The Dark Matter Scatter

How the Dark Universe Community is fraying, and in which directions, as a response to the DM crisis; How PEMC re-unifies the camps

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ABSTRACT

Dark Matter has been in crisis for several years. Beginning in 2017, adherents began jumping ship with DM lifeboats, masquerading as both real science and classical Dark Matter. In previous parts the author discussed the predictable 'Charged' DM, the use of BEC (instead of ultracold plasmas), Dark ('Hidden') Photons, Negative Mass, and Neutrino radiation formed via Acoustic Shockwaves. In this paper, the absence of DM in the Milky Way and nearby galaxies, as well as other places, will be discussed alongside blatant misrepresentations (such as Dark Matter 'glowing'), ultralight BEC's, and by contrast DM "heating up", which shows logical inconsistencies in DM theories. Contrasted with these disparate options, Plasma-Electromagnetism has a one-stop-shop for these observations with varying ranges of temperatures and behaviors which can describe all the matter, and repulsive forces without resorting to exotic (ie, 'made up') materials.

Keywords: Acoustic shockwaves - plasma - neutrinos - redshift - rearrangement

Where is the Dark Matter? Literally it isn't there.

The detraction from Lambda Cold Dark Matter (and DM in general) has always been "where is it?" In the 2000s, WMAP[1] and similar programs were used to create beautiful 3D models[2] with simulations of the Big Bang Expansion[3], with Dark Matter inserted in purple (see Figure 1), as it was a reasonable standin given it was expected we would not 'see' DM or DE as they "do not interact with normal matter."[4] But while this is clever hand-waving, which was acceptable at the time, ahead of the opening of the Large Hadron Collider, it remained a viable critique. "Where is it?"

"Wait," we were told, "until the LHC is up and running."

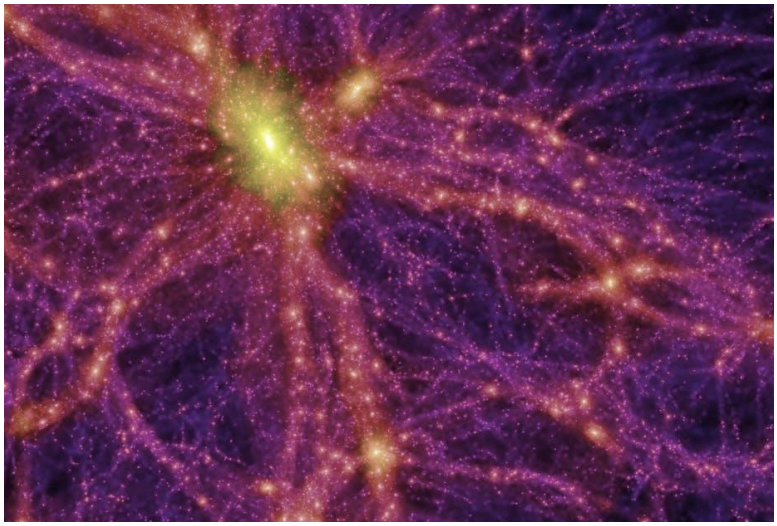

Figure 1 - "DM" filaments in Virgo Supercluster; credit: Max Planck Institute

While the Higgs[5] was found relatively quickly[6], continuous funding and searching for CDM has not yielded anything, but has instead, produced a string of official failures and "constraints" (see Table 2).

Conversely, the filaments were found to contain strings of galaxies aligning impossibly end to end[7], in similar vectors along their central axes.[8] The dwarves of these galaxies were also found to rotate coplanar, rather than in disorganized gravitational fashion as expected.[9] Solar Systems were found to be coplanar[10], and all the disc galaxies of the Universe were found to rotate at the same rate,[11] which is impossible in thermonuclear dynamic explosions (as the Big Bang is supposed to have been).[12]

Starting in 2018, the question (frantically) became "Where is the Dark Matter?" when literally galaxies were being found that did not have any[13] [14], or did not have "enough" (of the invisible material)[15]. Coincidentally, scores of alternative hypotheses emerged[16], claiming pseudoscientific Dark Matter replacements[17]. Unironically, Gaia DR2 and MMS began returning data, and radio-scopes also corroborated

