

“Something from ‘Nothing’”

Creating Light from the Counterspace and/or Aether: proof of quantum void, or maybe nothing at all?

Or...

The case of the nothing burger we want so bad we can taste it.

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Best viewed at: <https://bit.ly/3cIh7lG>

ABSTRACT

The Plasma-electromagnetic cosmology community is finding evidence for the Aether. However, it most assuredly wants to find evidence for the 0-pt source of energy which supplies that Aether, if they are not one and the same. But this can create a desire, shared with quantum mechanics specialists, to make announcements which “jump the gun” about proposals as being scientific fact, when they are still in early phases of the experimentation. The author herein dissects an article written by Dartmouth College¹ about a proposal which as stated would violate the laws of thermodynamics. Still, the author is cautiously optimistic about the proposal and would like to recommend a full support from the PEMC community and a full funding from grant writers.

Keywords: quantum - entangled light - vacuum - zero point - void - counterspace - aether

¹ <https://scitechdaily.com/clever-physics-experiment-that-produces-something-from-nothing/>

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Review of the Laws of Thermodynamics

“II - The Laws of Thermodynamics

1. *Zeroth law of thermodynamics – If two thermodynamic systems are each in thermal equilibrium with a third, then they are in thermal equilibrium with each other.*
2. ***First law of thermodynamics – Energy can neither be created nor destroyed. It can only change forms. In any process, the total energy of the universe remains the same. For a thermodynamic cycle the net heat supplied to the system equals the net work done by the system.***
3. *Second law of thermodynamics – The entropy of an isolated system not in equilibrium will tend to increase over time, approaching a maximum value at equilibrium.*
4. *Third law of thermodynamics – As temperature approaches absolute zero, the entropy of a system approaches a constant minimum.²*
5. *Fourth law of thermodynamics - Intensive properties are independent of the mass of the system; Extensive properties depend on the mass of the system³; all equations must balance intensive and extensive properties.^{4,5} (emphasis added)*

It is important to recognize that the “laws” of thermodynamics do evolve. In particular physicist and researcher Pierre-Marie Robitaille⁶ has shown definitively that “Kirchoff’s law”⁷ is nothing of the sort^{8,9}. However, this paper is not about his work. It is solely about the 1st law of thermodynamics.¹⁰ Can scientists stick to this?

The title of the article, whose paper that the author is responding to is “Clever Physics Experiment That Produces “Something From Nothing”” by Dartmouth College, November 21, 2021.

This is an important place to start because there are already two facts that the reader is being misled about:

1. There is no experiment, only a proposed experiment. Therefore nothing whatsoever has been produced.
2. There is no production of something from nothing - ever - as far as the author can tell. This is why the sun is not a burning gas ball fusion apparatus. All fusion is related to electromagnetic processes on the real¹¹, condensed matter¹² (crystal plasma?¹³) surface of the sun to the coronasphere (as far as we can tell¹⁴).

Therefore, this article is 100% Fake News.

² <http://physicsforidiots.com/physics/thermodynamics/>

³ P.T. Landsberg, Thermodynamics with Quantum Statistical Illustrations, Interscience Publishers, New York, 1961, p. 142

⁴ <https://www.youtube.com/watch?v=t8Nm9bnWOTs>

⁵ “Magnetic Universe Theory,” p. 135

https://www.academia.edu/37439506/Magnetic_Universe_Theory_A_Top_Down_Review_of_Phases_of_Magnetic_Theory_Development_with_accompanying_historiography_and_comparison_with_Unified_Aether_Field_Theories_including_E_PEMC

⁶ <https://sites.google.com/view/epemcgateway/pemc/researchers/robitaille>

⁷ <https://youtu.be/YQnTPRDT03U>

⁸ <https://youtu.be/LE7fZ565DWc>

⁹ <https://youtu.be/m-poylY7pfQ>

¹⁰ <https://youtu.be/uyEwWZVSlrA>

¹¹ <https://vixra.org/pdf/1310.0159v1.pdf>

¹² <https://youtu.be/0kn86th7qmk>

¹³ <https://vixra.org/pdf/1310.0119v1.pdf>

¹⁴ We can tell it is **not** happening inside the sun because sunspot holes in the CM surface are cool. But we’ve never probed the sun, so therefore we’re not able to see inside the sun- period.

However, as the proposed experiment is of interest to our Plasma-electromagnetic cosmology (PEMC), it is of interest to explore if this proposition could find us one of these three items (or all three):

- ❖ The Aether (or quantum foam?)
- ❖ The Counterspace (or Void/Vacuum energy¹⁵)
- ❖ Dual direction entropy (DDE)¹⁶, indicating a Spongy Counterspace (SCS)¹⁷
 - This means that in the SCS as entropy increases, order or Source increases for our 'visible' (ie, measurable) Universe

There is some history here, worth recounting, about the Void or Vacuum Energy history. It is a “special case of zero-point energy that relates to the quantum vacuum.”¹⁸ That is a fancy way to say something from nothing, which violates thermodynamics. Secondly, there is a massive logical fallacy that exists within the 2nd law of thermodynamics which implies an incompatibility with the more important 1st law. That is to say that when the system is 100% entropy, it ceases to function. So far there is no indication that this is really going to occur. But it is not in this paper’s purview to cover “Cosmic rearrangement hypothesis”¹⁹ and compare/contrast with Big Bang/Expansion models. Suffice it to say, the author himself does not subscribe to the idea that something comes from a literal nothing, but as polar complete physics²⁰ suggests, and is compatible with PEMC, that there *is* a dynamic that exists between space and counterspace that maintains cosmic equilibrium over the æons.

