The magnetic field generated by a moving charged particle can be written as

\[ \mathbf{B} = \left( \frac{\mu_0}{4\pi} \right) q \frac{\mathbf{v} \times \hat{\mathbf{r}}}{r^2}. \]

But we also know that if another charge \( q' \) is moving in that field at velocity \( \mathbf{v}' \), it experiences a force

\[ \mathbf{F} = q' (\mathbf{v}' \times \mathbf{B}). \]

Therefore if we put the two results together we get a general equation for the force one moving charge exerts on another, through its magnetic field.

\[ \mathbf{F} = \left( \frac{\mu_0}{4\pi} \right) q q' \left[ \frac{\mathbf{v}' \times (\mathbf{v} \times \hat{\mathbf{r}})}{r^2} \right]. \]

This is the magnetic analog of Coulomb’s Law,

\[ \mathbf{F} = k \frac{qq'}{r^2} \hat{\mathbf{r}} = \left( \frac{1}{4\pi\varepsilon_0} \right) \frac{qq'}{r^2} \hat{\mathbf{r}}. \]