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[1] https://www.ted.com/talks/george_smoot_on_the_design_of_the_universe/transcript?language=en
[2] https://www.theguardian.com/science/2014/may/07/universe-recreated-computer-simulation-model-big-bang
[3] https://www.sciencealert.com/most-advanced-illustris-next-generation-computer-model-universe-simulations
[4] https://home.cern/science/physics/dark-matter
[5] https://home.cern/science/physics/higgs-boson
[6] https://www.theguardian.com/science/blog/2012/jul/04/higgs-boson-discovered-live-coverage-cern
[7] https://www.newscientist.com/article/dn26598-galaxies-in-filaments-spaced-like-pearls-on-a-necklace/
[8] http://www.star.bris.ac.uk/sxp/galaxiesnotes_short.pdf
[9] https://arxiv.org/abs/1301.0446
[10] http://curious.astro.cornell.edu/about-us/159-our-solar-system/the-sun/the-solar-system/236-are-the-planes-of-solar-systems-aligned-with-the-plane-of-the-galaxy-intermediate
[11] http://www.astronomy.com/news/2018/03/all-galaxies-rotate-once-every-billion-years
[12] Should be radial and randomized, although in concentrations and wide gaps. But not structured.
[13] https://news.nationalgeographic.com/2018/03/dark-matter-galaxy-gravity-dragonfly-physics-space-science/
[14] Hilariously, one group tried to claim that the absence of something proved its existence, which is a logical fallacy.
[15] https://arxiv.org/pdf/1812.10714.pdf
[16] See [8],[10-12]
[17] See [12]

which showed that half the matter was actually just baryons[18], and the rest was likely “hot grains” or “local dust”, acting as so called “Covert Matter”[19].

Dark Photons Must Be Making Dark Matter Glow with Ordinary Light

It is not without a small amount of vexation that the author finds the entire premise of recent research, claiming that X rays - which are ordinary EMF waves within the normal electromagnetic spectrum - are glowing due not to electromagnetic activity in an obviously charged plasma environment, but due to Dark Matter.[20] Obviously the charged dust and covert matter in the galaxy MACS J0416.1-2403 is undergoing a charging up process. See Figure 2 and Nasa’s subtitle below:

“Hubble's powerful sensitivity and resolution captures a soft blue haze, called intracluster light, among innumerable galaxies in the Abell S1063 cluster. The stars producing this glow have been thrown out from their galaxies. These stars now live solitary lives, no longer part of a galaxy but aligning themselves with the gravity of the overall cluster. Astronomers have found that intracluster light's association with a map of mass distribution in the cluster's overall gravitational field makes it a good indicator of how invisible dark matter is distributed in the cluster. ***Credits: NASA, ESA and M. Montes (University of New South Wales)” (sic)***

The author finds this a tedious and ridiculous explanation. DM by definition is difficult to detect because it is not interacting with ordinary matter. To then claim it is, is pedantic.

Consider, as a comparison, the complete and total failure of the classical black hole model: “a singularity so dense with gravity so heavy that even light cannot escape it.” This is now considered totally fallacious.[21] The author must point out that black holes have already been ruled out as the missing DM.[22] But given that Crothers has already shown the classic black hole (and General Relativity as interpreted) to be fallacious, this isn’t very surprising. So why do they insist on using the term “black hole” when in fact tons of material[23], gas[24] (plasma[25]), electric currents[26], and magnetic fields[27] are escaping these AGN Z-pinches all the time?

Similarly, when one observes normal light, it’s a cinch that it is coming from explainable, normal electromagnetic interactions, albeit at high currents (10^{18}+ A) and extreme TeV charge densities (masses).[28]

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[18] https://www.newscientist.com/article/2149742-half-the-universes-missing-matter-has-just-been-finally-found/
[19] see [8]
[20] https://www.nasa.gov/image-feature/goddard/2018/faint-glow-within-galaxy-clusters-illuminates-dark-matter
[21] https://news.psu.edu/story/552527/2018/12/20/research/beyond-black-hole-singularity
[22] http://news.berkeley.edu/2018/10/02/black-holes-ruled-out-as-universes-missing-dark-matter/
[23] https://www.eso.org/public/news/eso1835/
[24] http://www.chandra.harvard.edu/photo/2018/a2597/
[25] https://alma-telescope.jp/en/news/press/blackhole-201812
[26] https://arxiv.org/pdf/1808.07327.pdf
[27] https://arxiv.org/pdf/1812.06025.pdf
[28] See [6].Table 7

Is it warming up, or is it really cold?

