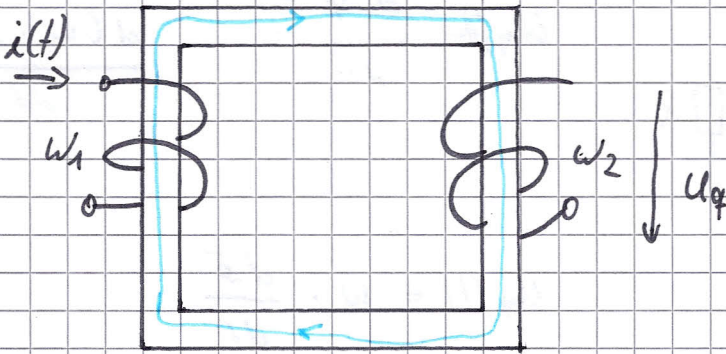


z. B. Trafo

$R_m \rightarrow$  magnetischer Widerst.



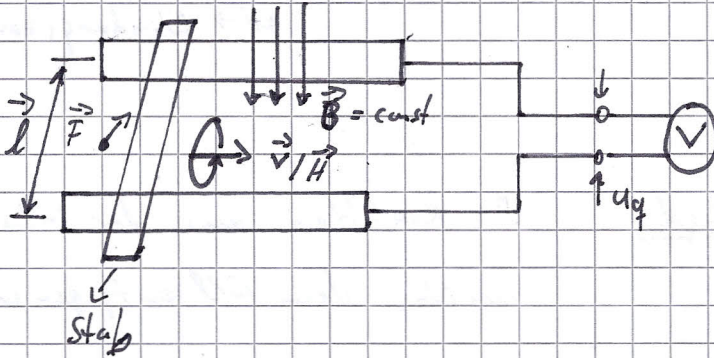
$$\Phi(t) = \frac{\mathcal{H}}{R_m}$$

$$\Phi(t) = \frac{i \cdot w_1}{R_m}$$

$$u_q = \frac{w_2 \frac{d\Phi(t)}{dt}}{dt} = \frac{d\psi}{dt} = \frac{w_1 \cdot w_2}{R_m} \cdot \frac{di}{dt}$$

$\uparrow$   
Rate Induktion

Bewegungsinduktion:



$$F \sim v \cdot B$$

$$\vec{F} \sim \vec{v} \times \vec{B}$$

$$\vec{F} = q \cdot \vec{E}$$

$$F = q \cdot (\underbrace{\vec{v} \times \vec{B}}_{\vec{E}}) \Rightarrow \text{Lorentz kraft}$$

$$\vec{E} = \vec{v} \times \vec{B}$$

$$u_q(t) = \oint \vec{E} \cdot d\vec{l} = \oint (\vec{v} \times \vec{B}) \cdot d\vec{l} \Rightarrow \text{Bewegungsinduktion}$$