Hard theoretical evidence for the dark energy force formula in a double torus universe.

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Abstract.

This paper shows how a 'dark energy force formula' emerges five more space- and two more time-dimensions in nature. The 'formula' is earlier described in vixra-papers, announcing the universe is a double torus of dark energy and dark matter. The 'formula' is a completely different force than the cosmological constant of Einstein used to explain accelerated expansion in the big bang. With this in mind, two independent experimental investigations has given additional proof, that the 'dark energy force formula' correlates the independent investigations, because: 1) Five extra space-dimensions have to exist, according to how electrons behave in graphene-experiments. 2) Computer-simulation shows a double torus geometry, that emerges from two colliding blackholes involving a third torus during pulsation. These results match with the postulate that the universe exists of a double torus of dark energy and dark matter, including a 'dark energy force formula'.

Dark energy force formula.

The discovery of my 'dark energy force formula' is theoretically made by me, Dan Visser, and mathematically supported by the British Christopher Forbes, PhD mathematics and physics, (and a friend-colleague) in the course of 2009, after I had published it in my website on April 4 2004. This is discussed in the first three 'papers' hosted in the vixra-archive[5,6,7]. I had derived the 'formula' from my 'thought experiment', also hosted in the vixra-archive[8]. It was about two black holes (large and small), which were 'scaled-away', such that their evaporation-radiation simultaneously could arrive in equal amounts at an observer. This was written in simple language of mathematics. The result was my 'dark energy force formula'. The British's succeeded in fiting this 'formula' into a general equation.

My original 'dark energy force formula' is:

$$F_{de} = -\frac{c^5 O_e}{2G} m^3 \left[(kgm)^3 \frac{N}{s} \right]$$

(1)

Where $O_e = (Lplanck)^2$, c is the speed of light and G is the gravitational constant of Newton. For (m) must be substituted a mass, which consists of both dark- and visible mass. The result provides a dark energy force F_{de}. Cristopher Forbes mathematically revealed the 'dark energy force formula' has also a "+" strength in the general equation.

However, I made equation (1) dimensionally independent of the value G. This

enables it dimensionally to act in the 'dark energy field of the double torus universe', which exists of a dark energy torus enclosing and intertwining a dark matter torus.

Starting with equation (1):

$$F_{de} = \frac{c^5 O_e}{2G} m^3 \left[(kgm)^3 \frac{N}{s} \right]$$

follows:

$$F_{de} = \frac{c^5 O_e}{2} m^3 \left[\langle G^{-1} kg^3 \rangle m^3 \frac{N}{s} \right] \tag{2}$$

Substituting G's dimensions in the F_{de} dimension, gives:

$$G[Nm^2 kg^{-2}] \rightarrow \left[\langle G^{-1} kg \rangle \right] = \left[\frac{m^3}{s^2} \right] \Rightarrow \left[kg^3 = \frac{m^5}{s^2} N \right] \tag{3}$$

From this follows:

$$F_{de} = \frac{c^5 O_e}{2} m^3 \left[\frac{m^8}{s^3} N^2 \right] \tag{4}$$

This shows that 'dark energy force' has five extra space dimensions (meters to the exponent 8) per three-dimensional time (seconds to the exponent 3). This is the ultimate (theoretical) evidence for dark energy to be *three dimensional time !*

 Furthermore the Newton Force [N] shows two functions: a "+" and "-" strength; therefore it is quadratically presented.

 The "+" widens the inner dark matter torus. The "-" will shrink the dark matter torus, thereby increasing gravity arises. The "+" process is in analogy with the expansion of the big bang, because a widening dark matter torus suggests expansion seen from within the dark matter torus. The "+"and "-" act on sub quantum-scale, which results in an effect on quantum-scale, which in turn results in an effect on classical-scale. Appearently the "+" results in an accelerated expansion on macro-scale, because it is dominant over the "-" strength. This must be due to how processes are taking place at subquantumlevel. This is a completely new way of thinking, leading to a double torus imagination for the universe.

 Originally in my 'thought-experiment' I had recognized the concept of just 'scaling away' two black holes. This caused only a "- " sign in my 'dark energy force formula'. The 'scaling towards-each-other' could also have delivered a "+" strength. I didn't notice this at that time. This came forth from the general equation of Christopher Forbes and colleague, which 'paper' I also co-authored.

Independent case study provides hard evidence for a 'dark energy force formula'.

In the quest to discover smaller and faster transistors, studies are conducted, showing that the structure of spacetime could have a "honeycomb geometry"[1,2] . This is an inference from investigations to use "graphene" for transistor-structures. Such a 'graphene grid' could be imagined as 'triangle-piles'. This means that the electrons, described as point particles in the Standard Model of Particle and Forces, with angular momentum, called 'quantumspin' acting 'up' and 'down ', just act like that, because space is segmented. Actually electrons have no surface (because a point has no surface). The investigation suggests the electrons move from one to the another 'triangle-pile', enabling them to change 'spin'. The "triangular grid", however, seems to fit in a "honeycomb-structure of spacetime", as a 'six-angle', like chess-board (see fig 1).