The following now truly encapsulates the confusion in the CDM community. See Figure 3, and included caption:

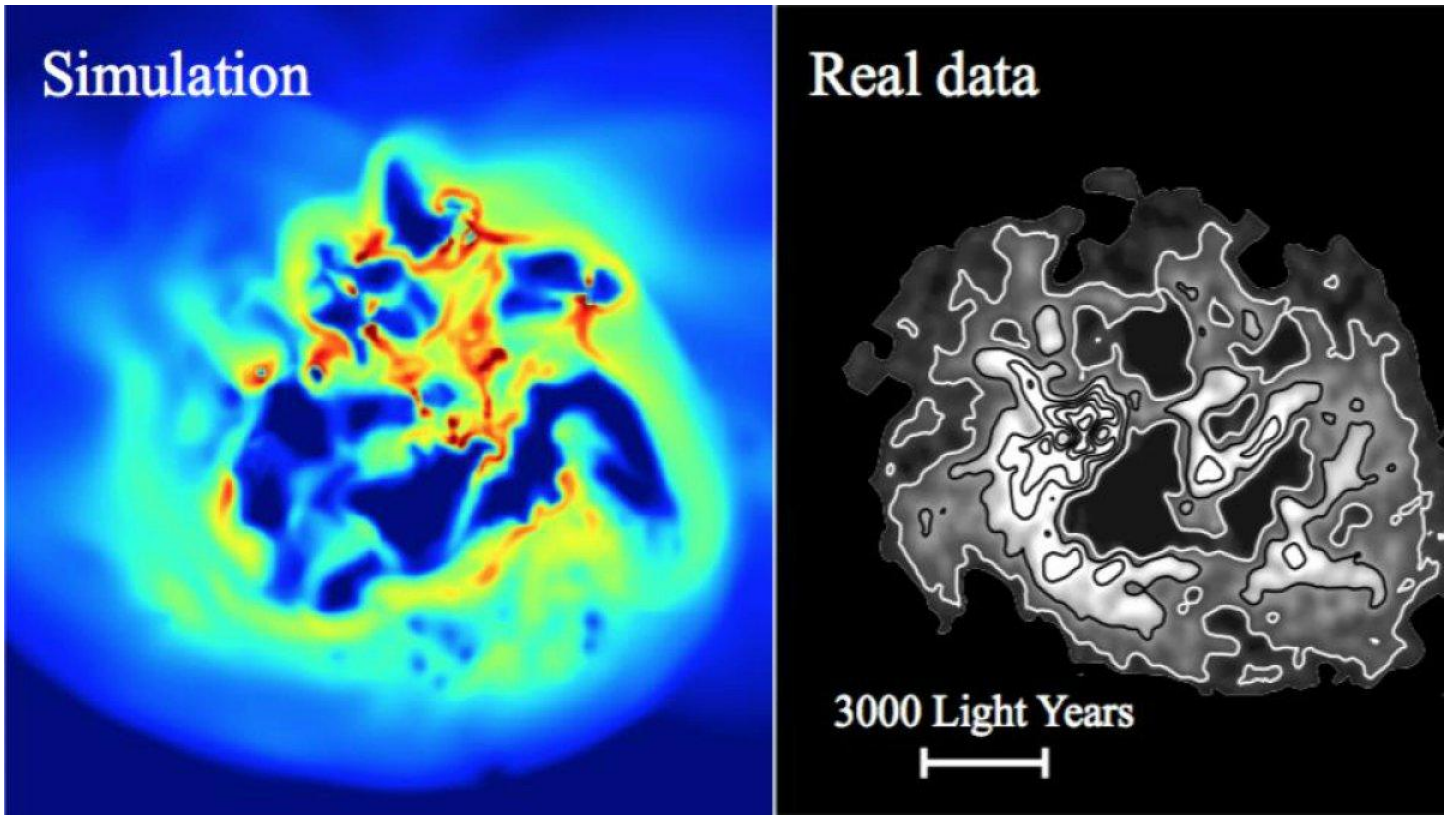

Figure 3: *"Scientists have found evidence that dark matter can be heated up and moved around, as a result of star formation in galaxies. The findings provide the first observational evidence for the effect known as 'dark matter heating', and give new clues as to what makes up dark matter."* credit: Royal Astronomical Society[29]

