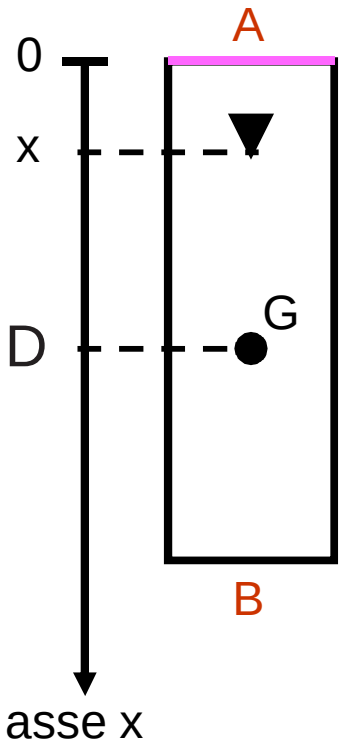

1.35
1.3
1.25
1.2
1.15
1.1
1.05
1
Periodo (s)
0
10
20
30
40
Distanza perno (cm)


1.35
1.3
1.25
1.2
1.15
1.1
1.05
1
Periodo (s)
0
10
20
30
40
Distanza perno (cm)

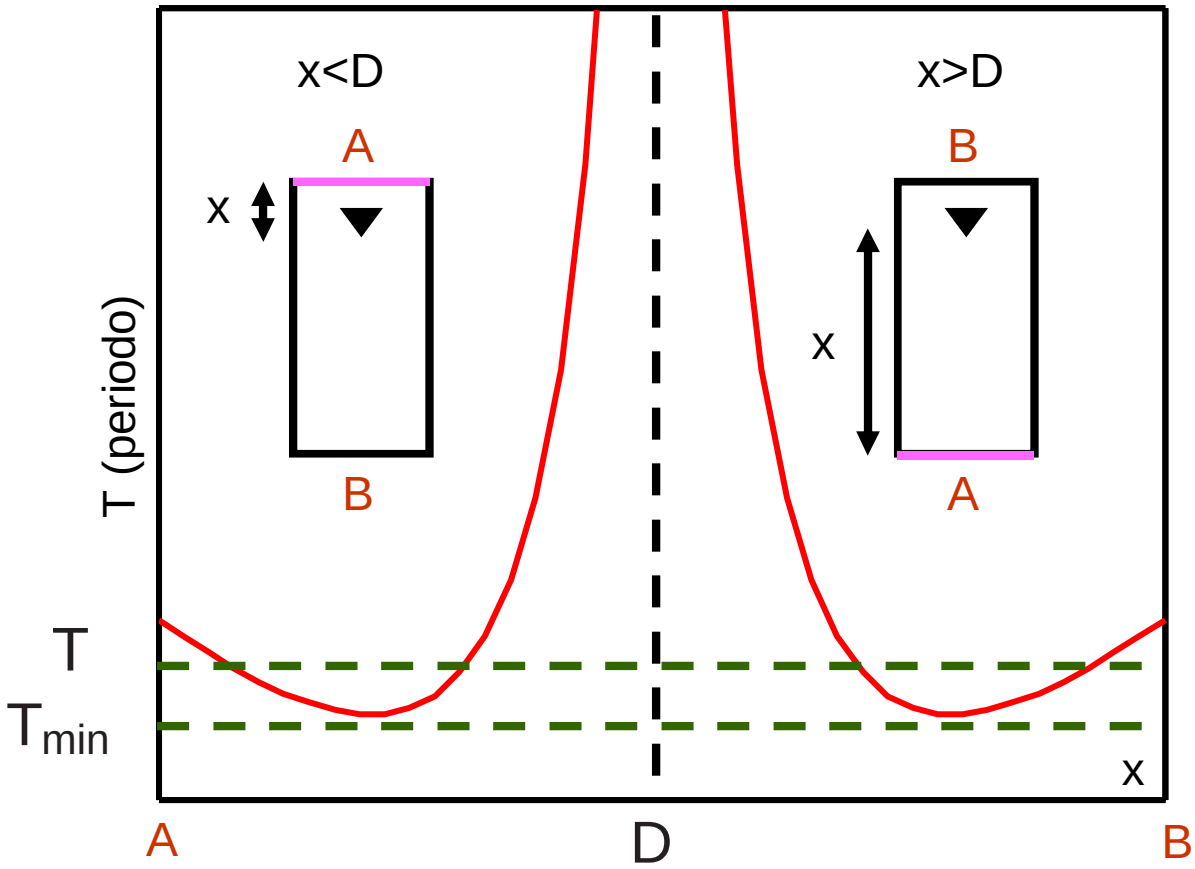

1.35
1.3
1.25
1.2
1.15
1.1
1.05
1
Periodo (s)
0
10
20
30
40
Distanza perno (cm)

