



## Gravity and the Big Bang

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### Abstract

The current definition of Gravity and the underlying properties are challenged within. Contents of this paper include interpretation of terms such as redefining gravity, formula for calculating extents and forces and also references anti-gravity and anti-matter. The paper then goes on to interpret other Gravity concerning astro-physic events such as Dark Matter, Black Holes and The Big Bang Theory. All work has been researched privately, however it should be noted that the hypotheses are simply subject to current interpretation of Einstein's and Newton's Laws of Physics. Any clear misunderstanding may be challenging to these Laws or simply made in error. Any query should be directed to me via my e-mail above.

**Keywords:** Gravity; Black Holes; Big Bang

### Introduction

Hypothesis Currently, the interpretation of gravity as a field and subsequently as energy forming is incorrect. Using scientific principles, it can be defined as a force and as such laden with potential energy. 1.1 From Archimedes to Space Such as a ball placed in water will make the water rise, so should a ball in space be seen as a displacing factor of density. Albeit difficult at first to imagine, the displacement of the vacuum energy will cause an inverted 'compression' force we know as gravity. Thus, referencing gravity in terms of field and spacetime seems incompatible with modern physics and mathematics. 1 By taking the subject to the reaches of space, I would suppose that the universe in terms of vacuum space is shaped like the inside of a ball, i.e. globular [1].

The sole perimeter of such be an incredible crushing force vacant of matter but impeded by the energy of the vacuum. Although, some may argue that this cannot be proven unless the outer edge is detected, there are perhaps experiments or computer models which can verify the nature of my definition. Imagine if vacuum were to be injected into the core of the earth [2,3]. The earth's mass and volume could feasibly remain the same, however, the extent of the force of gravity would surely alter? Time and Space Accepting this view, we now would start to see time and space differently in terms of how gravity works. My theory is that  $\text{Time} = 1/\text{Space}$  This will be accurate for any measurement of volume in linear terms (i.e. not litres). This is because space and time seen together are linear. Or in terms of a value is  $10 \text{ m}^3 = 1/10 \text{ volume time}$ . A simple test whereby this formula could be used may be to see how quickly a cube of  $10 \text{ m}^3$  can be filled by pouring at a set rate, i.e.  $x$  litres per second. You could suppose that the same test carried out at gravity ( $g$ ) would be faster and the

difference be the same difference again. There would be no multiplication factor for the rate increasing as gravity increased, it would simply accumulate a faster speed cumulatively based on the above principle. 3. Force of Gravity It should rightfully be asserted that gravity is a force with its own potential energy, specifically a compression force derived from the displacement of a vacuum by an unburdened mass. The extent of gravity corroborates with the volume of mass and  $1/\text{volume time}$ . The 2 force of gravity therefore is in direct relation to its mass only. Gravity would always be spherical in shape as this is the easiest space to evenly occupy. Thereby, mountain ranges and valleys on the earth's surface, have no bearing on the limits of earth's gravity. Note that I can only foresee using the term 'volume time' as other types of time exist separately. Also, But in terms of values, an example might be:-  $1000 \text{ m}^3$  as an objects volume would mean;  $1/1000 \text{ volume time} = \text{Extent of Gravity in metres}$  Also,  $\text{Mass/Volume ratio (Density)} (x) = \text{Force of Gravity at Core Units}$  for measuring both Extent of Gravity in metres and Force of Gravity at Core will need to be determined by professional minds. It would be easy to create a baseline figure by using the above formulas in relation to the Earth's values [3].

