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## 1. The evidence for a single massfree Aether continuum: Grote Reber and Aetherometry

In L'Abécédaire, Gilles Deleuze discusses how 'desert periods' - epochs of dearth in creativity - forget, literally forget, what was discovered by, and known to, epochs of creative joy. The work of Grote Reber is a clear example of such forgetfulness, because it does not fit within present-day cosmology and astrophysics. No theory predicted his experimental findings, and none could explain them. So, Reber slipped into obscurity, in an epoch where the microwave Cosmic Background Radiation (mCBR) was celebrated as evidence for the Big-Bang and a New Aether Drift.

When we wrote the experimental monographs of the present volume we realized how all Light spectra were doubles of Dark spectra. Once applied to the mCBR blackbody, this permitted us to identify both a kinetic spectrum of cosmological Matter (the real Dark Matter), and a radiative, ambipolar spectrum of massfree energy (the real Dark Energy). But the kinetic spectrum of Matter was varied - or could, in principle, be varied; it would differ for leptons and baryons. However, if this variation had the fluid-phase consistency that our aetherometric model predicted, it should (could) be explained by *a single electric spectrum of massfree radiation*. From our study of the mCBR, we knew that the latter was *just* the blackbody characteristic of cosmological (small) *leptons*; and from the kinetic energy spectrum (CBEK) of those leptons, we could infer the exact spectrum of the cosmic ambipolar radiation (CBOR). In fact, we could conclude to much more, given that, when combined with our treatment of the universal force constant G, these studies also uncovered the structure of the massfree Aether lattice, at once electric and nonelectric. The CBOR was just one of the components of the Aether continuum.

To prove the unity of function of a single CBOR responsible for the incessant activity of cosmological Matter, it was necessary to find experimental confirmation of other kinetic energy spectra - for baryons this time - and their characteristic blackbodies (in the radio range). Our aetherometric model was the first and only model to predict these necessary radio Cosmic Background Radiation (rCBR) blackbodies (plural), if other elements of Matter were cosmological in nature and present in extra-galactic space. Our treatment of the mCBR anisotropy suggested the presence of baryons (likely cosmological), so we made explicit predictions about the radio CBRs of hydrogen and helium (Tables 4 to 6 of monograph AS2-17C), and challenged NASA and its radio astronomers to find these radio blackbodies. Suffice it to say, our challenge fell on deaf ears.

So, just as Reber's findings had lapsed into obscurity, so the issue of the rCBRs has laid dormant since 2002. Until Pete Giovagnoli graciously brought Reber to our attention in mid-2005. Here was experimental confirmation of the very radio blackbody of cosmological protons exactly where the aetherometric model had predicted it would occur - and thus stark proof of the existence of a single CBOR spectrum of Dark Massfree

Energy and the accuracy of the model. We were elated. The way forward for all radio astronomers, NASA included, was now clear: to reproduce Reber's findings and extend the search to include the helium and other radio CBR spectra predicted by Aetherometry.

But Reber's work, though sparse, brought other jewels with it. For a long time now, we had sought evidence that galaxies (and likewise stellar systems) function as factories for the production of the particles of ordinary Matter, by constantly drawing in a raw material of Aether energy and cosmological Matter. Now, Reber's findings of the 144m (1) wave absorption at the galactic core and its presence in the intergalactic medium suggest a net influx of the CBOR from the 'medium' outside the galaxy towards the galactic nucleus; the same influx creates the 144m galactic halo, as if the galactic core drew massfree energy and cosmological matter from the extragalactic space. In aetherometric terms, this translates into a growing compression of the cosmological lattice, including its cosmological Matter, as it flows inward toward the core of the galaxy.

Cosmologically, these findings constitute evidence for a totally different interpretation and evaluation of the mCBR than the abstruse relativistic faith in the Big-Bang. They permit us to situate the problem in the ontological terms that were dear to Leibniz and above all to Spinoza: the universe is infinite, but its infinity is one of Time; it has no beginning and no end. But it is also one, uni-, because its energy is at all times finite and conserved. A finite, conserved energy in an infinity of Time can only generate a finite Space at each moment in Time. But being finite does not mean that Space is limited to a volume, obliging us to think of an outside to Space. No, Space is enveloped and enveloping, that is what the aetherometric theories of primary, secondary and tertiary superimposition indicate. Massfree energy Space is superimposable. There is, therefore, no volumetric limit to Space, no definite Space. Space is an energy property. And since energy can fold within itself, so can Space fold within itself. A finite Space at any moment of Time is not incompatible with an indefinite volume of Space devoid of an outside. Perhaps it is high time that Physics starts thinking energy, Space and Time in a functional way.

