Title –

# Dark Matter Related To Warps, The Unified Field, Quantum Spin And Dark Energy

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Abstract –
The unspoken background for this article is a hypothesis for origins (of life, the universe and everything). That hypothesis believes human science is responsible for everything, and neither supernatural nor evolutionary means originate anything. In a biological sense, the Theory of Evolution certainly explains adaptations and modifications. But believing it also explains origins is unwarranted extrapolation. It takes an idea that accounts for some parts of life and, since it's the only scientific explanation we currently have, assumes it accounts for all parts of life.

Albert Einstein showed space-time is warped, so it's possible our own computer science (and terraforming, and biotechnology from many centuries in the future) found its way into the past. Dr Graham Phillips said "(The physicist) Paul Davies thinks the universe is indeed fine-tuned for minds like ours. And who fine-tuned it? Not God, but minds from the future, perhaps even our distant descendants, that have reached back through time … and selected the very laws of physics that allow for the existence of minds in the first place." [0]

To discover what the unknown is, we must relate it to the known. In this comment, a possible answer to what dark matter is will be proposed by relating it to General Relativity's curvature of space-time. A Mobius strip is given a twist of 180 degrees before its ends are joined. Assuming space-time is modelled on the Mobius strip is one way to explain why space-time is curved. Such a model is plausible if string theory is invoked.

Content –
String theory says everything's composed of tiny, one-dimensional strings that vibrate as clockwise, standing, and counterclockwise currents. [1] We can visualize tiny, one dimensional binary digits of 1

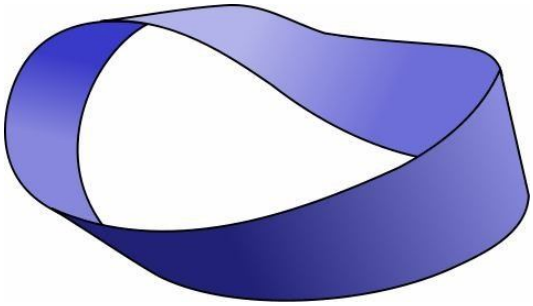
and 0 (base 2 mathematics) forming currents in a two-dimensional program called a Mobius loop – or in 2 Mobius loops, clockwise currents in one loop combining with counterclockwise currents in the other to form a standing current.

Joining two Mobius strips (or Mobius bands) forms a four-dimensional Klein bottle [2]. And each Klein bottle can become an observable (or "sub") universe (figure-8 Klein bottles appear to have the most suitable shape to form subuniverses). This connection of the 2 Mobius strips can be made with the infinitely-long irrational and transcendental numbers. Such an infinite connection translates^ into an infinite number of figure-8 Klein bottles which are, in fact, "subuniverses". Gaps in, or irregularities between, subuniverses shaped like figure-8 Klein bottles are "filled in" by binary digits in the same way that computer drawings can extrapolate a small patch of blue sky to make a sky that's blue from horizon to horizon. This makes space-time relatively smooth and continuous. The infinite numbers make the cosmos as a whole* physically infinite, the union of space and time makes it eternal, and it's in a static or steady state because it's already infinite.

* (i.e. the cosmos beyond our 13.8-billion-year-old subuniverse, which is expanding and displacing parts of the universe beyond)

^ The translation could be via photons and gravitons being ultimately composed of the binary digits of 1 and 0 encoding pi, e, √2 etc.; and matter particles [and even bosons like the Higgs, W and Z particles] being given mass by photons/gravitons interacting in matter particles' "wave packets".

