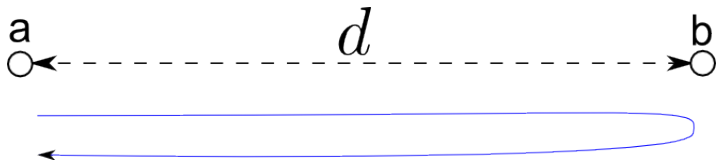
Uncle Kent's two way trip paradox



Suppose you take a two way trip between points "a" and "b". You cannot travel the first leg at a constant speed and then adjust your speed for the second leg such that the round trip average speed is twice that of the first legs'. Or stated otherwise

$$v_{avg} = 2v_1 = 2\frac{d}{t_1} \neq \frac{d_1+d_2}{t_1+t_2} = \frac{2d}{t_1+t_2}$$

Simplifying we get

$$\frac{d}{t_1} = \frac{d}{t_1+t_2}$$

only if t_2 is zero

Meaning, you would have to return to point "a" at an infinite speed