¹⁵ “Using the upper limit of the [cosmological constant](#), the vacuum energy of free space has been estimated to be 10^{-9} joules (10^{-2} ergs), or ~5 GeV per cubic meter.^[3] However, in [quantum electrodynamics](#), consistency with the principle of [Lorentz covariance](#) and with the magnitude of the [Planck constant](#) suggest a much larger value of 10^{113} joules per cubic meter. This huge discrepancy is known as the [cosmological constant problem](#).”

¹⁶ https://www.academia.edu/44857386/Opinion_Big_Bang_Not_a_Cosmology

¹⁷ https://www.academia.edu/50912946/FAQ_EP EMC_MIMS

¹⁸ https://en.wikipedia.org/wiki/Vacuum_energy

¹⁹

https://www.academia.edu/38017260/Acoustic_Shockwave_Cosmology_Big_Bang_and_PEMC_The_belief_in_emergent_matter_versus_material_rearrangement

²⁰ <https://sites.google.com/view/epemcgateway/pemc/quantum/polar-complete-physics>

Something From Nothing

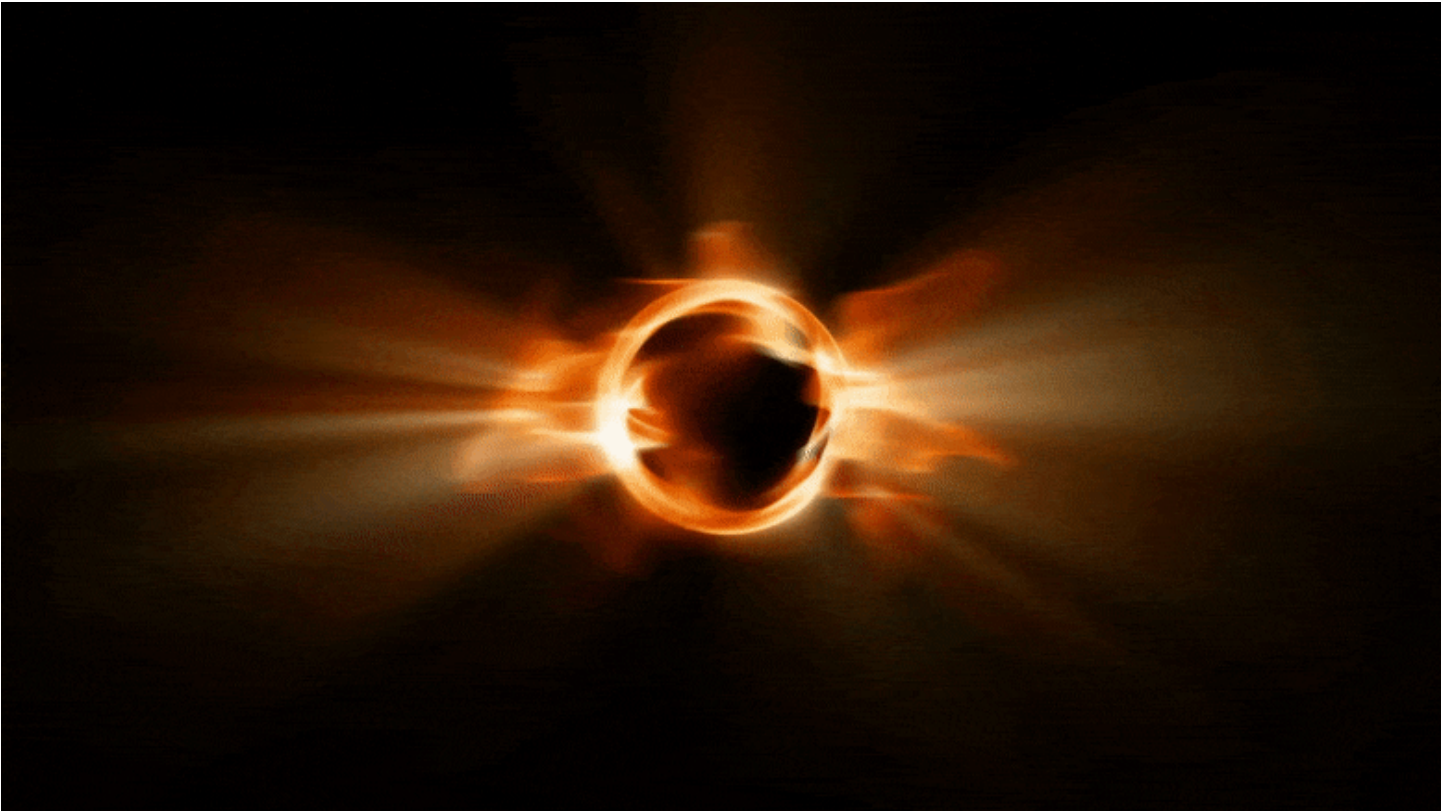


Figure 1 - “Black Hole Event Horizon” ([gif](#)) - not the subject of their paper, or this one. But if they include it in the article because it looks cool, why cannot the author? It’s a disingenuous move, and this the author feels is exactly the kind of shenanigans that need exposing. Credit: SciTechDaily.com

“New theory ‘detects’ light in the darkness of a vacuum. (1)

