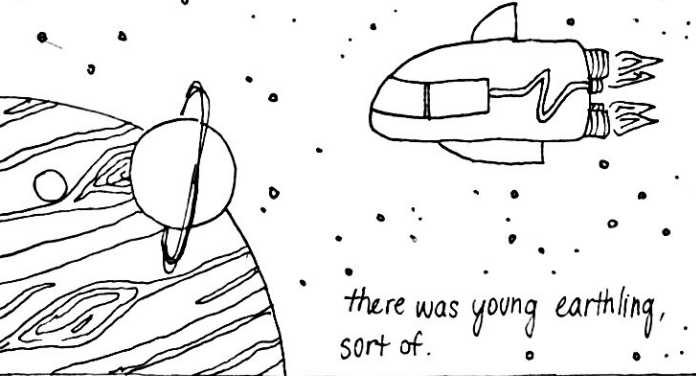


# // RELATIVELY COOL //

KAREN KANEMARU

In the deep depths of space...



there was young earthling, sort of.

Amelia is the universe's first astronaut bunny. After 20 years of traveling the galaxy, it was time for her to go home.

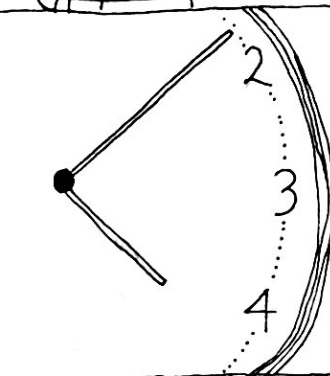


She can't wait to eat all the apples she can fit in her mouth when she comes home.

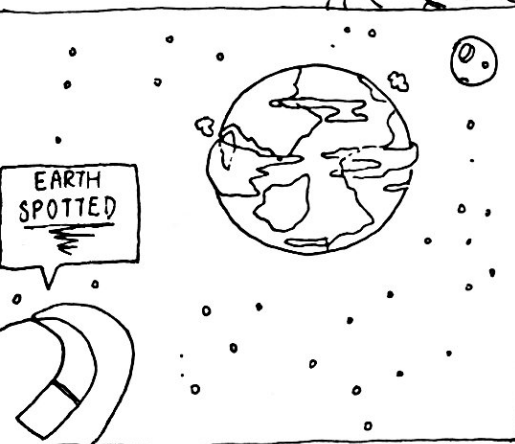
The spaceship is 50 m, so if the ship were to travel at 0.80c, using the formula.

$$l = l_0 \sqrt{1 - \frac{v^2}{c^2}}$$

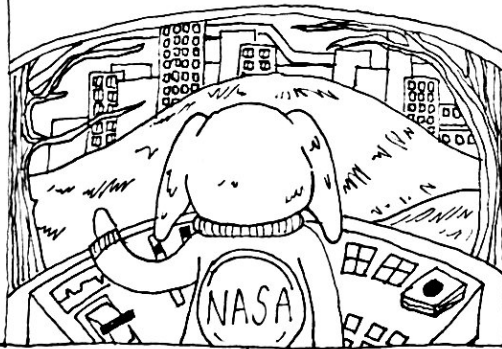
The ship would look like it were 30 m



As we travel closer towards the speed of light, time will slow down for Amelia, but not for any of us.

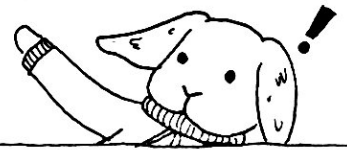


It looked a little different...



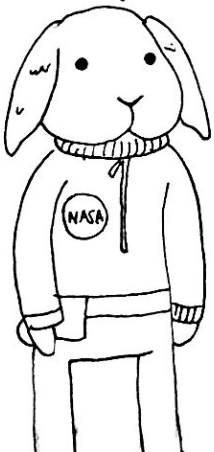
Amelia calculated the time dilation, and she realized that although she was traveling for 20 yrs, that was actually more than 33 yrs on Earth.

$$\frac{t_0}{\sqrt{1 - \frac{v^2}{c^2}}} = \frac{20}{\sqrt{1 - \frac{(0.80c)^2}{c^2}}} = 33.3 \text{ yrs.}$$



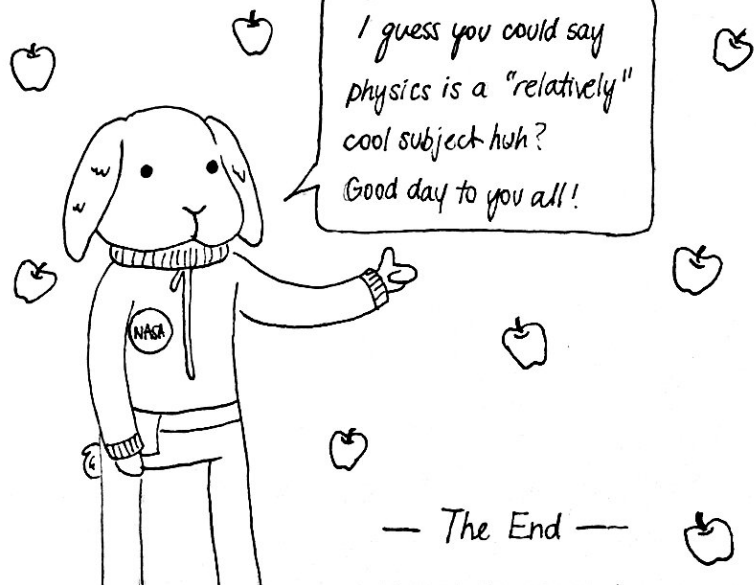
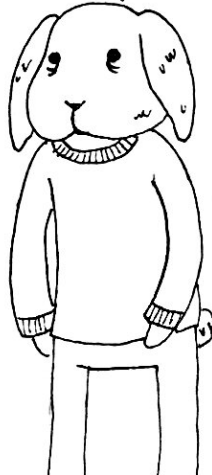
If Amelia had a twin.

38 yrs.



Now there's a 13 yr diff.

51 yrs.



I guess you could say physics is a "relatively" cool subject huh? Good day to you all!

— The End —