**Mobius Loop**



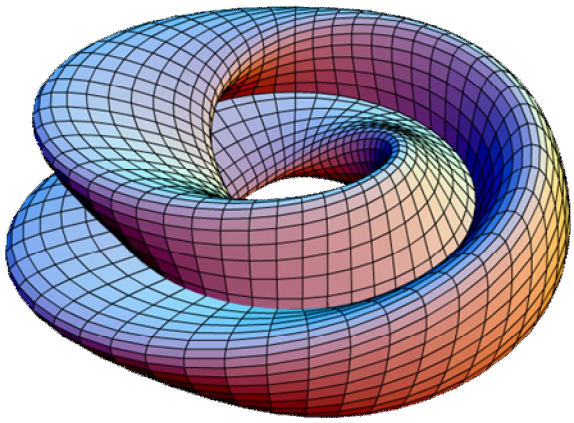


**Figure-8 Klein Bottle**

## MATTER WARPS AND EINSTEIN'S UNIFIED FIELD

Einstein said gravitation is the warping of space-time and that it plays a role in constitution of elementary particles. He also believed electromagnetism and gravitation are related [3]. So it's possible gravitons of gravitational waves and photons of electromagnetic waves could produce matter. It's also plausible that matter is composed of space-time ^. If space-time is curved as a result of being modeled on the Mobius strip, particles of matter and antimatter would also be twisted up to 180 degrees. This gives them a non-rotating "quantum spin" which does not have unlimited values (as visualizing the continuous curvature of a Mobius strip might imply) but is restricted to certain values by the more fundamental operation – that of the 1's and 0's. (Remember that electronic 1's and 0's need not only represent "on" and "off" – they can also represent "increase" and "decrease" of parameters; resulting in spins of 0, 1/2, 1, 3/2, 2, etc.) There would be the ordinary matter we see and touch, which could be labeled positive. At the extremity of 180 degrees; there would also exist an inverted, negative form of that matter. This would be as invisible to us as the curving of space, and only detectable through its gravitational effects. It would be referred to as Dark Matter existing in what can only be called a $5^{th}$-dimensional hyperspace.

^ The suggestion of matter being composed of space-time answers a 50-year-old objection to Einstein's Unified Field Theory which was put

forth by England's Professor Penrose [4]. His objection was that the gravitational fields, if known everywhere but only for a limited time, do not contain enough information about their electromagnetism to allow the future to be determined, so Einstein's unified theory fails. If time is unified with the gravitational and electromagnetic fields which this comment proposes to be the creators of matter, the gravitational fields are not known for only a limited time but do contain enough information. And Einstein succeeded, just as John Wheeler and Charles Misner claimed [5].

## c^2 AND THE ATOM

The separation between matter and dark matter (caused by curvature within particles) is undoubtedly 1.75 arcseconds, General Relativity's prediction of the deflection of a light ray passing near the rim of the Sun (caused by the curvature of space-time). How does this angular distance or separation arise?

When Einstein penned E=mc^2, he used c (c^2) to convert between energy units and mass units. The conversion number is 90,000,000,000 (light's velocity of 300,000 km/s x 300,000 km/s) which approx. equals 10^11. Gravity (and gravitation) can produce electromagnetic force, though there are other methods. An example of another method: X-rays can be emitted by matter swirling around a black hole when the atoms jostle and compress, and are heated to millions of degrees. Gravity waves with a strength of 10^1 are, via gravitational lensing, concentrated 10^24 times after they're focused to form matter (to 10^25, weak nuclear force's strength* - giving the illusion that a weak nuclear force that is not the product of gravitation exists). (If binary digits form space-time and gravitation, and all particles are composed of those digits, the sequence of 1's and 0's composing gravitons can become the sequence making up the W+, W- and $Z^0$ particles of the weak force; the gluons of the nuclear strong force; or of electromagnetism's photons.) Waves are magnified by the matter's density to achieve electromagnetism's strength (10^36 times gravity's strength) i.e. 10^25 is multiplied by Einstein's conversion factor [10^11] and gives 10^36 (this gives the illusion of the existence of electric and magnetic fields that are not a product of gravitation). After absorption by atoms, the depleted remnant of the

gravity waves is re-radiated from stars, interstellar gas and dust, etc. as electromagnetic waves - possibly a microwave background - and as gravitational waves which have lost most of their energy or strength during formation of forces (returning to a strength of 10^1.)

* Remember, this is only one example: the so-called weak force's "strength isn't constant" and varies with distances [6].