### Anti-Matter and Anti-Gravity

I currently hypothesise further that the above two terms refer to the same force. On Earth, there is a field of anti-gravity literally opposing actual gravity which is being sent in the opposite direction away from the core. A simple example would be the fact that objects bounce when hitting the earth from any given height, albeit, in a fairly 'weak' way. I find no other explanation of this bounce effect acceptable. However, I am investigating whether Physics Laws may suggest the force known as Anti-matter is actually derived from the vacant rebound force of an object halting it's velocity from past the point of light speed. In a way, a bounce effect would be expected, apart from the fact at such velocity, any mass would have left the position where the bounce would occur [4]. What happens to light when intercepted in spacetime is also something worth relating this value known as Anti-Matter to In short, the effect of an unimpeded compression force on a singular point in space (within the mass) creates the loose form of potential energy known as either of the above. However, this time the volume and mass are in direct relation as a combined figure to derive a value for extent and potential energy. This is itself a field and is characterised 3 by its potency of energy. i.e.  $\text{mass in vacuum} \times \text{volume} = \text{Anti-Grav volume} \times \text{Anti-Grav energy}$ . Therefore the mass can be directly compared to the amount of Anti-Grav energy it produces. In real terms, my theory is that a field of anti-grav breaking the surface of the volume of mass would induce an easier 'lift' from the surface, but an object doing so would intercept the force of gravity making its way to the core and be pulled down and as such terminating the 'use' of anti-grav force. It is generally accepted that it is easier to jump from the earth's surface and that the subsequent landing is harder than expected in comparison. Also, one would expect the moon's gravity to be fairly substantial. The lack of it can be explained by the above hypothesis whereby the anti-grav effect from the moon's core just about breaches the moon's surface [5]. Close observations of planetary bodies should be made to determine how much anti-grav force is breaching the surface (if any) to allow for 'lift' calculations. Once an object is in contact with the surface or within the volume, the effect of the anti-grav force is nullified for that object as the original gravity force is overtaking it with no recoil. I confidently

state that either force can be blocked and energy collected, simply by being in the way of the force, i.e. standing anywhere on earth blocks gravity from continuing to the core and also the anti-grav from rising past you to it's apex. The same effect should still occur away from the surface, however, the object will immediately be subject to gravity, such as satellites in orbit. This would explain why their orbits are eventually lost and are returned to earth rather than flowing around the current 'field' model.

## Dark Matter

Any use of Anti-Grav force either on the surface or within the mass itself, i.e. water bearing through porous rock in the same trajectory or crystals forming from liquid (upwards from core) or a person jumping on the surface or within open space inside the volume will be a vector for producing dark matter as a reaction to the anti-grav force. Jumping on the surface would see the dark matter try to fill the void between the person jumping and the surface between them, perhaps in the same way a gas would fill a vacuum. Crystals would clearly use this energy for layering molecules and porous rock in caves tend to produce an organic material like slime, referred to as slime mould by geologists. I therefore theorise that there are 3 types of Dark Matter derived from the earth itself, one having a solidifying effect incorporating surrounding materials (slime mould), one a layering effect (in crystals) and one a gaseous effect with no mass or form, which can presumably travel back into the earth or away from it with no interference. With no current example of any use for this matter apart from rock/water (slime mould) and crystals, it should be a function of today's scientific exploration to determine more useful abilities for it. The obvious 3-D printing effect may be useful in the production of prosthetic limbs and even robot limbs utilising the quantum mechanic property crystals could be made to hold and bear command to, from quantum computers or algorithm providing sources. Slime could even act as a skin for cushioning and protection from weathering or possibly muscle to power and locomate crystal core frankenstein limbs. On simple observation of the world around us, you may determine 'phenomenon' like 'sleep' matter, which are crystals formed around the eyes during sleep and other such eye grit could be the result of this process occurring during periods of stillness as dark energy gains. It would be important to note this could only be proven if the matter grows upwards. Similar crystal like matter is sometimes found to appear around eustatian tubes and back molars when people report an unexpected crunch they fear is their teeth grinding apart [6,7].

## Black Holes

I am aware current thinking is abound with different theories about what goes on in and around black holes, however, I would like to hypothesise the following. Just as other collapsed stars have extremely dense mass cores, black holes are extremely similar. Indeed the only thing that separates them from other collapsed stars is the threshold for which they are able to acquire such a dense force of gravity. The volume to mass ratio or density can be said to be so great that light travelling within a certain distance from the core is accelerated. As previously hypothesised above, the distance the force is effective from the core can also be determined, but is weakened on a gradual scale from the core to the further limit. Once light is accelerated through any part of the force of gravity the black core is 5 powering, it reaches a velocity greater than the current recordable speed of light in a vacuum. In doing so it enters a new law of Physics which I suggest means it cannot return below the point of light speed as we currently

suggest is the max. In a way, it goes beyond and stays there. It is important to note that the light does not bend or traverse towards the core or 'hole'. Any light in the trappings of black hole gravity carries on the same way in the same direction it always had. The reason we see 'black' is because we cannot detect the light travelling at such a high and 'faster than light speed' velocity. To reiterate, we simply see black. We do not see black space, we simply see the area around the core devoid of light even though light is travelling through there. You may realise that the width of blackness can indeed provide an indication of how far out from the core the gravity is able to accelerate light to past the point of light speed. Using tables that can be put together from other planets or stars gravitational extents, power of force and mass; mass or density of black holes can be configured. As such, there is no magic gateway to another realm or impossible bent timespace field that extends to infinity. In any case, such a point could not exist mathematically. It would be interesting to try and capture evidence of faster than light light, as I would assume no detector exists currently and no lens would be able to capture the wavelength [8-10].