Black holes are regions of space-time(2) with huge amounts of gravity(3). Scientists originally thought that nothing could escape the boundaries of these massive objects, including light.(4) The precise nature of black holes has been challenged ever since Albert Einstein’s general theory of relativity gave rise to the possibility of their existence. Among the most famous findings was English physicist Stephen Hawking’s prediction that some particles are actually emitted at the edge of a black hole.(5)

Physicists have also explored the workings of vacuums. (6) In the early 1970s, as Hawking was describing how light can escape a black hole’s gravitational pull, Canadian physicist William Unruh proposed that a photodetector accelerated fast enough could “see” light in a vacuum.^{21 22}

New research from Dartmouth advances these theories by detailing a way to produce and detect light that was previously thought to be unobservable.” (7)

**footnotes and (numbers) added by author*

1. There is no detection, so this is very tongue-in-cheek, potentially purposefully misleading.

²¹ <http://srv2.fis.puc.cl/~mbanados/Cursos/TopicosRelatividadAvanzada/Unruh.pdf>

²² <https://nottingham-repository.worktribe.com/index.php/OutputFile/5098002>

2. Assumption, and the aether chosen is Standard Model, but doesn't change the fact that it is an aether of particular flavor and choosing. The author would recommend the work²³ of Stephen Crothers²⁴, as he dismantles²⁵ this illogical aether.^{26 27}
3. There is a measure of a large amount of gravity, this is true. But the *source* of it is under dispute. So far the greater weight of evidence is that M87, for example, is **not** a classical black hole, but a Bostickian Super Plasmoid (BSP).²⁸ This is beyond the point of the paper, but briefly:
 - a. The center of mass is not the center of the event horizon
 - b. The accretion disc fluctuates asymmetrically
 - c. It is asymmetric and not symmetric as the math demands
 - d. The center is not black in the least
 - e. The image was produced pseudoscientifically²⁹
 - i. A priori fallacy

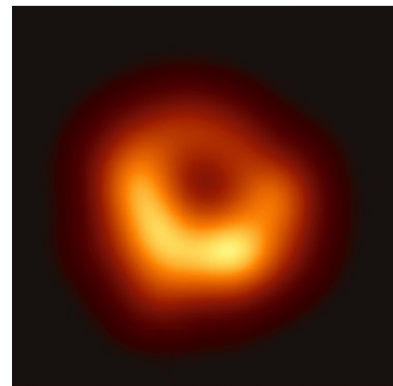


Figure 2 - M87 ([gif](#))

4. It is good for the article to admit that Black Hole Theory has, in fact, been falsified (see Table 2). Most of the scientific media focuses on a form of hand-waving propaganda that does not acknowledge this. They perform an Indiana Jones type switcheroo ([figure 3](#)) which does not at all resemble BHT³⁰, but instead a particular flavor or type of non-singularity where "non-physical radii" become various sizes³¹ (none the size of .) and masses.³²



²³ https://vixra.org/author/stephen_j_crothers

²⁴ <https://sites.google.com/view/epemcgateway/pemc/researchers/crothers>

²⁵ <https://youtu.be/wRsGPq77X0Q>

²⁶

https://www.amazon.com/Criticisms-Einstein-Field-Equation-Century/dp/1907343288/ref=sr_1_1?dchild=1&qid=1635477175&qsid=140-5268416-7366805&refinements=p_27%3AStephen+J+Crothers&s=books&sr=1-1&sres=1907343288

²⁷ A short treatment in the Mag U paper is found on pp. 69-76

²⁸ <https://sites.google.com/view/epemcgateway/pemc/pu-research/bostick>

²⁹ The software was programmed to remove data to create an image that was expected to have a certain shape. This is a known fallacy since Sir Arthur Conan Doyle's time, at least. One cannot create facts to suit theories!

³⁰ Not only can light escape, so do: plasma, x-rays, gamma rays, radio waves, gravity waves, electricity, magnetism, etc.

³¹ <https://www.nationalgeographic.com/science/article/black-holes>

³² https://www.nasa.gov/vision/universe/starsgalaxies/Black_Hole.html The epitome of hand-waving.