This type of iron-man hand-waving is truly disheartening. In actuality what the simulation shows is where gravity said, from WMAP measurements where DM **should be**. But not only are the concentrations completely wrong, they are wrong on the order of hundreds to thousands of parsecs.

What is heating up (in the past), likely are Birkeland Currents[30] (magnetic flux ropes), which are exchanging charges, such as baryons, along filaments *en masse* between clusters, galaxies, and ultimately heliospheres of stars.

> *"Gravitational potential fluctuations driven by bursty star formation can kinematically 'heat up' dark matter at the centres of dwarf galaxies. A key prediction of such models is that, at a fixed dark matter halo mass, dwarfs with a higher stellar mass will have a lower central dark matter density. We use stellar kinematics and HI gas rotation curves to infer the inner dark matter densities of eight dwarf spheroidal and eight dwarf irregular galaxies with a wide range of star formation histories. For all galaxies, we estimate the dark matter density at a common radius of 150 pc, $\rho_{DM}(150\,pc)$. We find that our sample of dwarfs falls into two distinct classes. Those that stopped forming stars over 6 Gyrs ago favour central densities $\rho_{DM}(150\,pc) > 108\ M_{\odot}\ kpc{-}3$, consistent with cold dark matter cusps, while*

[29] https://academic.oup.com/mnras/advance-article/doi/10.1093/mnras/sty3404/5265085
[30] http://www.ptep-online.com/2018/PP-53-01.PDF

those with more extended star formation favour $\rho_{DM}(150\,pc) < 108\,M_{\odot}\,kpc{-}3$, consistent with shallower dark matter cores. Using abundance matching to infer pre-infall halo masses, M_{200}, we show that this dichotomy is in excellent agreement with models in which dark matter is heated up by bursty star formation. In particular, we find that $\rho_{DM}(150\,pc)$ steadily decreases with increasing stellar mass-to-halo mass ratio, M_{*}/M_{200}. Our results suggest that, ***to leading order, dark matter is a cold, collisionless, fluid that can be kinematically 'heated up' and moved around.***"[31]

By definition, this is what plasma and superfluid Bose-Einstein Condensates (a proposed form of ultracold plasma) already do.

But, conversely to the idea of heating up:

"Ultralight spin-less dark matter is one of the dark matter candidates that shows properties that suit the current observational restrictions. Among the convenient properties of this particle are that it is ultralight, with mass of order $m \sim 10^{-22}eV$ [1–3], which implies it has a de Broglie wave-length that can prevent structures to develop cusps at the center of structures, which may be a solution of the cusp core problem [4–8]. At larger scales, there are now structure formation simulations showing that this candidate behaves just like CDM [9, 10]. Another problem possibly addressed by this candidate is the abundance of substructure [1–3, 5, 11]. Another appealing property is that a boson with such a small mass, ***the critical temperature for Bose-Einstein condensation is $Tc \sim 1/m5/3$ in the TeV scale,*** *which guarantees the condensation could have happened at very early stages."*[3233]

Isn't it convenient that everyone gets to decide when their version of CDM exists, based upon as of yet unproven claims of the age of the Universe (based on poorly understood redshift, which has been shown to be well off (Table 2))? It's as if there are enough billions of years for everyone to create their own Dark Matter. And then, it can heat up and move around. These astrophysicists do realize they are working with still images that barely change in years of time, right? In the end, the measured filaments are a correction of previous guesses, which were made using data that was likely interfered with by the oceanic black body radiation of the Earth. When these corrections were made, suddenly it was found that Dark Matter was heating up, which is inconvenient, so why not say that *your* "Dark Matter" comes from later (6 Gyrs)? Why not have a whole rainbow of material no one can find, with different timestamps, so that if one is constrained out, it doesn't eliminate the entire scientific endeavor? After all, there are many more grants to acquire in constant pursuit of the mythical aether.

