

Faraday's Law

Faraday's Law:

$$emf = \oint \vec{E} \cdot d\vec{\ell} = -\frac{d\Phi_B}{dt}$$

where

$$\Phi_B \equiv \int \vec{B} \cdot d\vec{A}$$

Looks scary but it's not – its amazing and beautiful!



A changing magnetic flux produces an electric field.



Electricity and magnetism are deeply connected.