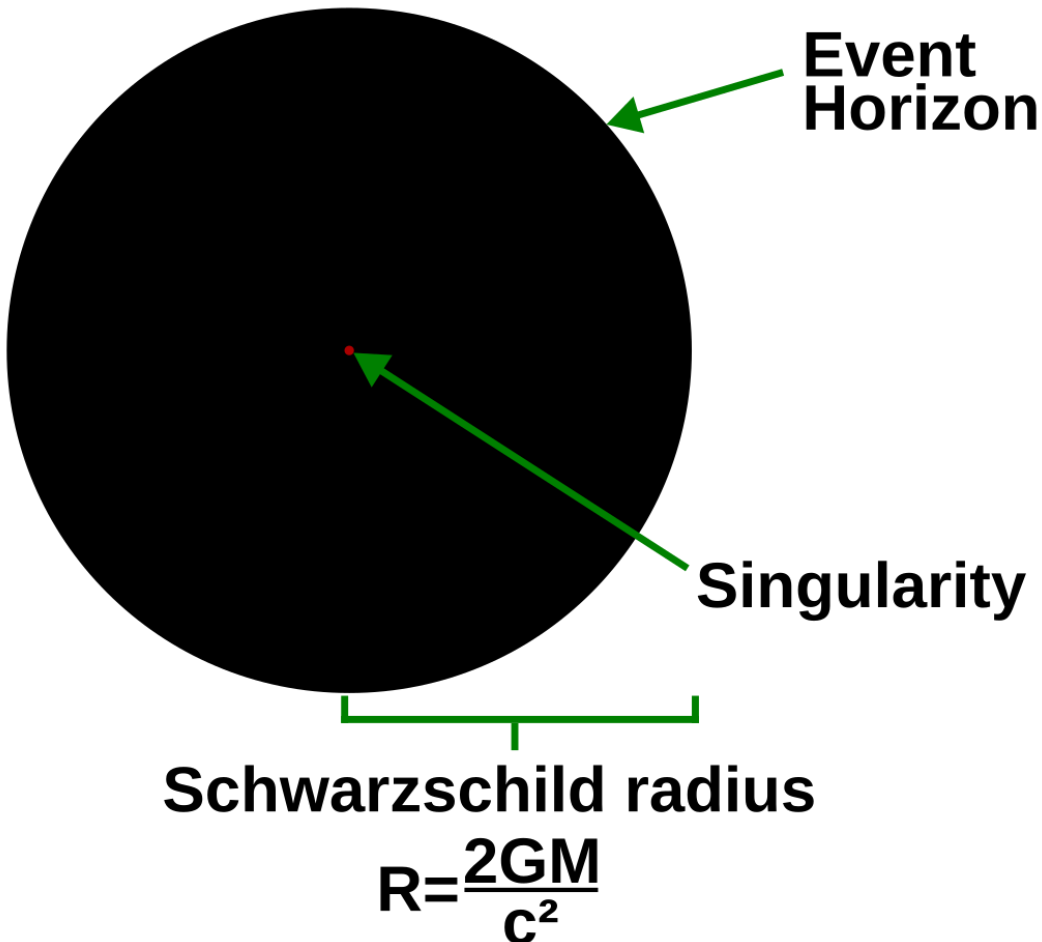


Figure 4 - Schwarzschild 'radius', but unbeknownst to most people, $R=0$

5. Stephen Hawking, however, as he debunked Einstein and BHT³³, was acting as effectively as an apologist for observations from space³⁴. It turns out, however, he was wrong in his estimations³⁵, and in fact these AGN which are "black holes" are actually electric currents in space³⁶, whose magnetism is parallel in force-free fields³⁷, and counter-rotating cylinders (coaxial cables and flux ropes), which are rightly called Birkeland Currents³⁸.
6. This reminds the author of the work of the polar complete whole physicists, and the author recommends reviewing their works, particularly "Stone Monkey"³⁹ where B. Holbrook explores the spectroscopy issues of black bodies. But also the "Tao of Physics"⁴⁰ covers the arising of particles and their anti-particles from the "void" spontaneously in particle accelerators.⁴¹
7. This is why we in PEMC⁴² would be interested in the experiment. So, while this article is a Nothing Burger, we are intensely interested in it, and let us dive into some of the publicly revealed details:

³³ <https://www.brainmaster.com/software/pubs/physics/Hawking%20Particle%20Creation.pdf>

³⁴ See: quasars <https://arxiv.org/pdf/hep-th/0409024>

³⁵ <https://www.scientificamerican.com/podcast/episode/model-black-hole-re-creates-stephen-hawking-prediction/>

³⁶ <https://www.wiley.com/en-us/Electric+Currents+in+Geospace+and+Beyond-p-9781119324492>

³⁷ <http://www.ptep-online.com/2015/PP-41-13.PDF>

³⁸ <https://sites.google.com/view/epemcgateway/pemc/pu-research/birkeland>

³⁹ <https://www.amazon.com/Stone-Monkey-Alternative-Chinese-Scientific-Reality/dp/0688006655/>

⁴⁰ <https://drive.google.com/file/d/1F4URj45IVOGBJ7PA6UiB6mxlilxhRiJi/view>

⁴¹ Ibid. pp. 223 (217 of pdf)

⁴² <https://sites.google.com/view/epemcgateway/pemc/pu-research>

“In the proposed experiment, illustrated here, a postage stamp-sized synthetic diamond membrane containing nitrogen-based light detectors is suspended in a super-cooled metal box that creates a vacuum.(8) The membrane, which acts like a tethered trampoline, is accelerated at massive rates (9), producing photons.(10) Credit: Animation by LaDarius Dennison/Dartmouth College

“In an everyday sense, the findings seem to surprisingly suggest the ability to produce light from the empty vacuum,”(11) said Miles Blencowe, the Eleanor and A. Kelvin Smith Distinguished Professor in Physics at Dartmouth and the study’s senior researcher. “We have, in essence produced something from nothing; the thought of that is just very cool.”(12)

In classical physics, the vacuum is thought of as the absence of matter, light, and energy. In quantum physics, the vacuum is not so empty,(13) but filled with photons that fluctuate in and out of existence. However, such light is virtually impossible to measure.(14)

One part of Einstein’s general theory of relativity(15), the “equivalence principle,” establishes a connection between Hawking’s prediction for radiating black holes and Unruh’s prediction for accelerating photodetectors seeing light.(16) Equivalence says that gravity and acceleration are fundamentally indistinguishable:(17) A person in a windowless, accelerating elevator would not be able to determine if they are being acted on by gravity, an inertial force, or both.(18)

Therefore, if black hole gravity can create photons in a vacuum, so can acceleration.(19)

With science already demonstrating that observation of light in a vacuum is possible, (20) the Dartmouth team set out to find a practicable way to detect the photons.”