Real Consequences

There are, of course, several reasons why this is a monumentally bad idea. While the failure of CDM has not stopped the progress (indeed it has helped it) of the advance of plasma-electromagnetic cosmology, it is the less efficient way to exploring the issue.

Also, considering the transition to electrometerology[34], electrogeology[35], electrovolconology[36] [37], electrocometology[38] (which has been slowed, but remains boosted by continual discovery of predicted

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[31] Ibid. Abstract
[32] https://arxiv.org/pdf/1812.11612.pdf p. 1
[33] See [11]
[34] https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2018JD028489
[35] https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2018SW001880
[36] https://www.imperial.ac.uk/news/189371/volcanoes-mush-reservoirs-rather-than-molten/
[37] https://www.sciencedaily.com/releases/2018/09/180904093838.htm
[38] https://www.youtube.com/watch?v=34wtt2EUToo

dual-lobe comets and asteroids[39]), it seems a bit of a hindrance for the rest of astronomy and astrophysics to remain in the *Dark Ages* (pun intended). After all, calls for the re-measuring of black holes have already gone out, new levels of radiation around Earth[40] and Saturn[41] [42] have been found[43] and all that remains is to tie this web of obvious electric current together with non-gravitationally based models which utilize magnetohydrodynamics, quantum electromechanics, superfluidity, high energy plasma physics, and new electromagnetism.[44]

As the author mentioned in the later sections of "Magnetic Universe Theory," there are several untapped sources (even unexplored) of charge flow that could more than solve humanity's needs for electricity. If an oil executive was told that a totally untapped, massive, and inexhaustible source of crude oil was to be found, and all they needed was to go to a certain depth, they would spare no expense in research and development for acquiring that energy source. That makes sense at this current juncture. While it is barbaric, burning so-called fossil fuels provides cheap chemical energy which can be converted into mechanical advantage to create high tension power lines for general widespread use. The production of the lines and maintenance also provides countless jobs and need.

When Tesla and Steinmetz transformed the electric grid of the US and Europe, and eventually ushered in a new world of energy and connectivity, they never imagined, however, that we would stop and remain transfixed in the same system. Both would have expected us, by now, to have tapped into Birkeland's sea of charge at the poles, and to wirelessly transmit the superfluid **real** aether all around the planet. Again, we know that 100,000- 650,000 A circulates above and around the Earth[45], in perpetuum, and that it is mostly being wasted. But despite this the sun actually will not run out of mass for billions of years[46], because the amount of mass it sheds yearly is miniscule to the current size (even without additional mass coming from the galaxy (GEC) or cluster (SGEC).

So why are we not racing to develop this source? Leadership failures, pure and simple. Whether it is scientific leadership, or government comptrollers, funding of weak endeavors is bound to continue human dependence on fossil fuels, and also prolong the time which it takes for mankind to develop truly green power technology, which takes advantage of the free energy and charge in the atmosphere, space, and the high tension between the Earth and the moon.[47]

As for current funding, this was covered in the first part of this series. But, more to the point, the amount of money that has been spent on the US nuclear program since 1940 far exceeds the investment costs which would be needed to explore this power production technology,[48] and also to explore other important avenues, such as the Changes - which have no substantive research at all.

Regardless, the DM community needs to straighten out its propositions and intentions. The scattered and seemingly desperate threads that are proposed seem more like cash grabs than realistic proposals. They certainly do not seem like empirical propositions with the best intentions and most honest observations. Rather, it seems like more attempts to uphold the house of cards that has become the Dark Universe, and by extension, Big Bang Cosmology.