If a star only received the input of gravitational waves from deep space entering it, there would be no limit to its potential growth. Since it also radiates mass-forming gravitational waves, there is a limit to the growth. 99% of the solar system's mass / gravity / gravitational waves are associated with our star, so the gravitational push on Earth from its sphere may be slightly greater than the push resulting from the waves originating in deep space. In the end, our planet's orbit would be growing slowly larger. According to [7]; the distance between Sun and Earth is growing by approx. 15 centimetres per century. The two authors attribute this increase of the Astronomical Unit (AU) to dark energy which is, as noted in the final paragraph, a term that may be used to describe the repelling force of gravity.

Particles of matter in space-time radiate gravitational waves. Since the article states that gravitational waves form* particles, the waves radiated from matter (as opposed to the waves which originally came from deep space to create the matter) form other particles. These other particles form a duplicate (Mobius-style inversion) of the matter – and matter has a 1.75 arcsecond separation from dark matter.

* The Law of Conservation of Mass-Energy says neither matter nor energy can ever be created or destroyed. The universe would not be unified to near-uniform temperature and curvature by the whole cosmos having once been small enough for everything to be in contact, then undergoing extremely rapid expansion from a big bang during a period called inflation. It would be quantum entangled (unified) by everything having the same origin of binary digits. Binary digits unite to display many separate pixels as one image on a computer screen. Similarly, they unite everything in space-time so the whole universe and all time is a unified field - or one "image". "New" space-time isn't really formed but is simply the arrangement of binary digits into what we call the universe ^.

^ This entire universe will, being a computer simulation, be filled with advanced artificial intelligence (AI) – and separation or distance in its unification is not actual but only a seemingly real device^^ necessary for civilization to reach its present development (future development requires letting go of the past and embracing of the unified field). Erwin Schrodinger (1887-1961), the Austrian theoretical physicist who achieved fame for his contributions to quantum mechanics and received the Nobel prize in 1933, had a lifelong interest in the Vedanta philosophy of Hinduism and this influenced Schrodinger's speculations about the possibility of individual consciousness being only a manifestation of a unitary consciousness pervading the universe [8].

^^ After his friend's death (the friend was engineer Michele Angelo Besso), A. Einstein wrote to the sister and son: 'Michel has preceded me a little in leaving this strange world. This is not important. For us, who are convinced physicists, the distinction between past, present, and future is only an illusion, however persistent' [9]

**TIME TRAVEL TO DARK ENERGY**

Referring to the next paragraph, travel in a unified field must be possible in all directions. Just as it's possible to go forwards or backwards in space, taking trips into both the future and past has to be permitted. And time travel doesn't simply apply to human-sized intelligences. It applies to any form of violation of cause and effect. This can be totally beyond our comprehension and occur on astronomical scales.

So hyperspace's dark matter is part of space-time's ordinary matter and Nima Arkani-Hamed would be correct when he said, " … 'dark matter' might be just ordinary matter …" [10] (he's saying there could be equal quantities of the two). Dark matter's properties of invisibility and retention of gravitational influences are simulated by phenomena such as time travel. During this, matter is invisible and the amount of it seems to decrease. Gravity effects remain, and are necessarily attributed to increase of dark matter. At a certain point (the present), there'd appear to be approx. 5 times more dark matter.

A supernova blows off gaseous material before exploding - forming a slower moving, cooler shell [11]. Travelling at light speed, gravitational and electromagnetic radiation (consisting of binary digits) from the blast slams into that material. The lower temperature allows the gravitons' energy to interact with the photons', producing mass in the form of dust i.e. dust particles condense in the shell. Waves from deep space produce graviton-photon interaction, forming collapsing clouds from which stars form. If there's no interaction as a result of higher temperatures, no matter is created and there is no cloud of gas and dust. A black hole – formed of gravitational waves and their precursors, binary digits - could result.

Gravitational waves radiating from a supernova to its shell would push against the shell and be repulsive. Similarly, waves originating from warps far out in space and condensing into interstellar clouds would be repelling waves that conceivably account for universal expansion (the 1's and 0's forming the waves would be candidates for explaining dark energy).

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