

Maxwellovy rovnice

Pro konstantní ε, μ platí

$$\operatorname{div} \varepsilon \vec{E} = \rho$$

$$\operatorname{div} \mu \vec{H} = 0$$

$$\operatorname{rot} \vec{E} = -\mu \frac{\partial \vec{H}}{\partial t}$$

$$\operatorname{rot} \vec{H} = \varepsilon \frac{\partial \vec{E}}{\partial t} + \vec{j}$$

Platí

$$\begin{aligned} \vec{D} &= \varepsilon \vec{E} \\ \vec{B} &= \mu \vec{H} \end{aligned}$$

Pomocí \vec{D}, \vec{B} lze zapsat také

$$\operatorname{div} \vec{D} = \rho$$

$$\operatorname{div} \vec{B} = 0$$

$$\operatorname{rot} \frac{\vec{D}}{\varepsilon} = -\frac{\partial \vec{B}}{\partial t}$$

$$\operatorname{rot} \frac{\vec{B}}{\mu} = \frac{\partial \vec{D}}{\partial t} + \vec{j}$$