

A note on the origin of the concept of dark photons, dark chemistry, and dark biology

S. Halayka^{*†}

November 5, 2008

Abstract

A brief note is given, highlighting the origin of the concept of a dark form of electromagnetism, chemistry, and biology.

1 Letter to the Editor

It has recently become popular to openly discuss the concept of dark photons, dark chemistry, and dark biology [1, 2].

These topics have also been discussed at great length in the past by the independent researcher Matti Pitkänen [3, 4]. As is with most independent researchers, Pitkänen's work is generally not accepted for publication in specialized journals, and so it suffers from low visibility. It is not surprising then that his work may have "slipped through the cracks" when it came time to compile the reference sections of [1, 2].

However, it would be a great disservice to Pitkänen to remain without citation in regard to these subjects, which is why I am writing this letter. I do not know Pitkänen on a personal basis, and I certainly cannot claim to understand the entirety of the mathematics behind his work, but even a lay person such as myself can clearly see that the foundation of the concepts in question here lie squarely with him. Of course, this assumes that other low-visibility works from even earlier times are not still waiting to be re-discovered.

Although Pitkänen's general style may not prove to be correct at the most technical of levels, it would still be rather unfortunate if the majority were not made aware of the origin of the concepts of dark photons, *etc*, in his work.

References

- [1] Feng JL, Huitzu Tu, Hai-Bo Yu. Thermal Relics in Hidden Sectors. arXiv:0808.2318v3 [hep-ph]; 2008

^{*}shalayka@gmail.com

[†]Regina, SK

- [2] Ackerman L, Buckley MR, Carroll SM, Kamionkowski M. Dark Matter and Dark Radiation. arXiv:0810.5126v1 [hep-ph]; 2008
- [3] Pitkänen M. Topological Geometroynamics. Chapter 9, Section 6. ISBN: 0955117089; 2006
- [4] Pitkänen M. Dark Nuclear Physics and Condensed Matter. <http://www.helsinki.fi/~matpitka/pdfpool/exonuclear.pdf>; 2006