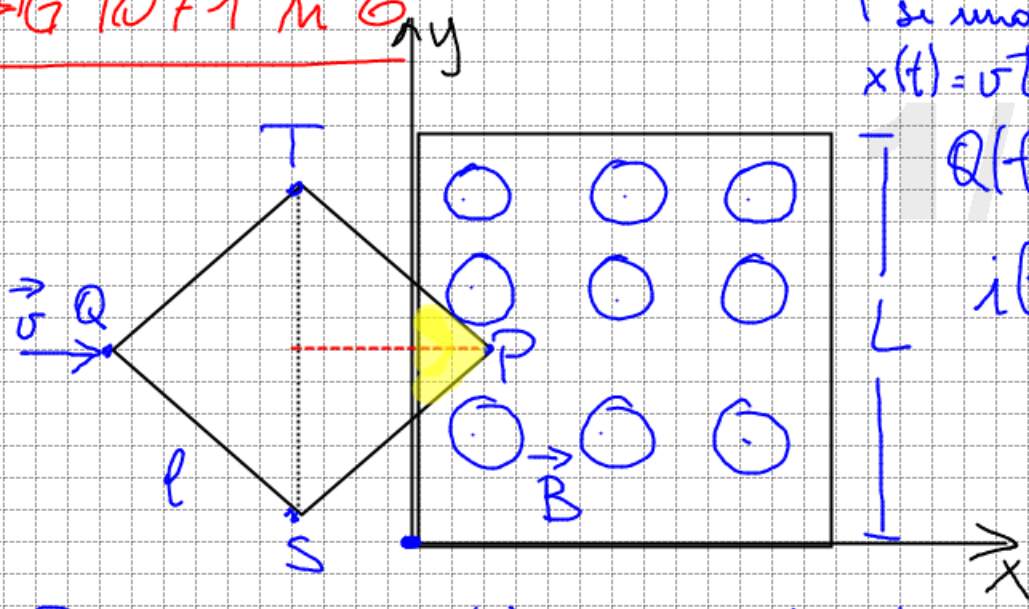
# PAG 1071 n 6



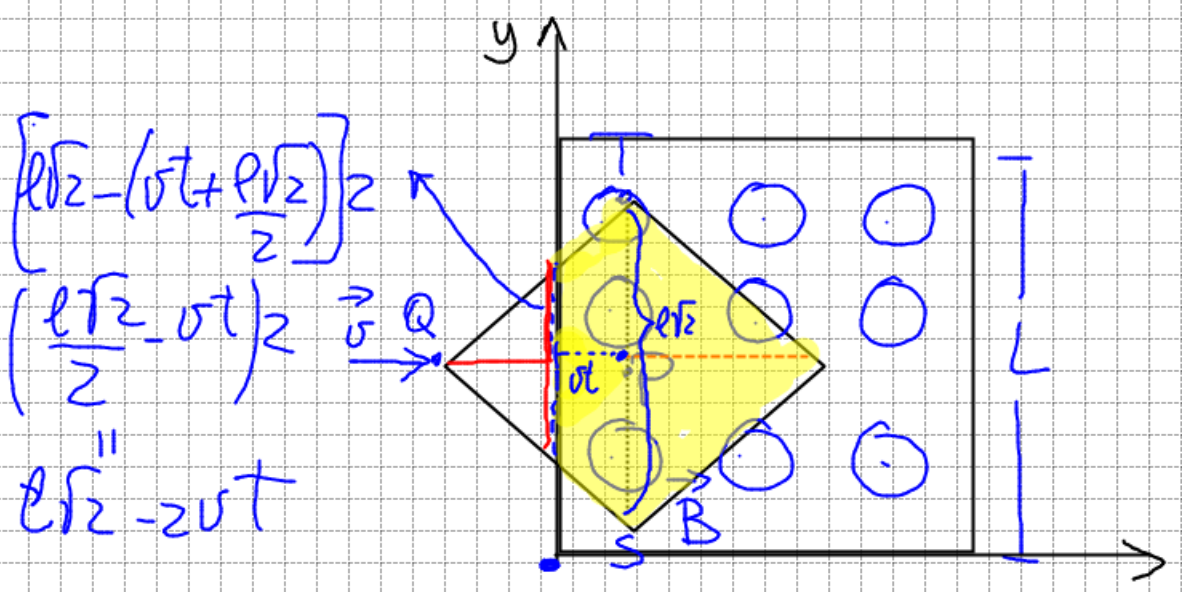

P si muove a velocità costante
$x(t) = vt$

$Q(t)$ come varia?

$$i(t) = -\frac{NB}{R}\frac{d\Theta(t)}{dt}$$

Se $P \in$ asse y cioè $x(t) = 0 \Leftrightarrow x(t) = vt = 0 \Leftrightarrow t = 0$
e fino al caso in cui $TS \in$ asse $y \Leftrightarrow x(t) = \frac{l\sqrt{2}}{2} \Leftrightarrow vt = \frac{l\sqrt{2}}{2}$
$\Leftrightarrow t = \frac{l\sqrt{2}}{2v}$

$$0 \le t \le \frac{l\sqrt{2}}{2v} \qquad Q(t) = \frac{vt \cdot 2vt}{2} = v^2t^2$$




$l\sqrt{2} - 2vt$

Se $\frac{l\sqrt{2}}{2} \le x(t) \le l\sqrt{2} \Leftrightarrow \frac{l\sqrt{2}}{2} \le vt \le l\sqrt{2}$

$$\frac{l\sqrt{2}}{2v} \le t \le \frac{l\sqrt{2}}{v} \qquad Q(t) = l^2 - (l\sqrt{2} - vt) \cdot 2(l\sqrt{2} - vt)\frac{1}{2}$$

$$Q(t) = l^2 - (l\sqrt{2} - vt)^2$$

finire per cosa!