This⁴³ is where the fun of convolution and conflation approaches epic Big Bang proportions. Some of it is practically mental gymnastics:

8. Okay, this sounds quite interesting. The author is sold on the experiment, it seems relatively cheap. There is a philosophical issue that Holbrook covers where you have to predict the number of photons arising from the detectors themselves, but practically speaking it seems like a sound hypothesis. The production of the vacuum has been done many times, and a chemical process makes sense.
9. The imagery evoked here notwithstanding, some proposed data would be nice.
10. There is no need to put this. Nothing has been produced, only simulated.
11. Again, there are no findings. This is Fake News.
12. They have in essence produced an experiment proposition. One we in PEMC hope for and look for as results. But to say or suggest otherwise is disingenuous and pseudoscientific.
13. This has been known for awhile, as was written above. However, redefining the vacuum is a mistake. Instead, they should be focusing upon the Counterspace, which is a separate and distinct concept. It is not unrelated to the confusion between time (the marking of the passing of events), and flux (the observation of the flow of change in causal systems, such as a circuit or transformer, chemical process, etc.).
14. The use of the word virtual is interesting, because it is a double-entendre, considering the proposition of “virtual particles.”⁴⁴ But the author assumes they mean “basically.” Okay, fair enough. It is difficult.
15. Again, this is injected here completely out of context. GR is not supported⁴⁵ by quantum mechanics, and force fitting them together is a huge mistake, philosophically speaking. In practical terms, relativistic effects on a microcosmic scale are not so easily measured, or the results are full of conjecture about

⁴³ Unfortunately, though the author tried to produce a gif, there is some sort of block, so please refer to their youtube video: <https://www.youtube.com/watch?v=-luvOKjoNc>

⁴⁴ <https://www.britannica.com/science/virtual-photon>

⁴⁵ Not unified with. SUSY was falsified, and MOND, too. See Table 2

the aging of the particles due to acceleration, rather than considering the relationship of mechanics to charge properties... speaking of which...

16. This is where the article truly derails. From GR to Newtonian mechanics, which are not equivalent, and throwing Hawking in there (Authority Fallacy⁴⁶) is a massive mistake.
17. Yes, that is what a MOND or another mechanistic theorem would suggest, but again until the relationship between mass, inertia, and charge (weight of particles in electronVolts) is clarified in a unified cosmology, there will always be a messiness of terms. Now one adds something clearly defined where acceleration is the change in velocity (m/s) in temporal counterspace (s⁻¹) as a mass moves, and we begin to discuss issues of not just special relativity (not gravitic, but Lorentzian transformations of Maxwell's EM equations⁴⁷), but hysteresis⁴⁸ (as it relates to inertia). Does the reader see how this one section convolutes the issue? This is part of the author's general critique of the Dark Matter Dine n Dash, where Standard Model tries to pick and choose parts of PEMC⁴⁹ and ignore blatant falsifications and fallacies, to support the leaking ship which is sinking.⁵⁰
18. Again, Newtonian mechanics!? "What's it to do with the price of tea in China?"
19. Fake news followed by violations of the 1st law of thermodynamics, wound up with a non-sequitur. Astounding.
20. Citation needed. The author has cited two polar complete physics texts, is it too much to ask Dartmouth College to cite such an assertion?

"The Dartmouth research theory, published in Nature Research's Communications Physics⁵¹, predicts that ... a postage stamp-sized synthetic diamond ... membrane, which acts like a tethered trampoline, is accelerated at massive rates.

The research paper explains (21) that the resulting photon production from the cavity vacuum is collectively enhanced and measurable, with the vacuum photon production undergoing a phase transition from a normal phase to "an enhanced superradiant-like, inverted lasing phase" when the detector number exceeds a critical value.(22)

"The motion of the diamond produces photons," said Hui Wang, a postdoctoral researcher who wrote the theoretical paper while a graduate student at Dartmouth. "In essence, all you need to do is shake something violently enough to produce entangled photons.(23)"

21. predicts*
22. This is a very vague mouthful of words. Is it superradiant, or not, and how is that quantified and/or defined? Inverting lasing phase:
 - a. **"Lasing without inversion (LWI), or lasing without population inversion, is a technique used for light amplification by stimulated emission without the requirement of population inversion.^[1]** A laser working under this scheme exploits the **quantum interference** between the probability amplitudes of atomic transitions in order to eliminate absorption without disturbing the **stimulated emission.^[2]** This phenomenon is also the essence of **electromagnetically induced transparency.^[3]**

⁴⁶ <https://yourlogicalfallacyis.com/appeal-to-authority>

⁴⁷ https://en.wikipedia.org/wiki/Relativity_priority_dispute#Poincar%C3%A9

⁴⁸ <https://www.britannica.com/science/hysteresis>

⁴⁹

https://www.academia.edu/37569958/PEMC_tm_Benefits_Ten_Reasons_to_Consider_Switching_to_Extended_Plasma_electromagnetic_Cosmology

⁵⁰ https://www.researchgate.net/publication/338108645_Cosmology_in_crisis

⁵¹ Reference: "Coherently amplifying photon production from vacuum with a dense cloud of accelerating photodetectors" by Hui Wang and Miles Blencowe, 10 June 2021, Communications Physics.

