



Faraday's Law of Induction:

“induced EMF” = rate of change of magnetic flux

$$\varepsilon = -\frac{\Delta\Phi}{\Delta t} = -\frac{\Phi_f - \Phi_i}{t_f - t_i}$$

- The principle that unifies electricity and magnetism
- Key to many things in E&M
 - Generating electricity
 - Microphones, speakers, guitar pickups
 - Amplifiers
 - Computer disks and card readers