

Lenz's Law (EMF Direction)

Induced emf opposes change in flux

$$\varepsilon = -rac{\Delta\Phi}{\Delta t} = -rac{\Phi_{
m f} - \Phi_{
m i}}{t_f - t_i}$$

• If flux increases:

New EMF makes new field opposite to original field

• If flux decreases:

New EMF makes new field in same direction as original field

EMF does NOT oppose B field, or flux! EMF opposes the <u>CHANGE</u> in flux