

$$u \quad \frac{\oint_{\partial S} \mathbf{E} \cdot d\mathbf{s} = -\frac{d}{dt} \iint_S \mathbf{B} \cdot d\mathbf{S}}{\text{Induction law}} \quad \mathbf{B}$$

Material property

$$\mathbf{B} = \mu_0 \mu_r \mathbf{H}$$

$$\dot{i} \quad \frac{\text{Ampere's law (simple version)}}{\oint_{\partial S} \mathbf{H} \cdot d\mathbf{s} = i} \quad \mathbf{H}$$