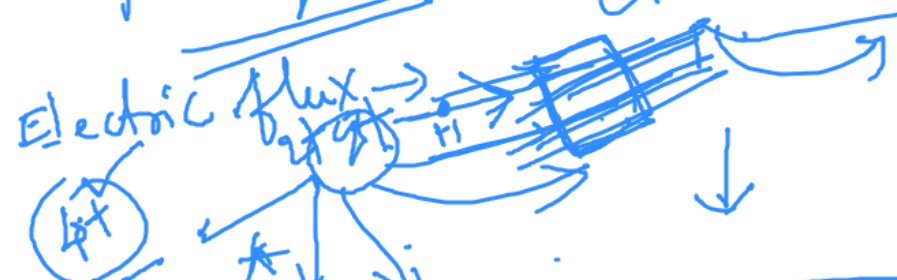


Physics → Electro-Magnetic Induction.



$\Phi_E = \vec{E} \cdot \vec{A}$
 no. of electric lines passing through unit area

① Arcs Compass
 passing through unit area

$\Phi_B = \vec{B} \cdot \vec{A}$
 no. magnetic field lines passing through unit area



e.m.f. = Works
 e.m.f. = Works

induced emf of a coil $\mathcal{E} \propto \frac{d\Phi_B}{dt}$
 $\mathcal{E} = - \frac{d\Phi_B}{dt}$

Faraday



Faraday
 Electric motor
 Dynamo (electric generator)