

Title – Summary for Layperson on How a Non-Standard-Model Higgs Field and Boson Developed from Einstein's Theories Explains Everything - Unification of the Quantum and the Universe, Space and Time, Gravitational-Electromagnetic Equivalence, Dark Matter and Dark Energy

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Abstract - This is a very short summary for the layperson that tries to condense more than 30 years of my research into how the universe works into approx. 1,000 words. Remember that it does not attempt to reveal all the science and mathematics I've used in those 30 years. It merely lays out the final conclusions, which I hope you'll find interesting and self-consistent (though I won't be surprised if no-one ever takes it seriously). The summary was inspired by the speculation that Large Hadron Collider scientists will announce the discovery of the Higgs during the International Conference on High Energy Physics, which takes place in Melbourne, Australia, July 4 to 11.

Content - I began by writing the following email to America's Discover magazine (it was about an article of theirs concerning Julian Barbour). Unintentionally, my email started talking about a subject which fascinates me – the Higgs boson/field (I've been thinking about this for years, and I spent hours deciding on the best words to use in a short email). I used Albert Einstein's theories to come to the conclusion that what we call the Higgs is our name for ALL particles (not simply this one or that one) being composed of quantum mechanical "wave packets" formed by the union of gravitons and photons – the notion of the Higgs actually being all particles implies that its possible discovery by the Large Hadron Collider would be another experimental verification of the existence of quantum entanglement in time and space and on Earth. In turn, gravitons and photons – along with all time and space - are composed of electronic binary digits (this may be termed the Higgs field).* I suspect this idea of binary digits composing space-time is highly unfashionable in the present worldview of quantum fluctuation. Also, people believe in strictly linear time where effects do not influence causes, but the "binary digits" idea requires a looping subroutine where electronics from the future is transmitted nearly 15 billion years into the past in order to create the subuniverse we currently inhabit (on a separate note, I believe we live in an infinite universe made up of subuniverses shaped like figure-8 Klein bottles that are made flexible enough to seamlessly – except for wormholes – fit into each other by their construction from binary digits). Dark matter could be explained as matter travelling from future to past, or past to future, which is invisible but still has gravitational effects. Dark energy could be explained as gravity or space-time (i.e. the product of binary digits) being programmed to accelerate and expand (I prefer to regard acceleration/expansion being the result of more space-time continually being created, which is what the Big Bang's rival – Steady State theory – proposes). Anyway, the unfashionableness of my ideas does not automatically make them wrong.

* The University of Edinburgh scientist Peter Higgs pointed out that the Higgs field would produce its own quantum particle (the Higgs boson) if hit hard enough, by the right amount of energy. The Higgs field is the name given to the unification of space-time by the binary digits creating it. Therefore, the Higgs boson would necessarily indicate this unification and "...its possible discovery by the Large Hadron Collider would be another experimental verification of the existence of quantum entanglement in time and space and on Earth." Why does data from the LHC "... see tantalising hints consistent with making Higgs bosons with a mass of around 125 times as heavy as the proton?" (<http://www.ph.ed.ac.uk/higgs/laypersons-guide>) I don't know why there are hints at this specific mass. I can only suggest that we use quantum physics' wave-particle duality and think of all the subatomic particles in the universe – and throughout all time – as a beam of light from a torch. If the circle of light cast by the torch represents all subatomic particles, then the centre of that circle (which is its brightest part) represents the masses' energy of 125 billion electron volts (125 times as heavy as a proton).

Here's the email I sent to Discover –

I'd like to comment on the article "Is Einstein's Greatest Work All Wrong—Because He Didn't Go

Far Enough?" by Zeeya Merali (March 2012 issue).

"Long before Einstein, (Austrian physicist and philosopher Ernst Mach had advocated a 'truly relative' theory, in which objects were positioned only in relation to other tangible objects—Earth relative to sun, pub relative to farmhouse—and not against any abstract background grid." ("Is Einstein's Greatest Work ...")

This makes sense as long as we assume that space-time is an unverifiable abstract grid and matter, such as objects, is the only component of reality.

"When forced to summarize the general theory of relativity in one sentence, Einstein said: time and space and gravitation have no separate existence from matter." - PHYSICS: ALBERT EINSTEIN'S THEORY OF RELATIVITY at <http://www.spaceandmotion.com>

Einstein's thinking claims that space-time is as much a part of reality as matter is, and his thinking can potentially be verified by the Large Hadron Collider. This is because the Higgs boson/field sought by the LHC could turn out to be a non-Standard-Model Higgs where subatomic particles are composed of quantum mechanical "wave packets" formed by the union of gravitation's gravitons. To give matter a different appearance from gravity, this union could include electromagnetism's photons. The amplitude of gravity waves might taper from a central point to the sides while the amplitude of electromagnetic waves remains constant - in which case electromagnetism would be modified gravitation and Einstein would have been correct when he said gravitation and electromagnetism may be related.

Since the great physicist claimed gravitation is the warping of space-time, time and space would have no separate existence from matter and would be the ultimate composition of the non-Standard-Model Higgs particle. Continuing from Einstein's deductions, space-time cannot simply be an abstract background but must be composed of something, or else it could not give rise to the matter we see, touch, and probe with instruments. But that something also gives rise to immaterial space, time, and gravity. What could be the source of things we see, and also of things we do not see? Why not the electronic binary digits of 1 and 0? After all, we can view a webpage but can never view its ultimate composition.

So Julian Barbour's approach is only good for people who only believe in what they can see. Albert Einstein's approach is the one to follow if we ever hope to achieve a Unified Field Theory or Theory of Everything which has meaning in physics, as opposed to purely in mathematics. A mathematically defined unified field could be accurate and detailed, but it would only be relevant to mathematicians and would therefore be somewhat abstract. A physical unified field would be relevant to everybody, enabling us to understand and manipulate both what we can and can't see in the universe.