

On the impossibility of high-speed interstellar travel

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Abstract

The impossibility of high-speed interstellar travel is considered.

1 Introduction

The relaying and reflection of the externally-generated exchange particles causes the process formed by internally-generated exchange particles to reduce in frequency. And when I say frequency, I mean how often it happens over some macroscopic amount of time, not necessarily how fast it cycles. The biggest difference between this and contemporary views is that in my view, the overcome process is forgotten. If you put an atomic clock in a deep gravity well, and then remove it to some large distance away from the event horizon, the clock will no longer be functioning properly. The pattern formed by the internal process is not only reduced in frequency, it's all but forgotten. This is the theory of forgotten processes, where all external interaction results in internal time dilation.

Have you seen the Dilbert comic where the random number generator gets "stuck" on 9, 9, 9, 9 ... ? Imagine the process only occurs at random intervals, some longer than others, not necessarily cyclically. The cycle rate is an upper bound on how often it happens.

If quantized and random and potentially irregular as such, then the timing of the internal process would go out of whack, and so the internal process is forgotten, not maintained.

For instance, where t is the time rate in the gravitational well, and $r > R_S$:

$$\text{real } t = \sqrt{1 - \frac{R_S}{r}}, \quad (1)$$

or where t is the time rate for an accelerated body $v < c$:

$$\text{real } t = \sqrt{1 - \frac{v^2}{c^2}}. \quad (2)$$

Note that t is also the chance that internal process occurs:

$$\text{integer } x = \frac{1}{t}, \quad (3)$$

and

$$\text{integer } y = \text{rand}() \pmod{x}. \quad (4)$$

If $y = 0$, then the internal process occurs by chance, otherwise an external process occurs. Where $t \approx 0$, the chances are extremely slim that internal process occurs. It would be by pure luck that an accelerated, high-speed body would ever go back to the state it was in before it was accelerated. The higher the speed, the lesser the chance.

References

- [1] Misner, Thorne, Wheeler. (1973) "Gravitation"