

1.4 Elektrodynamische Potentiale

2. Elektromagnetische Wellen

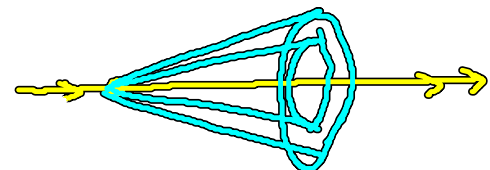
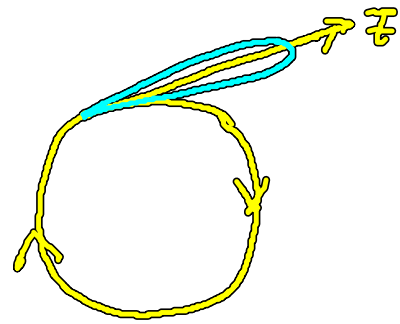
2.1 Materialgleichungen

$$[\epsilon] = \frac{C}{Vm}$$

$$Nm = J = VA \cdot s = VC$$

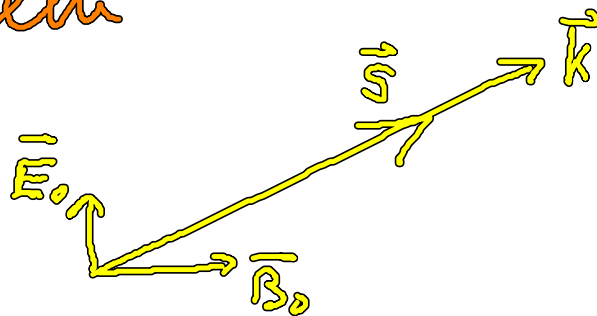
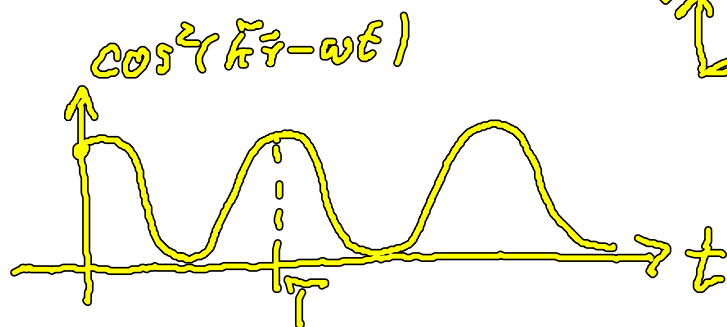
$$[H] = \frac{A}{m} = [M]$$

magnet. Dipolmoment $\vec{m} = \mu_B \vec{e}$, $[\vec{e}] = 1$ ($\vec{e} = \frac{1}{\hbar} \vec{r} \times \vec{p}$)
 $|\vec{m}| = \mu_B = A m^2$



2.2 Ebene Wellen

$$\vec{S} = \vec{E} \times \vec{H}$$



$$\omega = \frac{2\pi}{T}$$