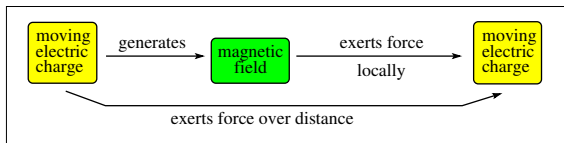


Magnetic Field of a Moving Point Charge



(1) Magnetic field \vec{B} generated by point charge q : $\vec{B} = \frac{\mu_0}{4\pi} \frac{q\vec{v} \times \hat{r}}{r^2}$

(2) Force \vec{F}_1 exerted by field \vec{B} on point charge q_1 : $\vec{F}_1 = q_1\vec{v}_1 \times \vec{B}$

(1+2) There is a time delay between causally related events over distance.

- Permeability constant

$$\mu_0 = 4\pi \times 10^{-7} \text{Tm/A}$$

