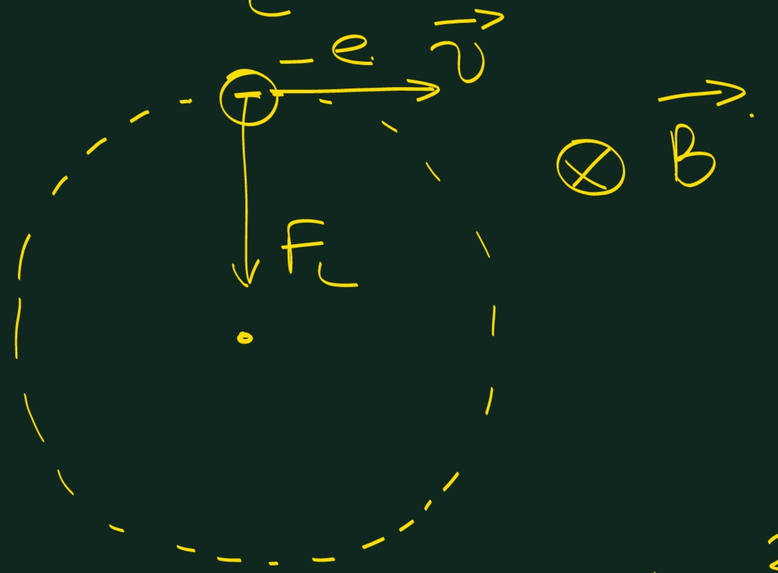
Δύναμη Lorentz

Αν $\vec{\upsilon} \perp \vec{B}$

τότε $\eta\mu\theta = 0$

οπότε: $F_L = |q| \cdot \upsilon \cdot B$.



Αφού: $F_L = F_K \Rightarrow$

$$|q| \cdot \upsilon \cdot B = \frac{m\upsilon^2}{R} \Rightarrow$$

$$R = \frac{m\upsilon}{|q| \cdot B}$$

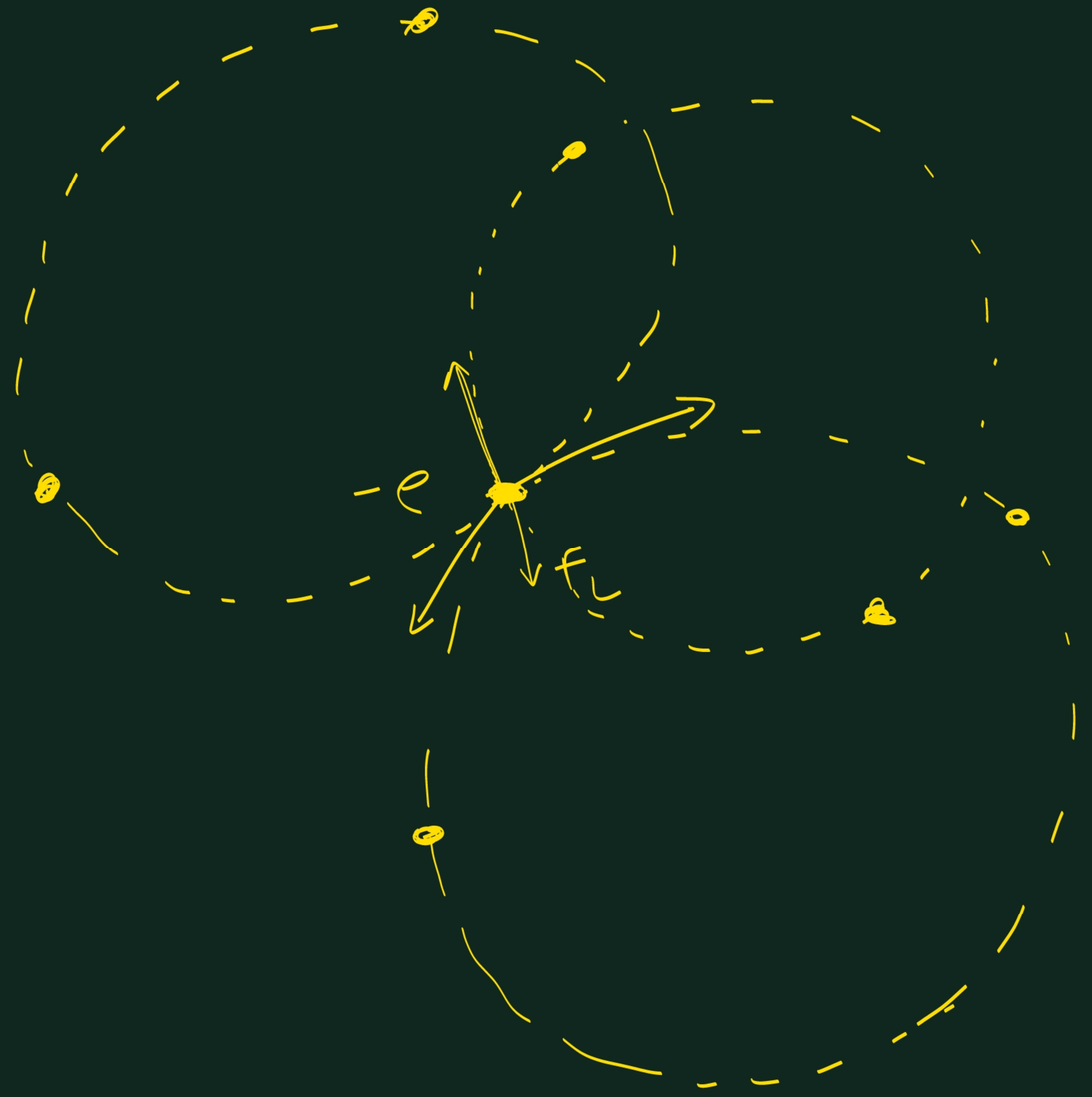
$$L = m\upsilon R = \frac{m\upsilon^2}{|q| \cdot B} = \frac{2K}{|q| \cdot B} \quad \text{(στροφορμή)}$$