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[39] See: Ultima Thule http://pluto.jhuapl.edu/News-Center/News-Article.php?page=20190101

[40] http://articles.adsabs.harvard.edu/cgi-bin/nph-iarticle_query?1983SSRv...34..223W&data_type=PDF_HIGH&whole_paper=YES&type=PRINTER&filetype=.pdf

[41] https://www.nasa.gov/press-release/goddard/2018/ring-rain

[42] https://www.jpl.nasa.gov/news/news.php?feature=7251

[43] Not to fail to mention the proven connection of Earth's water to Saturn, now (isotopes): https://phys.org/news/2018-12-saturn-satellites-earth-moon-phoebe.html

[44] See [6], "R Distinti" & http://www.distinti.com/docs/neThesis.pdf

[45] [6].Table 7

[46] https://docs.google.com/spreadsheets/d/1KtbWGKILL0OP3sVbp0eNUuT06Ls3bJiA0gOkM21DRzM/edit?usp=sharing

[47] See [14], pp. 110-125

[48] [5] p.2

Table 1 :: Proper Physics Chronology[49]

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[50]	1972
QCD	Gross, Wilczek, & Politzer	1973
SUSY	Werner Nahm	1978
MOND	Mordehai Milgrom	1982-83
String Theory	Green & Schwarz	1984
Dark Energy	Friedman[51] or Sivaram[52]	1924 or 1986
M Theory	Edward Witten	1995
Intrinsic Redshift	Halton Arp[53]	1998
MACHOs	unclear	2002?[54] [55]

[49] Tables 1 and 2 reproduced from [11]; all references in [13] included, as this paper is a follow-up.
[50] https://www.velikovsky.info/Ralph_Juergens
[51] http://home.fnal.gov/~skent/early.html
[52] https://arxiv.org/ftp/arxiv/papers/0809/0809.3364.pdf
[53] https://www.haltonarp.com/articles/intrinsic_redshifts_in_quasars_and_galaxies.pdf
[54] http://www.astro.caltech.edu/~george/ay20/eaa-wimps-machos.pdf
[55] https://theconversation.com/from-machos-to-wimps-meet-the-top-five-candidates-for-dark-matter-51516

WIMPs	unclear	2008[56] or 1980[57]

Table 2 :: Falsifications

SUSY	2012[58] - 2017[59]
CDM	2012[60], 2015[61], 2016[62] - 2018[63] [64] [65] [66]
LCDM	2010[67], 2014[68]
WIMPs & MACHOs	2017[69]
MOND	2018[70] [71] [72]
Galaxy Rotation and DM	2017[73] [74]
Standard Redshift	2017[75] [76] [77]
Galaxy Rotation and MOND	2018[78]
Higgs-boson as non-standard Quark	2018[79]
Dark Energy	2018[80]
LDM	2018[81]

Conclusion

Untapped sources of energy remain an important long-term discussion. But in the interim, as scientists scatter from the failing and failed Dark Matter paradigm, it will be necessary to qualify and quantify the data and bring it under the PEMC paradigm, to begin restoring previous evolution in science and humanity's standards of living. When EMF was discovered and made humanity's servant in the 1800's it led to massive change, and some of it was horrific. This, just as DM, was due to a misunderstanding of the meaning and value of what was found - the true Aether: charge. PEM is the true Unified Aether Field. However, DM scientists continue to be befuddled, or to create fantasies to prop up their grants and publish fancy mathematical papers, abusing that tool, and to no real benefit of mankind. Meanwhile, a completely new world of basically free,

[56] https://www.astro.umd.edu/~ssm/darkmatter/WIMPexperiments.html
[57] https://www.scientificamerican.com/article/dark-matter-exotic-possibilities/
[58] http://backreaction.blogspot.com/2016/08/the-lhc-nightmare-scenario-has-come-true.html
[59] https://www.space.com/39001-dark-matter-doesnt-exist-study-suggests.html
[60] https://arxiv.org/abs/1204.2546
[61] http://adsabs.harvard.edu/cgi-bin/bib_query?arXiv:1406.4860
[62] http://adsabs.harvard.edu/abs/2016arXiv161003854K
[63] https://arxiv.org/pdf/1808.09823.pdf
[64] https://academic.oup.com/mnras/article/476/3/3124/4875952
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[78] https://arxiv.org/pdf/1801.09304.pdf
[79] https://www.nature.com/articles/d41586-018-06130-9
[80] https://arxiv.org/pdf/1810.05027.pdf
[81] https://arxiv.org/pdf/1810.10543.pdf

untapped, endless energy awaits us. If only we would have the sense to stop the spending spree, and really invest in the proper Science.

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