## The Big Bang Theory

To begin with, a crushing force is surrounding a vacuum or empty globular shape. This crushing force is simply acting on an empty space and is building its force with nowhere to go. This empty space is far smaller than we see or can imagine now. It has no physical boundary but can be said to have one theoretical 'side'. At some point now i.e. just before the Big Bang, the formula  $E=mc^2$  is born into physics and space. I would suggest the limit of energy saturation possible to be contained within an empty space is breached. As that happens, energy begins to create mass and a constant time space field at 50/50 rates. This also allows for more energy to be 'pumped' in to the space itself via the reinforced crushing force 'outside'. This further pumping of energy draws from the potential energy of the surrounding crushing force which could be said to be infinite. If we ignore the constant of space/time which are two separate but interlinked fields spreading, for a second, we can look at this in terms of energy and mass. The vacuum is still being fed by the crushing force acting on it. Random mass being produced as elements will form around the centre or area with weakest effect from the crushing force. We can determine today that this started with hydrogen at the fiercest beginning and as the reaction slowed, helium was formed, then oxygen etc. I would summarise this by saying the only hydrogen in existence was created at the very start, as Einsteins  $c^2$  formed, helium took over then other elements all through the periodic table.

This may be why the most complicated elements are in short abundance within the universe and simple ones which came first are more prevalent. Going back to our model, all known elements are currently centering on the area at the middle of our new universe and beginning to form gravity. The occupyable space of the universe is growing as the time and space field has already 'exploded' into the original vacuum or empty room. Hydrogen is being pushed away from the middle by more complex elements being created behind it. As this happens, the other less dense material formed first, i.e. helium, will start to form alongside it, the outer core of this emerging mass. At some point nature is going to want to end this ongoing process, balance and settle as per synchronicity. Factors to be considered balanced in order to halt element production are: The 'saturation' of the remaining vacuum space has now levelled at maximum. The previous breach which caused the big bang to start can be contained by virtue of the emergent mass becoming a governing factor. This emergent

mass will convert the overspent energy which breached the vacuum space into gravity [9]. The force of gravity has compressed enough matter towards the core to halt new element production in parity with other balancing factors. All known energies are currently held by the material at the innermost core as potential energy. So whatever is there is now in possession of all the heat, radiation, electric 7 charge, kinetic energy, etc. The other act of balancing is to stop the time/space field deploying. It will have either already extended to the boundary of the universe or may have extended it. Whichever the case, as soon as it stops we will get the Big Bang. Immediately following the time/space field's final form, all the potential energy held at the core of all the matter will diffuse or transfer to all other elements at the outer core. One effect of this is to separate the elements from the gravitational force of the huge mass by expanding them via heat and via the kinetic energy presumably forced out from the core. Thereby weakening the force of gravity the mass has and allowing for further dissipation of the mass whilst energy transfer is continuing wherever possible via its own heirarchy.

At the same time, chemical reactions will be occurring between elements separated by the initial bang. We will therefore see H<sub>2</sub>O created fairly early on. As these reactions settle; clusters of mass, either differing or composite in nature, will start to grow, create gravity and potentially 'steal' mass from other less powerful clusters nearby or shed less dense matter away. Clusters such as nebula will start to collect less dense gases to form stars. These may well be spending all their potential energy as kinetic energy and will in theory have already travelled the furthest. Clusters of other mass will be catching up whilst tussling for their individual goal to become the most efficient final form planet, i.e. they will not stop 'fighting each other until one has become 'immune' to the others (planets) either by escaping cross-gravitational effects, retaining enough potential energy and dimensional presence to thwart any attempt to pull matter or energy away from it. Such a winning planet could be said to be 'earth', whilst all other known planets will have a subordinate status either in terms of poorer density, lack of composition or less overall potential energy. I therefore suggest that the overall big bang effect was substantially less violent than currently hypothesized [10]. I would think something closer to the way we see energies transferred at extreme levels now would be similar, such as the core of the sun, lightning storms, etc. In any case, no force great enough to destroy an atom was achieved and if so, one atom detonation at the core of all the known matter in the universe would have been a drop in the ocean. Nature will always diffuse energy at the 'calmest' rate (to prevent chaotic effects), such as wavelength energies, resonance and a relatively peaceful appearance would have begot the Big Bang if viewed from a pleasant enough distance. Perhaps nebulas and ongoing planetary galaxies would have formed fairly pedestrian like. A deeper theory I have studied the formation of the mass. Thinking back to the above model, some, even if slight, distance would have to be covered by the emerging mass in order to reach the middle where the inner crush happened. Apart from atoms, subatomic particles are needed to allow for stability of mass within the 3 dimensions of space we know today and for forming molecules, compounds or generally binding chemical reactions and function alongside the further Laws of physics which came along.