[DOI: 10.1038/s42005-021-00622-3](https://doi.org/10.1038/s42005-021-00622-3)

- b. The basic LWI concept was first predicted by [Ali Javan](#) in 1956.^{[4][5]} The first demonstration of LWI was carried out by [Marlan Scully](#) in an experiment in rubidium and sodium at Texas A&M University, and then at NIST in Boulder.^[6]⁵²

So what this appears to suggest, is that LWI amplifies light (enabling detection), using lasers (although here they are not introducing a laser), to avoid disturbing the emission directly. How this does not violate the Schrödinger Principle⁵³ nor Heisenberg Uncertainty Principle⁵⁴ is not clear to the author, but let us just accept it. The key is the electromagnetically induced transparency bit. This suggests that they will be calling upon fairly ‘magical’ principles for this experiment, which makes it incredibly exciting and potentially game changing. Which is why it is so important to make the proposition better than is written here.

23. The problem is that Dr. Hui is engaging in so much a priori assumption and even the presumption of success! That is a massive issue in peer-reviewed research today⁵⁵. It is why peer-review is failing worldwide⁵⁶, and especially in foreign sources⁵⁷, but also progressive institutions infected with the anti-rationalist mental pathogen of cultural marxism⁵⁸. There is a clear disconnect between doing the science, which seems more or less fine⁵⁹, and understanding science, which has become philosophically disintegrated from the foundations of a Baconesque doctrine⁶⁰. This is not a small deal, when scaled up and replicated across millions of experiments, most of which are never validated⁶¹, used for prestige, awards, grants, and status in essentially secret cliques within Academia!

“The Dartmouth paper investigates using multiple photon detectors—the diamond defects—to amplify the acceleration of the membrane and increase detection sensitivity. Oscillating the diamond also allows the experiment to take place in a controllable space at intense rates of acceleration.”(24)

“Our work is the first to explore what happens when there are many accelerating photodetectors instead of one,”(25) said Blencowe. “We discovered (26) a quantum-enhanced amplification effect for light creation from vacuum, where the collective effect of the many accelerating detectors is greater than considering them individually.”(27)

To confirm that the detected photons come from the vacuum rather than from the surrounding environment, (28) the team demonstrates that the theory observes “entangled light,” (29) a distinct feature of quantum mechanics that cannot originate from outside radiation. (30)

“The photons detected by the diamond are produced in pairs,” said Hui. (31) “This production of paired, entangled photons is evidence that the photons are produced in vacuum and not from another source.” (31)”

24. Fair enough, the proposal is to use a controllable space. This is the only way to create a vacuum, but it is a fair proposal in that way, however...
25. The author is curious about the introduction of multiple sources. How to guarantee they are acting as one variable and not several?

⁵² https://en.wikipedia.org/wiki/Lasing_without_inversion

⁵³ https://en.wikipedia.org/wiki/Schr%C3%B6dinger%27s_cat

⁵⁴ <https://www.britannica.com/science/uncertainty-principle> .

⁵⁵ <https://www.theatlantic.com/ideas/archive/2018/10/new-sokal-hoax/572212/>

⁵⁶ <https://retractionwatch.com/2014/07/08/sage-publications-busts-peer-review-and-citation-ring-60-papers-retracted/>

⁵⁷ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3868814/>

⁵⁸ <https://fee.org/articles/woke-educators-release-letter-declaring-objective-math-a-form-of-white-supremacy/>

⁵⁹ Depending upon the reliance of mathemagics and/or custom software for theory.

⁶⁰ <https://plato.stanford.edu/entries/roger-bacon/>

⁶¹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1182327/>

26. Fake news. You have proposed the experiment, that is all. Calculations are one thing, but one cannot call it discovery, period.
27. That's a curious addition to the paper. Is there some reason the system would not have been normally considered linear?
28. Well this is the crux and all important... based on Holbrook's assertions **how can one guarantee this?** Still, let us assume it is true and go from there.
29. And here we come to the real crux. The theory of "entangled light"⁶² as covered in another work:

"Abstract

*The concept of entanglement is so synonymous with quantum mechanics that the prefix "quantum" is often deemed unnecessary; there is after all only quantum entanglement. But the hallmark of entangled quantum states is nonseparability, a property that is not unique to the quantum world. On the contrary, nonseparability appears in many physical systems, and pertinently, in classical vector states of light: classical entanglement? Here we outline the concept of classical entanglement, highlight where it may be found, how to control and exploit it, and discuss the similarities and differences between quantum and classical entangled systems. Intriguingly, we show that quantum tools may be applied to classical systems, and likewise that classical light may be used in quantum processes. While we mostly use vectorial structured light throughout the text as our example of choice, we make it clear that the concepts outlined here may be extended beyond this with little effort, which we showcase with a few selected case studies.*⁶³

So we are talking about vectored fields and structured light⁶⁴. Hence the LWI references. Fair enough, then the issue it seems to the author is in verifying the disentangled states of the light, proving it has emerged **freshly** from the Aether and/or Counterspace. Good. Why not just say that?