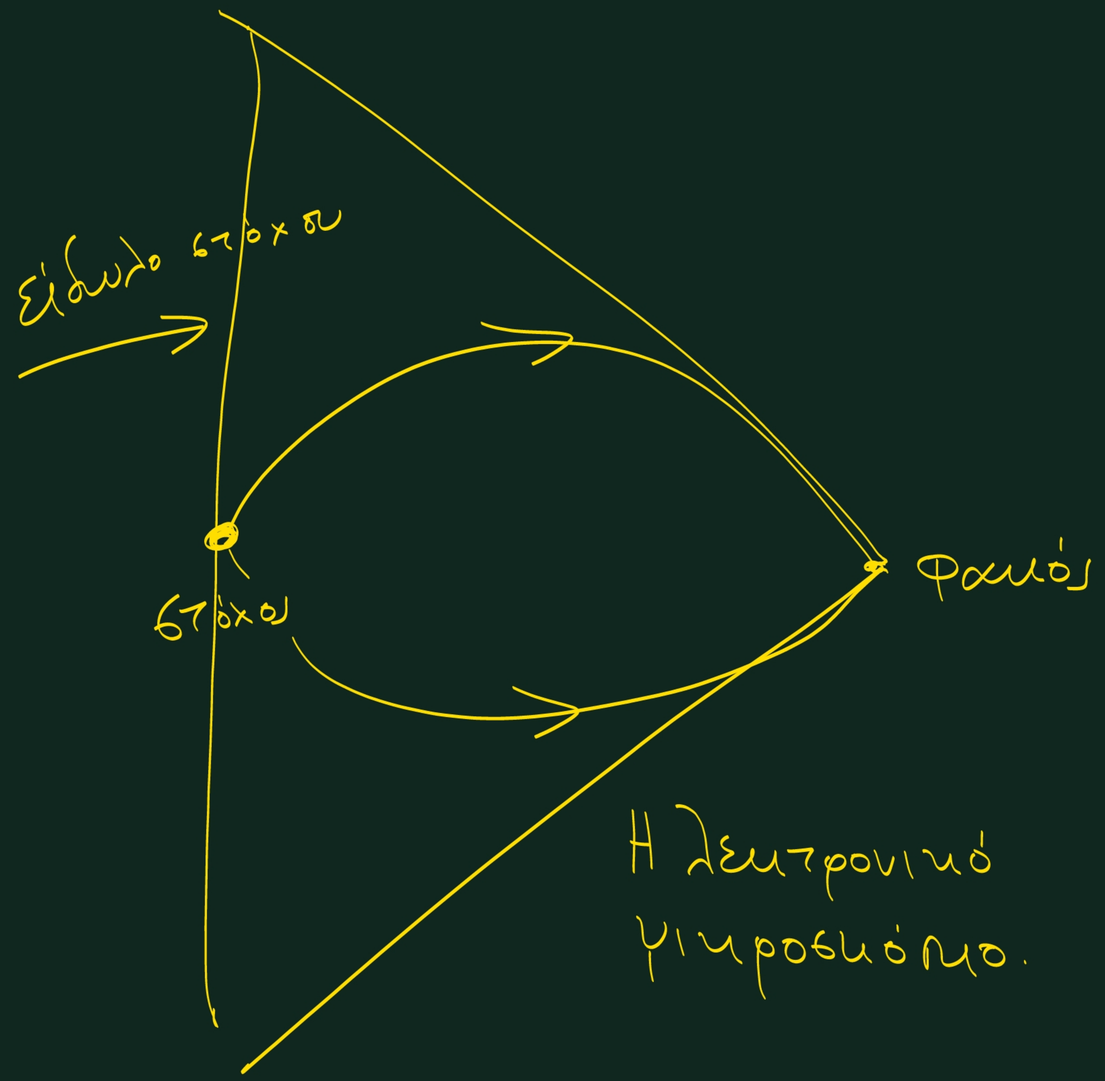
$$R = \frac{p}{|q| \cdot B} \qquad B \propto I$$

