$$K \longrightarrow V_K$$

$$R \longrightarrow V_R$$

$$X \xrightarrow{} \underset{V}{}$$

$$E$$

Earth sees object of mass $M = 7.35 \times 10^{22}$ kg, moving at speed $V = 10^4$ m/s.

$$V << c \quad \rightarrow \quad \gamma \approx 1$$

$$E = \gamma mc^2 \approx mc^2 = 6.61 \times 10^{39} \text{ J}$$

$$p = \gamma mv = 7.35 \times 10^{26} \text{ kg·m/s}$$

$$ME = \sqrt{E^2 - p^2 c^2} \approx E = 6.61 \times 10^{39} \text{ J}$$

Romulans are travelling at $V_R >> V$, Klingons at $V_K >> V$. Each will see the object moving at approximately V_R and V_K, respectively. Each should measure a different E and p, but get the same momenergy as Earth observers.

	Romulan	Klingon
E	7.63×10^{39} J	1.52×10^{40} J
p	1.27×10^{31} kg·m/s	3.25×10^{31} kg·m/s
$\sqrt{E^2 - p^2 c^2}$	6.61×10^{39} J	1.17×10^{40} J

Klingon reported ME is not same as that of the Earth... so Klingons are lying!