"The proposal to observe light in a vacuum does not have immediate applicability,(30) but the research team hopes that it adds to the understanding of physical forces that contributes to society in the way other theoretical research has.(31) In particular, the work may help shed experimental light on Hawking's prediction for radiating black holes through the lens of Einstein's equivalence principle.(32) "Part of the responsibility and joy of being theorists such as ourselves is to put ideas out there," said Blencowe. "We are trying to show that it is feasible to do this experiment, to test something that has been until now extraordinarily difficult."(33) A technical animation produced by the team depicts the creation of photons by the experiment. The detected light exists in microwave frequency, so is not visible to the human eye.(34)"

30. The author begs to differ. This is useful in both optical and quantum computing, also in the creation of True Green Energy (TGE) systems. While not immediately had, these are immediately sought out for discussion in the author's SPACER work, and there is a *synchronicity* with having proposed these TGE and the arrival of this experiment. Is it an emergent process? No one knows.
31. It will do neither of these things. The use of lens is a particularly cute double entendre, but in light of Dr. Dowdye's⁶⁵ "Extinction Shift Principle"⁶⁶ expose of Einstein's macrolensing "rings" it is particularly

⁶² <https://physicsworld.com/a/entangled-light-is-unscrambled-using-entanglement-itself/>

⁶³ <https://www.sciencedirect.com/science/article/pii/S0079663818300167>

⁶⁴ https://en.wikipedia.org/wiki/Structured_light

⁶⁵ <https://sites.google.com/view/epemcgateway/pemc/researchers/dowdye>

⁶⁶ <https://www.amazon.com/Discourses-Mathematical-Illustrations-Electrodynamics-Transformations/dp/0963447157>

apropos that the **correct** understanding of light - which is neither a particle nor a wave⁶⁷ - be defined as EM related **only** (nothing to do with gravity⁶⁸), and explored. Lensing is related to refraction in a plasma medium, period. It has never been measured at $R > 1$.⁶⁹

32. It goes without saying that this is true. But luckily, this is **not** another 'Dark Universe' proposal. Like dark mode plasma, black body research is totally detectable, and the author commends this proposal and would have it fully funded by whatever can be cut from Dark Matter and Dark Energy wasted grant money!

Conclusion

The author is [tacitly] excited and [cautiously] optimistic about this proposition. Within a 1-3 year span of time the vertical interferometer verification of the Aether⁷⁰ can be followed up with the potential detection of the Counterspace, and take us one step closer towards an anatomical observation of the actual invisible Universe. We can get away from failed LCDM and DE experiments, and back towards a "classical" quantum electrodynamical discussion of the in depth behaviors of the PEMF and bring about a truly unified aether theory⁷¹.

However, we should be careful, in SM or PEMC, in jumping the gun and making irresponsible claims and using irresponsible language and fallacies. The author advises Dartmouth College to consider looking at our EPEMC Standards⁷² in order to re-orientate with a better scientific paradigm. But they should proceed immediately to experimentation and with all due caution. Michelson-Morley was not careful⁷³ and set mankind back 134 years, ninety of which have been essentially wasted by Academia in pursuit of the wrong cosmology⁷⁴ under very bad assumptions about the vacuum, gases in space, and the nature of space and/or time themselves. Such mistakes are expensive, and disruptive to the SPACER⁷⁵ movement, and could be expensive literally. Strategically they open the West to distinct military vulnerabilities⁷⁶, although it does appear the US Military has been hiding secret electrokinetic research⁷⁷. Dr. Peratt⁷⁸ has revealed that PEMC work done at Los Alamos and NASA/JPL rendered Dark Universes redundant⁷⁹. The question is, how does plasma research come to bear upon this proposal above? The author thinks this will be related to the baryonic mass⁸⁰ and magnetism discussion, as well. But... one thing at a time.

⁶⁷ https://www.academia.edu/37972998/Pseudoscience_Cannot_Be_Dark_Matter

⁶⁸ Which may or may not be the results of electrical processes, to begin with.

⁶⁹ <https://drive.google.com/file/d/19mMkOG5r24j0zAjdzBZ9TBUufp9c2UDu/view>

⁷⁰ <https://disk.yandex.ru/i/FnUkHxwI5C5EIq>

⁷¹ PEMF = the UAF

⁷² <https://sites.google.com/view/epemcgateway/home/standards>

⁷³ A horizontal experiment was a doomed experiment, based upon PEM atmospheric studies since then.

⁷⁴ 1927: the end of the Enlightenment. See Table 1

⁷⁵ <https://sites.google.com/view/epemcgateway/epemc/spacers>

⁷⁶ Literally gets us behind Chinese scientific counterparts exploring fusion and thorium nuclear, etc.

⁷⁷ "Space Forces: Our Star Trek Future"