(1) Our 142.7m, the insignificant difference being due to our use of the exact value of the fine structure constant.

Alexandra Correa Paulo Correa

Toronto, March 2006

## 2. A Note on Grote Reber's 2.1 MHz Surveys and the Proton Radio CBR By Peter Giovagnoli

In July of 2005 I had the delight of surprising two pioneers by conveying to them the pioneering work of another.

Immediately after reading AS2-17C and Dr. Paulo and Alexandra Correa's prediction of a 2.1 MHz proton radio CBR, I did what any good web surfer does these days: I Googled for it. That led to "The History of Radio Continuum Surveys" by Richard Wielebinski, which mentioned Grote Reber's 1968 radio survey at 2.1 MHz, in Tasmania.

I'll admit, I was learning about Grote Reber for the first time as well. He's mentioned in Timothy Ferris' book *The Red Limit* from 1979, which I'd read when I was young, but I guess Reber faded from my mind against the heroic figures of Big Bang cosmology. At least I'd remembered Arp, though! Like Arp, it seemed Reber was labeled a maverick for finding the 'echoes of the Big Bang' not worth listening to, and telling people exactly what he thought.

Searching again, I thought I'd find the 1968 results somewhere in an archive of such data. *Great Radio Continuum Surveys of the '60's* or something. After all, an apparently unique radio survey by a radio astronomy pioneer would be part of the literature, surely!

Nope. I was not led to an academic archive, where I could purchase Reber's publication of findings from 1968, or even to a paper that referenced them. It seemed Reber's survey had been abandoned. But I did come across "Endless, Boundless, Stable." It's the text of a lecture Reber gave at the University of Tasmania in 1976, and it recounts not only the 1968 survey results and Reber's tale of getting there, but also the outline of his cosmology of the time. An endless, boundless, stable UNIVERSE? No wonder I found the sole publicly accessible copy on an amateur cosmologist's web space. This was samizdat!

What Reber observed in the southern sky was a bright extragalactic emission continuum at 2.1 MHz, brightest at the galactic poles, dimmer in the plane of the galaxy. He hypothesized that all intergalactic space must be filled with rarefied ionized hydrogen, with Compton scattering at 2.1 MHz its signature, or one of its signatures; the radiation would be absorbed by ionized hydrogen in the galactic disk, producing the darker band in the galactic plane. Later he proposed an inhomogenous intergalactic medium with the ionized hydrogen concentrated in plasma haloes around galaxies, as stated in his 1986 paper "Intergalactic Plasma." That 1986 paper revisits Reber's 1968 survey, teases out a possible geometry for such a halo, and finally mentions a preliminary survey from 1986, near Ottawa, that showed the same general pattern as the southern survey.

I first read "Endless, Boundless, Stable" sometime in 2004. The concurrence with the Correas' prediction was obvious, so obvious that I assumed they'd heard of it. Not until July 2005 did I decide it was necessary to forward them the URL for "Endless, Boundless, Stable" and convey Reber's report. It was news to them, and I was proud to be the news bearer.

During the composition of this note I came across a Reber paper I could actually buy: a 1995 reprint of 1986's article in *Astrophysics and Space Science*. Bought. I'm still looking for my own copy of "Endless, Boundless, Stable," though I suppose I should look harder: the paper gives an address, but it's from 1977! So the provenance of this tiny aid to Aetherometry is clear in one case, and I hope to make it so in the other.

It gives me some pleasure though, that a possible confirmation of the Correas' system of Aetherometry should be pulled from the attic, the junk drawer, the garbage bin of science – the wilds of the Internet! – as the Correas had saved the crucial work of Reich and Tesla (and even Nietzsche's physics) from ruin, forgetfulness, intellectual decay. As if the only way to replace a doomed paradigm is to search in the rubble for the juggernaut left behind, to gather the trash thrown away, and recognize sparkly-gold Knowledge, even if it meant picking out the gold, grain by grain... or something like that. Not that it should have to be this way. But what is, is.

Pete Giovagnoli Chicago, March 2006

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