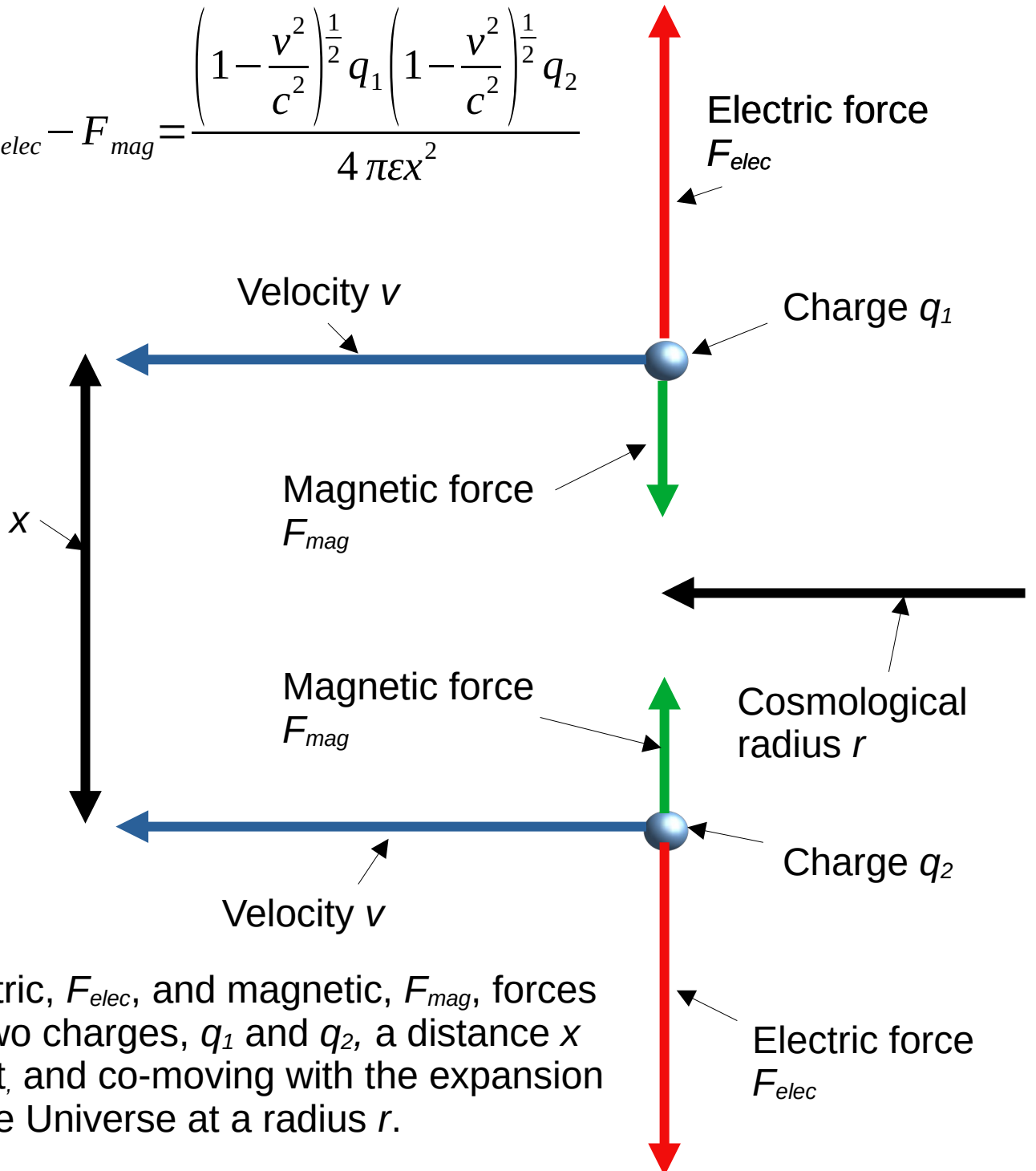


Electric and magnetic forces on two charges co-moving with the expansion of the Universe

$$F_{elec} - F_{mag} = \frac{\left(1 - \frac{v^2}{c^2}\right)^{\frac{1}{2}} q_1 \left(1 - \frac{v^2}{c^2}\right)^{\frac{1}{2}} q_2}{4 \pi \epsilon x^2}$$



Electric, F_{elec} , and magnetic, F_{mag} , forces on two charges, q_1 and q_2 , a distance x apart, and co-moving with the expansion of the Universe at a radius r .

As the velocity, v , approaches the speed of light, c , the resultant force, $F_{elec} - F_{mag}$, tends to zero