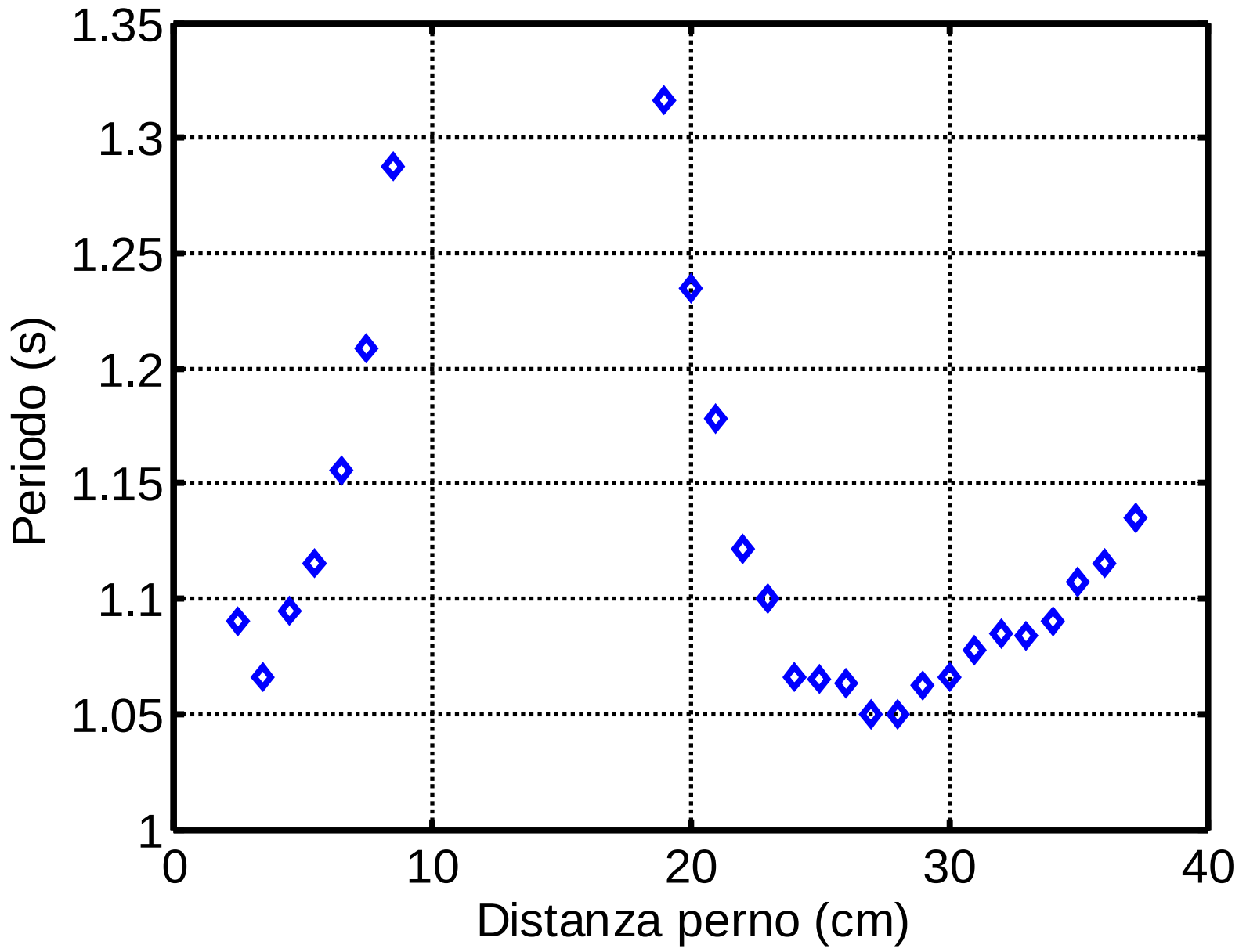

1.35
1.3
1.25
1.2
1.15
1.1
1.05
1
Periodo (s)
0
10
20
30
40
Distanza perno (cm)


1.35
1.3
1.25
1.2
1.15
1.1
1.05
1
Periodo (s)
0
10
20
30
40
Distanza perno (cm)
L_e



$$T = 2 \sqrt{\frac{I_0 + M(D - x)^2}{MgjD - xj}}$$




1.35
1.3
1.25
1.2
1.15
1.1
1.05
1
Periodo (s)
0
10
20
30
40
Distanza perno (cm)