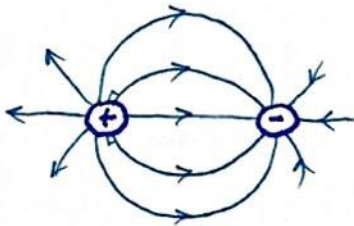
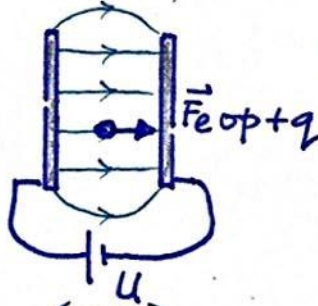


* Elektrische veldsterkte \vec{E}



In metalen kooli geldt: $E=0$

gelijke ladingen stoten elkaar af
ongelijke trekken elkaar aan



homogeen veld



$$\vec{F}_e = \frac{U}{d} q \Rightarrow \boxed{E = \frac{F_e}{q} = \frac{U}{d}} \quad (\text{N/C of V/m})$$

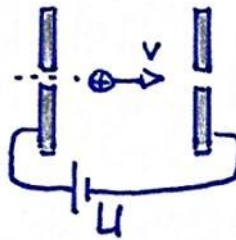
* Versnellen alleen in \vec{E} -veld

Arbeid $\boxed{W_e = q \cdot U = \Delta E_k}$

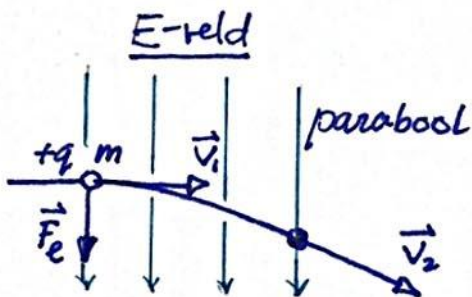
Volt = J/C

elektronvolt: $1\text{eV} = 1,6 \cdot 10^{-19}\text{C}$

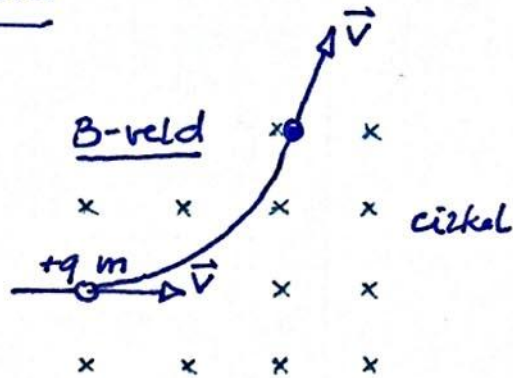
Toepassing: lineaire versneller



* Af buigen in \vec{E} - of \vec{B} -veld



$$\frac{1}{2}mv_1^2 + qU = \frac{1}{2}mv_2^2$$



$$\boxed{F_L = Bqv = \frac{mv^2}{r}} \quad v \text{ constant}$$

Toepassing: in cirkelvormige versnellers