

Minkowski suggested a better way to write  $K^\mu$  is in terms of the field tensor,  $F^{\mu\nu}$ ,

$$K^\mu = \frac{dp^\mu}{d\tau} = q\eta_\nu F^{\mu\nu}$$

What are the units of the components of the field tensor?

A.  $\frac{N}{m}$

B.  $T$

C.  $\frac{Ns}{Cm}$

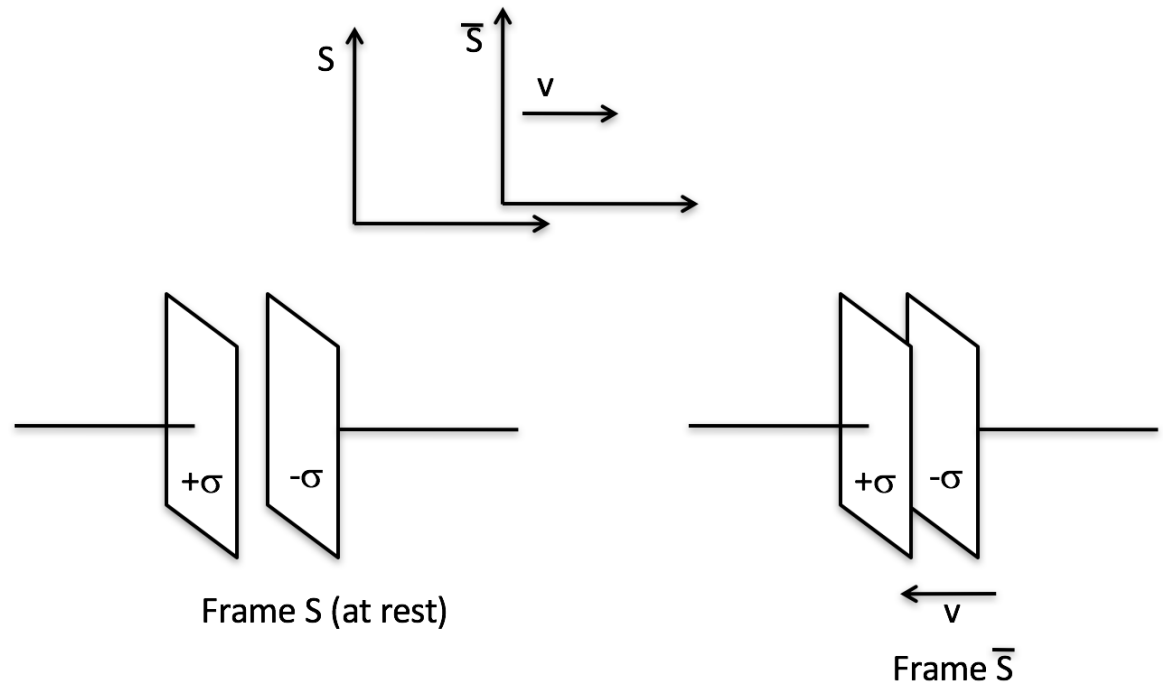
D.  $\frac{V}{m}$

E. None or more than one of these

Switch from frame  $S$   
to frame  $\bar{S}$ :

How does  $E_x$  compare  
to  $\bar{E}_x$ ?

- A.  $\bar{E}_x = E_x$
- B.  $\bar{E}_x > E_x$
- C.  $\bar{E}_x < E_x$



Consider the equation

$$\frac{\partial G^{\mu\nu}}{\partial x^\nu} = 0$$

How many ordinary equations is that really?

- A. 1
- B. 4
- C. 6
- D. 16
- E. ????