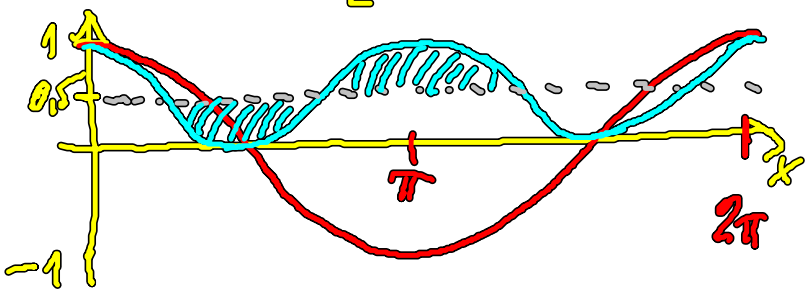
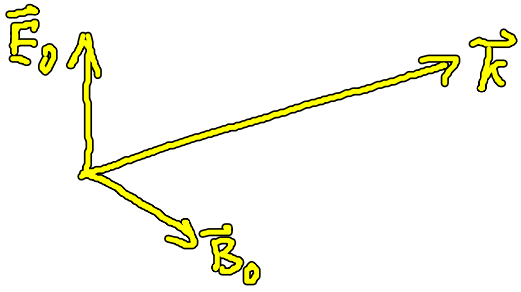
Die nächste Vorlesung findet am 12. November 07 statt

Die Polarisation $\vec{P}[\vec{E},\vec{H}](\vec{r},t) \approx \vec{P}[\vec{E}](\vec{r},t)$

$\cos^2 x = \frac{1}{2}(1+\cos 2x)$




$\langle \cos x \rangle = 0 \quad ; \quad \langle \cos^2 x \rangle = \frac{1}{2}$

$$\delta(x) = \frac{1}{2\pi}\int_{-\infty}^{+\infty} \exp\{ikx\}\,dk \quad \text{mit} \int_{-\infty}^{+\infty}\delta(x)\,dx = 1$$

$$u(x,0) = \iint \frac{1}{2\pi}\exp\{ik(x-y)\}\,dk\; u(y,0)\,dy = \int \delta(x-y)\,u(y,0)\,dy$$

$$f(x) = \int_{-\infty}^{+\infty} f(y)\,\delta(x-y)\,dy$$

$$\sigma = \frac{2n\varepsilon_0\omega}{\mu\nu} \cdot \frac{\alpha c}{2\omega} = \frac{n\mu_0\varepsilon_0}{\mu}\alpha c \approx \frac{n\alpha}{\mu c}$$