

## Making Sense of C-nu-B Anisotropies

### Predictions from Antimatter Black Hole Physics

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#### Preface:

There are three non-disjoint sets of physicists:

1. model-builders
2. experimentalists
3. educators

Of course, a physicist can, and frequently does, change roles during the course of their lifetime typically with youthful dreams of model-building, spending most of their time/life as an educator, and perhaps ending their career with A. a realization that we know almost nothing about the true physics of our universe - XOR - B. they latch on to a decent idea which sometimes reflects reality and sometimes does not .. Obviously, Albert Einstein was a model-builder for most of his life; however, Richard Feynman, perhaps the most highly regarded physicist of human history, is known for his contributions to theory BUT spent most of his time in education. This is the seeming irony of the discipline.

Quite recently, I have committed the 'unforgivable sin' of contacting luminaries in various areas of physics with the forgivable hope that one of them would actually listen to me. I have not contacted them out of ego nor pride; in all honesty, I'm concerned the ideas will die with me whenever that time comes. I'm an outsider with some interesting ideas that relate to cosmology and black-hole physics. The concern here is that IF my ideas are *more* than 'just interesting', IF they *actually correspond* to the physics that define our universe, we're in *serious trouble* if those ideas 'pass on' with me.

That brings us to the discovery of the Dipole Repeller in 2016, published early 2017. Also in 2016, a seemingly unrelated article was published:

<https://arxiv.org/pdf/1610.01154.pdf>

which, as a minor point, deals with cosmic neutrino background, C-nu-B, and how it relates to GRBs, gamma ray

bursts. But, as usual, I'm jumping ahead .. The earliest article I can find about the C-nu-B is from 2006. Including that, there are **only six** relating to the C-nu-B published between 2006 and 2016. Ten years – only six articles; which shows the reader **how brand-new** the field actually is. All that means to me personally is – the field is **RIPE** for predictions .. Back to the article above and a missing line from Table 3:

$\frac{\text{lambda cm}}{10^{-5}}$	$\frac{\text{delta-phi}_1}{\sim 10^{-25}}$	$\frac{\text{delta-phi}_2}{\sim 10^{-25}}$	$\frac{\text{delta-phi}_3}{\sim 10^{-14}}$	$\frac{\text{delta-phi}_4}{\sim 10^{-4}}$
	$\frac{\text{delta-phi}_5}{\sim 10^{-6}}$			

Values were extrapolated from other entries. Notice the second and third columns of that missing line: they're **the same**. This corresponds to the observed wavelength of 'light' from GRBs just between UV and visible where the predicted circular-polarization angle-shift contributions from CMB and C-nu-B **are equal**. By examining the other values, we inspect the last three contributions **swamp-out** those contributions **but are dependent on direction /** intervening intergalactic magnetic field and assumed uniform 'space-time forward scattering due to non-commutative field theory'. **Those three factors can conceivably be subtracted-out with a comprehensive all-sky survey**. Which leaves us with the two we care about relative to antimatter black-hole physics.

Once we create a 3D-map of intergalactic contributions of  $\text{delta-phi}_3$  through  $\text{delta-phi}_5$ , we note any statistically significant difference between  $\text{delta-phi}_1$  and  $\text{delta-phi}_2$ , directionally. We pay particular attention to the cone projecting toward the center of the Dipole Repeller.

This article is dedicated to Hope Micheal and Stephen Hawking.