If anything, ones which keep  $E=mc^2$  balanced and safe. I suggest these things like Higgs particles, were formed at the same moments in the same 'rush' for the middle of space. Somehow, it was known by nature that these things would be needed later on to propagate further energy transfers under its new Law (now residing in Higgs fields or

similar fields as well). And keep things from spinning, dragging, splitting etc. Alternatively, it is feasible that the Higgs field and supposed Quantum fields alongside other yet unknown fields were propagated and travelled alongside the time/space field stopping when that stopped. I suggest all 3 fields exist in the universe but within separate dimensions. Time/Space-(2nd and) 3rd Dimension Higgs - 4th Dimension Quantum - 5th Dimension I suggest the Higgs particle is a simple strut which stops rotation of atoms or other particles, so that energy transfer is kept efficient. My imagination follows that 1 dimension is like a drawing on paper, dimensions give time and space (not length, width, height) (so like most peoples 3 dimension states) dimensions occur once movement begins and the 4th dimension is rotation of the 9 object. So Higgs' particle prevents the 4th dimension - rotation from occurring. Otherwise all sorts of things start happening, as we see in planets which rotate dimensions could be supposed as one object striking a stationary object and returning, could mean the same but deflecting, could be the same but spinning, could be striking another moving object. I could be here forever but noting how many dimensions are in effect on either's side when two objects collide could lead to further discovery about efficiency in reactions and general energy transfers [5-8].

I speculate that the Higgs particles are forced and kept in a higher unseen 4th dimension. This is because we in our humble 3rd dimension cannot generate our own energy, having to rely on a previously created energy to move or do anything. My speculation continues that the Higgs can create its own momentum energy to move and attach to required particles. This is because objects existing in higher dimensions or having more dimensions active, will always draw fresh energy from objects encountered (touched or struck) within lower dimensions or having less dimensions active. So a spinning ball will draw fresh energy by hitting a non-spinning ball every time [11].

## Discussion

You can prove this by experimenting that the spinning ball will always be the last to stop if all other variables are the same. We are therefore at the bottom of the 'food chain' of energy draw. The only recompense is that Higgs particles perform a function to disable other particles from achieving higher dimension capability, i.e. rotating. You could suggest other fields such as the quantum field exist in higher dimensions akin to the definitions outlined above and contain particles which may act in a similar fashion to limiting other particles capacity. This would suggest nature will bring all this 'stolen' energy back to dimension. Efficiency is the main draw of nature. Something it prides itself on and utilises when faced with imbalances that need correcting. In effect, it is more efficient to invent and create the Higgs than to allow random rotation of atoms/particles, so that simpler reactions and actions can occur, almost like knowing as soon as possible what and when the end result will occur of anything. It likes a safe bet. It could also be said to be a massive  $n$  vs  $np$  problem, perfectly executed by separating values (particles) into dimensional acts -moving, spinning, colliding and forming a heirarchy of function by attributing greater priority to those with higher dimensions running. It is interesting to note from the LHC's work at CERN, the existence of these (Higgs) 10 particles cannot clearly be seen to 'appear' from either the core of a proton during disintegration or fragments of the proton striking random Higgs particles travelling randomly around the collider in a 'higher dimension' thereby breaking the universe's dimensional hierarchy [12-15].

## Conclusion

It is my preferred vision that the second explanation is true and unfortunate Higgs particles are being mauled for their energy by ferously fast proton shrapnel fragments upsetting the balance of things. That is until, they draw more fresh energy and 'disappear' back into dimension.

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