$$\upsilon = \frac{2\pi R}{T} \Rightarrow \upsilon = \frac{2\pi}{T} \cdot \frac{m\upsilon}{|q| \cdot B} \Rightarrow$$

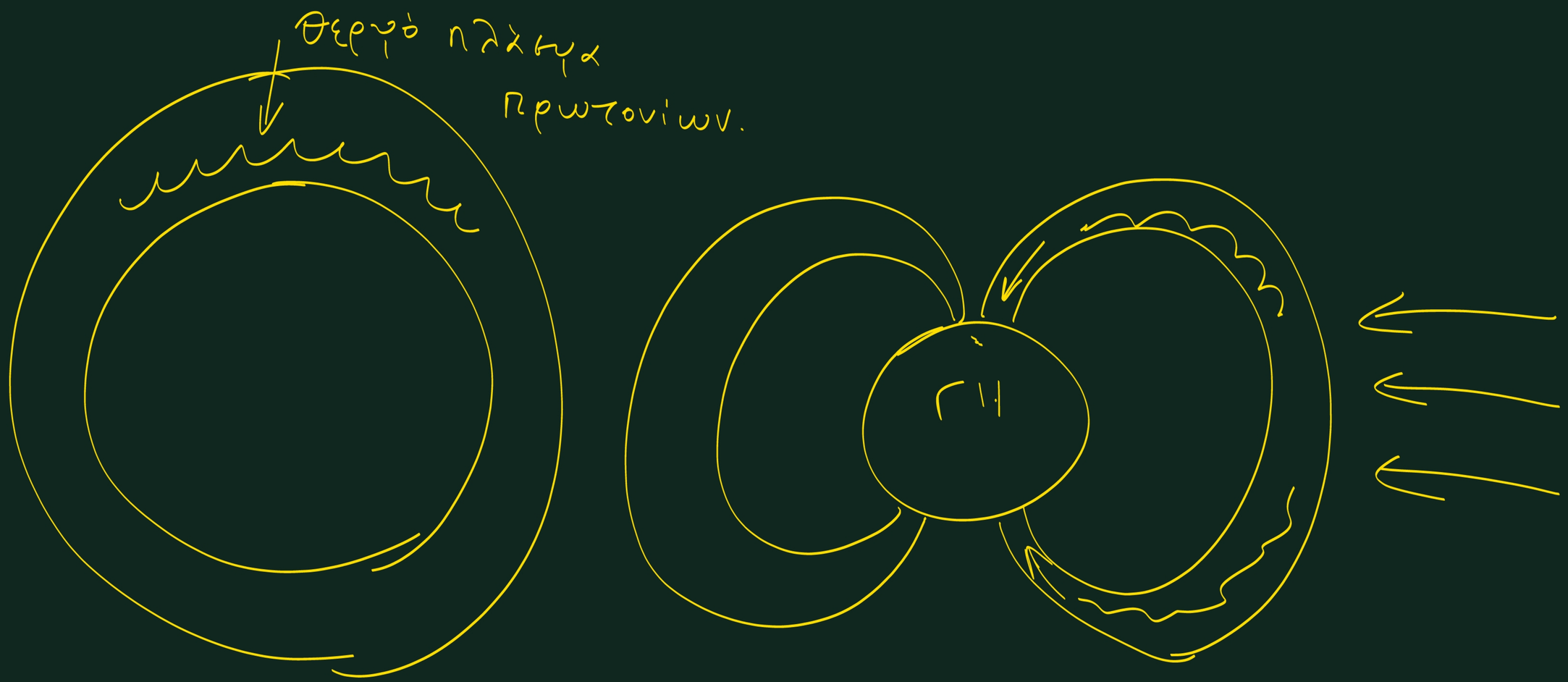
$$T = \frac{2\pi m}{|q| \cdot B}$$

ανεξάρτητη της ταχύτητας.

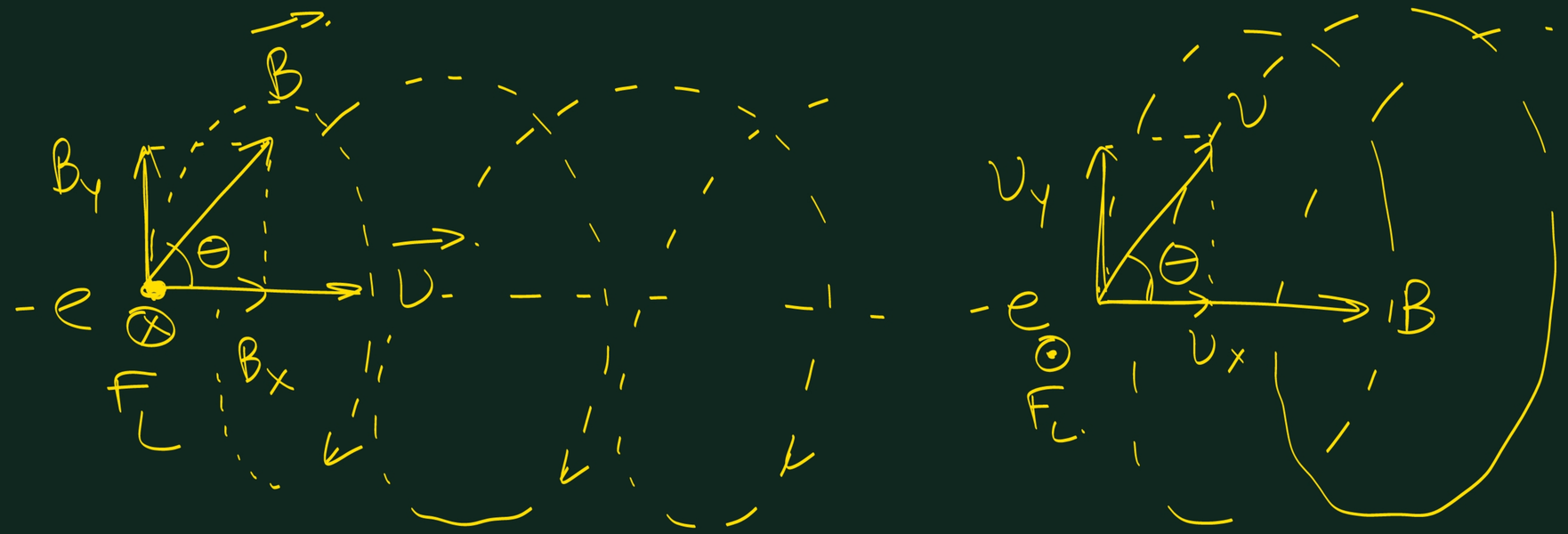




Η ηλεκτρονικό μικροσκόπιο.


Θερμό πλάσμα
πρωτονίων.

Ελικοειδής κίνηση.



$$b = v_x T \qquad T = \frac{2\pi m}{|q| \cdot B} = \frac{2\pi m}{eB} \qquad b = v_x \cdot T = v \cdot \sigma\upsilon\nu\theta \cdot \frac{2\pi m}{|q| \cdot B}$$