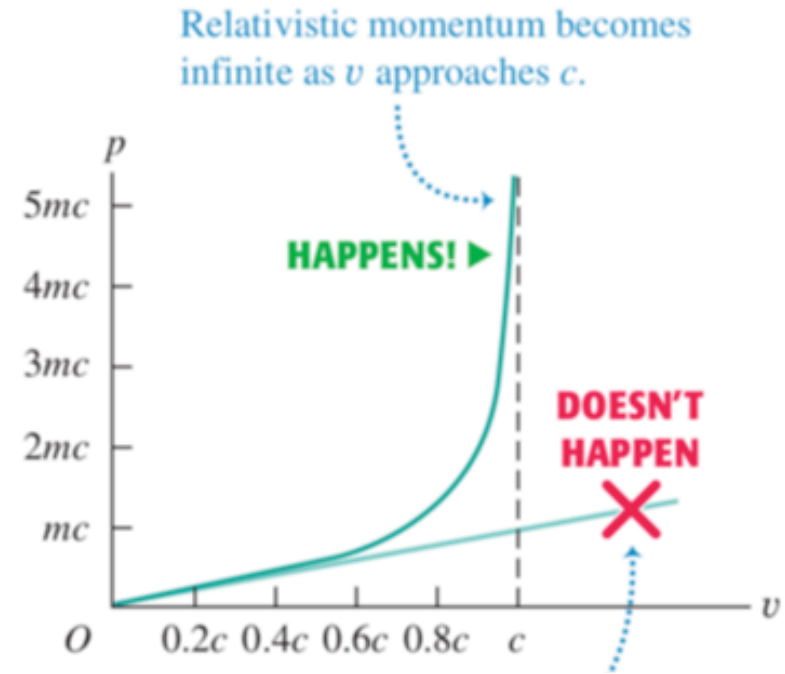


Last lecture

- Velocity transformations:
 - rockets
 - Doppler effect
- Relativistic Momentum
 $p = \gamma(v)mv$ NOT $p = mv$

This lecture

- Homework (pole in a barn)
- Relativistic Force $F = dp/dt$
- Relativistic Energy $E = \int F dx$
- $E = mc^2$



Barn frame: runner $u = 0.9c$

Runner frame, barn $= -0.9c$

