

The Galilean transformation between S' and S is:

$$x = x' + vt$$

The Lorentz transformation will introduce a γ , where do you think it goes? And why?

ANNOUNCEMENTS

- Quiz 6 (Due next Monday)
 - Use special relativity to investigate the effects of particle detection
 - Compare two events observed from different frames
- Homework 12 (Due next Monday)
 - Will accept through Wednesday

I'm in frame S , and you are in Frame S' , which moves with speed V in the $+x$ direction.

An object moves in the S' frame in the $+x$ direction with speed v'_x . Do I measure its x component of velocity to be

$$v_x = v'_x?$$

A. Yes

B. No

C. ???

I'm in frame S , and you are in Frame S' , which moves with speed V in the $+x$ direction.

An object moves in the S' frame in the $+y$ direction with speed v'_y . Do I measure its y component of velocity to be

$$v_y = v'_y?$$

A. Yes

B. No

C. ???