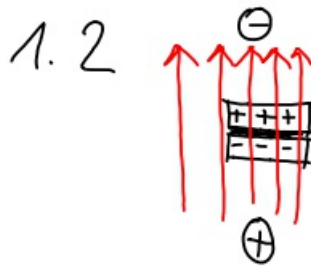


Aufgabe 1:

1.1 $E = \frac{F_{el}}{Q}$ $F \sim Q$

$$F = \text{const} \cdot Q$$

\uparrow
 $\frac{N}{m}$
 E



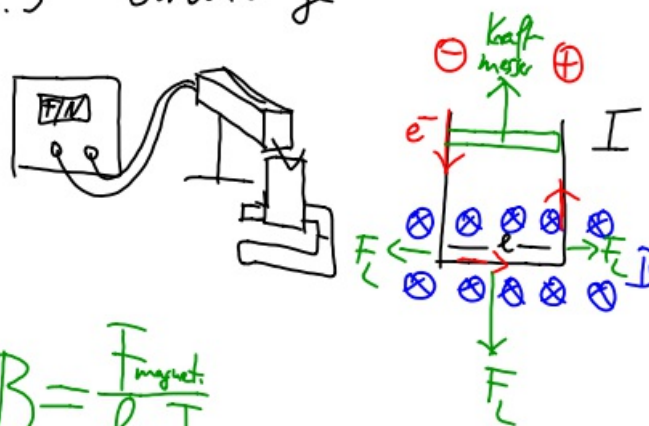
Influenz: Ladungs-
(bei Leiter) trennung

Polarisation: Ladungs-
(bei Nichtleiter) Verschiebung

Einheitsumrechnung:

$$\frac{kg \cdot m^2}{s^2} = J = N \cdot m = V \cdot A \cdot s$$

1.3 Stromwaage



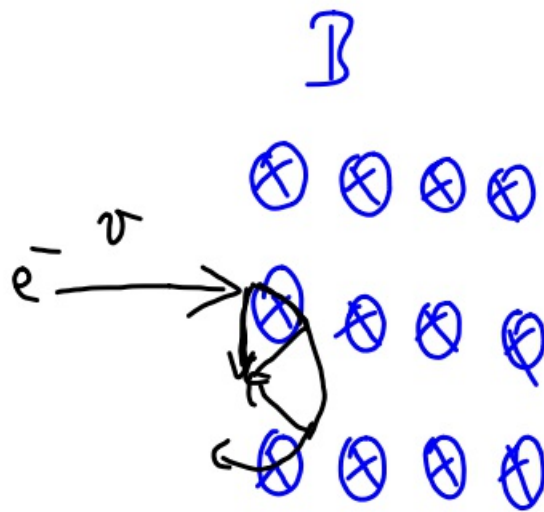
$$B = \frac{F_{\text{magnet.}}}{l \cdot I}$$

2.1

Fadenstahl-
rohrversuch

$$e U_B = \frac{1}{2} m_e v^2$$

2.2



$$F_L = Q \cdot v \cdot B$$

$$F_z = \frac{m \cdot v^2}{r}$$