What I want to express in this 'paper' is, that, according to the graphene-investigation described in reference [1], two electrons could be imagined as being located at the end of each 'segment-line'. As the electrons are point particles in 3D spacetime, the 'segment-line' also has to be considered as 3D-spacetime. However, if five segment-lines has to be added to imaging spacetime, than 5 extra space-dimensions have to be added, and that is what precisely is the result of the dimensions of the 'dark energy force formula' (equation 4).
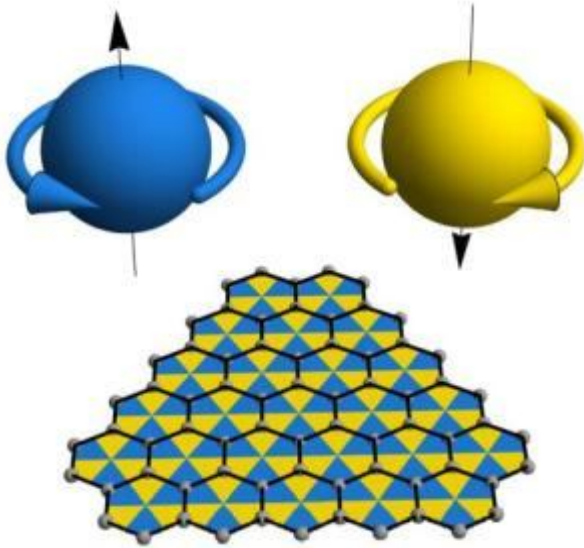

Fig. 1: Electrons are thought to spin, even though they are pure point particles with no surface that can possibly rotate. Recent work on graphene shows that the electron's spin might arise because space at very small distances in not smooth, but rather segmented like a chessboard (see also source reference [1]*).

Compared with the dimensions, expressed in equation (4),

$$F_{de}\left[\frac{m^8}{s^3}N^2\right]$$

it is noteworthy, that not only the extra five space dimensions occur in the 'dark energy force formula' (meters to the exponent 8, five more, correlating the graphene segmented space suggestion), but also two extra time-dimensions, two more than the one time-arrow in big bang cosmology. This delivers hard evidence for a double torus universe with its 'dark energy force formula'.

In the next chapter a second hard evidence for a double torus geometry is noticed by me.

Two computer simulated colliding black holes provide hard evidence for a double torus universe.

The investigation indicated in references[3,4] shows a computer-simulated pulsation of two black holes after an artificial collision. This is illustrated with 'tendexes "and" vortexes". Tendexes are cooperating expanding tidal forces and vortexes are curved spacelines whirling around eachother.
It turns out to be a double 'donut' !!
Moreover, it is amazing that the 'vortexes' in the 'heart' of the image eject a third torus in the next pulsation, because Christopher Forbes, who is supposed to be active to write the higher mathematics of the double torus universe, has introduced a third torus, purely to describe the mathematical physics of the double torus universe.
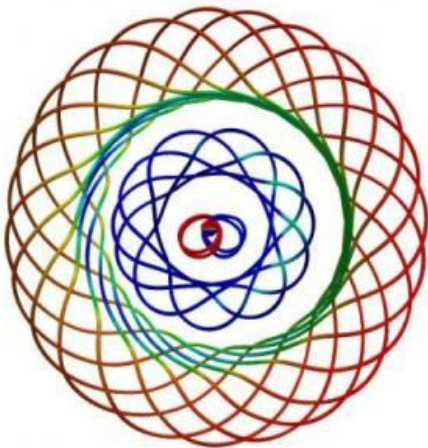

Fig. 2: Two doughnut-shaped vortexes ejected by a pulsating black hole. Also shown at the center are two red and two blue vortex lines attached to the hole, which will be ejected as a third doughnut-shaped vortex in the next pulsation (source-references [3,4]*).
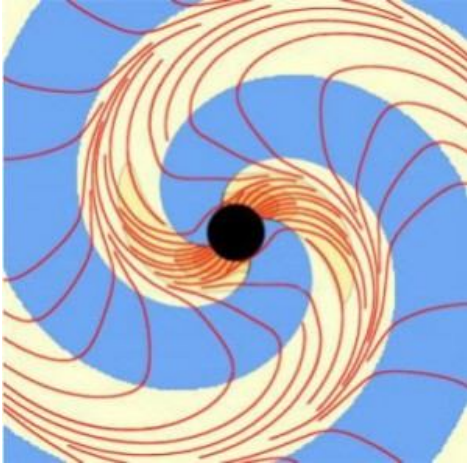
Fig.2: Two spiral-shaped vortexes (yellow) of whirling space sticking out of a black hole, and the vortex lines (red curves) that form the vortexes ([source-reference [3,4]*).

* The origin of the images are from C. *Regan/CNSI and The Caltech/Cornell SXS Collaboration)*

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