ΤΥΠΟΛΟΓΙΟ

$\vec{\nabla}\cdot\vec{D}=4\pi\rho$, $\vec{\nabla}\cdot\vec{B}=0$, $\vec{\nabla}\times\vec{E}=-\frac{1}{c}\frac{\partial\vec{B}}{\partial t}$, $\vec{\nabla}\times\vec{H}=\frac{4\pi\vec{J}}{c}+\frac{1}{c}\frac{\partial\vec{D}}{\partial t}$. $\vec{D}=\varepsilon\vec{E}$, $\vec{B}=\mu\vec{H}$. $\vec{B}=\vec{\nabla}\times\vec{A}$, $\vec{E}=-\vec{\nabla}\phi-\frac{1}{c}\frac{\partial\vec{A}}{\partial t}$.

$\psi(\vec{x},t)=\frac{1}{2\pi}\int_{-\infty}^{+\infty}\tilde{\psi}(\vec{x},\omega)\,e^{-i\omega t}\,d\omega$, $\tilde{\psi}(\vec{x},\omega)=\int_{-\infty}^{+\infty}\psi(\vec{x},t)\,e^{i\omega t}\,dt$

$\vec{F}=q(\vec{E}+\frac{\vec{v}}{c}\times\vec{B})$, $\vec{g}=\frac{1}{4\pi c}(\vec{E}\times\vec{B})$ (στο κενό)

$u_e=\frac{1}{8\pi}\vec{E}\cdot\vec{D}$, $u_m=\frac{1}{8\pi}\vec{B}\cdot\vec{H}$, $\vec{S}=\frac{c}{4\pi}(\vec{E}\times\vec{H})$,

$\vec{S}=\mathrm{Re}\left[\frac{c}{8\pi}(\vec{E}\times\vec{H}^*)\right]$, $\vec{B}=\frac{c}{\omega}[\vec{k}\times\vec{E}]$

$\nu=\nu_R+i\nu_I$, $\cos\nu=\cos\nu_R\cosh\nu_I-i\sin\nu_R\sinh\nu_I$, $\sin\nu=\sin\nu_R\cosh\nu_I+i\cos\nu_R\sinh\nu_I$

$\epsilon(\omega)=1+\frac{4\pi Ne^2}{m}\sum_i f_i(\omega_i^2-\omega^2-i\omega\gamma_i)^{-1}$, $Z=\Sigma f_i$, $\omega_p^2=4\pi NZe^2/m$

$\sigma=f_0Ne^2/[m(\gamma_0-i\omega)]$.

$u(x,t)=\frac{1}{\sqrt{2\pi}}\int A(k)e^{ikx-i\omega(k)t}\,dk$, $A(k)=\frac{1}{\sqrt{2\pi}}\int u(x,0)e^{-ikx}\,dx$.

kramers - kronig $\varepsilon(\omega)=1+\frac{1}{\pi i}P\int_{-\infty}^{+\infty}\frac{[\epsilon(\omega')-1]}{\omega'-\omega}\,d\omega'$