<https://www.amazon.com/Space-Force-Future-Secret-Programs-ebook/dp/B0916GD4KV>

⁷⁸ <https://sites.google.com/view/epemcgateway/pemc/pu-research/peratt>

⁷⁹ <https://youtu.be/E4pWZGBpWP0>

⁸⁰ <https://www.scirp.org/journal/paperinformation.aspx?paperid=101683>

Table 1 :: Proper Physics Chronology⁸¹

Electricity	Ben Franklin	1751
Gaussian Theory	Carl Gauss	1813
Electromagnetism Unification	Michael Faraday	1831
Doppler Redshift	Hippolyte Fizeau	1848
Maxwell's Equations	James Maxwell	1861-62
Quantized Hypothesis	Ludwig Boltzmann	1877
Photoelectric effect	Heinrich Hertz	1887
Electron Theory	JJ Thomson	1897
Quantum Theory	Max Planck	1900
Relativity theory	Henri Poincare	1900-1904
Mass-energy relation	Henri Poincare	1900
Gravity Waves	Henri Poincare	1905
Special Relativity	Albert Einstein	1905
Photoelectric Effect Explained	Albert Einstein	1905
Birkeland Currents	Kristian Birkeland	1908
Atomic Theory Proved	Ernest Rutherford	1911
Particle-Wave Theory of Atoms and Particles	Niels Bohr	1913
General Relativity	Albert Einstein	1915
Proton discovered	Ernest Rutherford	1919
Quantum Radiation Interaction	Paul Dirac	1920
Quantum Mechanics Codified	Born, Heisenberg, Pauli	1924
Bose-Einstein Condensate	Bose, Einstein	1924
Plasma Cosmology	Irving Langmuir	1927
Big Bang Cosmology	Georges Lemaitre	1927
Missing Matter	Edward Zwicky	1933
Magnetohydrodynamics	Hannes Alfven	1940
QEM/QED	Bethe to Feynman	1947-1960
Electroweak Theory	JC Ward	1959
Quarks	M Gell-Mann & G Zweig	1964
Black Hole Theory	John Wheeler	1967
Dark Matter	Rubin & Ford	1970
Electric Star Theory	Ralph Juergens ⁸²	1972
QCD	Gross, Wilczek, & Politzer	1973
Axions	Peicci & Quinn	1977
SUSY	Werner Nahm	1978
WIMPs	unclear ⁸³	1980
MOND	Mordehai Milgrom	1982
String Theory	Green & Schwarz	1984
Dark Energy	Friedman ⁸⁴ or Sivaram ⁸⁵	1924 or 1986
M Theory	Edward Witten	1995
Intrinsic Redshift	Halton Arp ⁸⁶	1998
MACHOs	unclear	2002? ⁸⁷

⁸¹ Tables 1 and 2 reproduced from [11]; all references in [18] included, as this paper is a follow-up.

⁸² https://www.velikovsky.info/Ralph_Juergens

⁸³ <https://www.scientificamerican.com/article/dark-matter-exotic-possibilities/>

⁸⁴ <http://home.fnal.gov/~skent/early.html>

⁸⁵ <https://arxiv.org/ftp/arxiv/papers/0809/0809.3364.pdf>

⁸⁶ https://www.haltonarp.com/articles/intrinsic_redshifts_in_quasars_and_galaxies.pdf

⁸⁷ <http://www.astro.caltech.edu/~george/ay20/aaa-wimps-machos.pdf>

Table 2 :: Falsifications

Cosmic Background Radiation	2007 ⁸⁸ & 2019 ⁸⁹
ΛCDM	2010 ⁹⁰ , 2014 ⁹¹
SUSY	2012 ⁹² - 2017 ⁹³
CDM	2012 ⁹⁴ , 2015 ⁹⁵ , 2016 ⁹⁶ - 2018 ^{97 98 99 100}
WIMPs & MACHOs	2017 ¹⁰¹
Galaxy Rotation and DM	2017 ^{102 103}
Standard Redshift	2017 ^{104 105 106}
MOND	2018 ^{107 108 109}
Galaxy Rotation and MOND	2018 ¹¹⁰
Higgs-boson as non-standard Quark	2018 ¹¹¹
Dark Energy	2018 ¹¹² 2021 ¹¹³
LDM	2018 ^{114 115}
Classical Black Holes	2018 ¹¹⁶
Accretion Model	2019 ¹¹⁷

⁸⁸ <http://rnas.asj-oa.am/2542/1/73.pdf>

⁸⁹ <https://www.youtube.com/watch?v=p8IKQMEYYLw>

⁹⁰ <https://arxiv.org/abs/1011.0004>

⁹¹ https://astro.uni-bonn.de/~pavel/kroupa_SciLogs.html

⁹² <http://backreaction.blogspot.com/2016/08/the-lhc-nightmare-scenario-has-come-true.html>

⁹³ <https://www.space.com/39001-dark-matter-doesnt-exist-study-suggests.html>

⁹⁴ <https://arxiv.org/abs/1204.2546>

⁹⁵ http://adsabs.harvard.edu/cgi-bin/bib_query?arXiv:1406.4860

⁹⁶ <http://adsabs.harvard.edu/abs/2016arXiv161003854K>

⁹⁷ <https://arxiv.org/pdf/1808.09823.pdf>

⁹⁸ <https://academic.oup.com/mnras/article/476/3/3124/4875952>

⁹⁹ <https://arxiv.org/pdf/1807.07113.pdf>

¹⁰⁰ <https://arxiv.org/pdf/1805.04817.pdf>

¹⁰¹ <https://phys.org/news/2017-12-machos-dead-wimps-no-showsay-simps.html>

¹⁰² <https://arxiv.org/pdf/1805.10706.pdf>

¹⁰³ <https://arxiv.org/pdf/1811.08843.pdf>

¹⁰⁴ <https://arxiv.org/pdf/1805.03298.pdf>

¹⁰⁵ <https://arxiv.org/abs/1807.09409>

¹⁰⁶ <https://arxiv.org/pdf/1804.03888.pdf>

¹⁰⁷ <https://www.physicsforums.com/threads/falsifications-and-constraints-due-to-gw-measurements.929254/>

¹⁰⁸ <https://arxiv.org/pdf/1804.04167.pdf>

¹⁰⁹ <https://arxiv.org/ftp/arxiv/papers/1809/1809.09019.pdf>

¹¹⁰ <https://arxiv.org/pdf/1801.09304.pdf>

¹¹¹ <https://www.nature.com/articles/d41586-018-06130-9>

¹¹² <https://arxiv.org/pdf/1810.05027.pdf>

¹¹³ <https://room.eu.com/news/no-dark-energy-needed-just-dark-matter-with-a-magnetic-force-new-study-says>

¹¹⁴ <https://arxiv.org/pdf/1810.10543.pdf>

¹¹⁵ Several, see previous papers to the series

¹¹⁶ Ibid.

¹¹⁷ Ibid.

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