

# Velocity of Human Dying: does the speed of light limit it?

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## Abstract

The argument that a time-like interval separates any two human death cases. The upper limit on average death velocity is calculated. A death in Mars future colony can falsify the result. Intermediator causally connects the events of death. The possibility to stay alive until the Intermediator arrives and the Intermediator build-up material is possible due to the discovery of Virtual Terms, which example is Dark Matter and Dark Energy: latter proofs are submitted to Science, but here is their abstract:

We know, that there are many Baryonic (ordinary) matter **T**: stars, planets, etc. It satisfies the Einstein Equations in the presence of Dark Matter. Just describe the Dark Matter by the certain, but to be determined yet, energy-momentum tensor  $\mathbf{DM}(t, x, y, z)$ , where the coordinates are on the map of Universe. The Dark Matter can violate energy conditions because nobody will record violation: Dark Matter does not directly interact with Baryonic Matter. We must start hard work to determine the ten unknown functions in  $DM^{\nu\mu}$ . Just invent for any particular problem a suitable Dark Matter tensor: we need to match theories with Nature.

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## Material of Intermediator is Virtual Matter

Instead of inventing Dark Matter energy-momentum tensor  $\mathbf{DM}$  we can invent the metric tensor  $\mathbf{g}$  and easily calculate from it the Einstein Tensor  $\mathbf{G}$ . This way the  $8\pi \mathbf{DM} = \mathbf{G} - 8\pi \mathbf{T}$ . The  $\mathbf{DM}$  has zero covariant divergence  $DM_{;\mu}^{\nu\mu} = 0$ , thus, it is special case of the Virtual Matter  $\mathbf{VM}$ , which can have energy-momentum tensor with:  $VM_{;\mu}^{\nu\mu} \neq 0$ . It is just the matter-type mathematical modification of Einstein Equations; therefore, Virtual Matter can act on Baryonic Matter; however, itself remains not directly observable: film “Ghost” starring Patrick Swayze, Demi Moore, Whoopi Goldberg, Tony Goldwyn, and Rick Aviles. Virtual Matter is a special case of Virtual Terms  $\mathbf{VT}$ , latter are the mathematical modifications of equations, not only of the form  $\mathbf{G} + \mathbf{VT} = 8\pi \mathbf{T}$ . There is only one demand for Virtual Terms: they must not cause paradoxes in Nature. Dark Energy then is a special form of Dark Matter.

## On rapidness of death cases

The average velocity upper limit one finds simply by

$$\bar{v} \leq \frac{D}{\Delta t},$$

where the average time between death cases one finds from Population Counter [1]

$$\Delta t = \frac{(31 + 28 + 31 + 23) * 24 * 60 * 60 + 17 * 60 * 60}{18390198} \approx 0.534 \text{ sec}.$$

and the maximum distance is the diameter of Earth

$$D = 12750000 \text{ m}.$$

Then

$$\bar{v} \leq 0.08 c \ll c.$$

Thus, it is evidence, that the death cases are causally connected by Intermediator. [2]

## Conclusion

If the humankind will spread over the Universe, it is truly will become immortal. Go, humans, go! Boldly go there nobody has gone before!

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[1] <http://www.worldometers.info/world-population/>

[2] And if I drive out demons by Beelzebul, by whom do your people drive them out? Matthew 12:27, During those days people will seek death but will not find it; they will long to die, but death will elude them. Revelation 9:6.