

$$\nabla \cdot \mathbf{D} = \rho_f$$

$$\nabla \times \mathbf{H} - \frac{\partial \mathbf{D}}{\partial t} = \mathbf{J}_f - c_\gamma \frac{\alpha}{2\pi} \mathbf{B} \frac{\partial \theta}{\partial t}$$

$$\nabla \cdot \mathbf{B} = 0$$

$$\frac{\partial \mathbf{B}}{\partial t} + \nabla \times \mathbf{E} = 0$$