<p style="text-align:center">See - exactly how these</p>

<p style="text-align:center">mathematical complexities of</p>

FIELD THEORIES

<p style="text-align:center">totally **OBSCURE** & **HIDE**</p>

<p style="text-align:center">Attractive and Repulsive</p>

Fundamental Forces

<p style="text-align:center">Issued: October 29th 2018.</p>

Field Theory in html: - *http://rbduncan.com/fieldtheory.html*

Also, Field Theory in Word: - *http://rbduncan.com/fieldtheory.doc*

And Field Theory in Adobe pdf: - *http://rbduncan.com/fieldtheory.pdf*

Taken from message 17681 of *http://groups.yahoo.com/group/TheoryOfEverything/message/17681*

To mathematical physicist Tony Bermanseder:

DPFJr Thank you, thank you, thank you for all this.

I'll interleave:

TB stated>You must define your terms, before doing mathematical analysis.

Why do you single out the green-down quark?>

Fitz replied: Because, in a hydrogen atom, for instance, the electron is mirroring a single entity and there is only one green down quark in the proton so I'm assuming the electron is mirroring it.

TB stated>**What do you mean with scalar frequency?>**

Send your mailing address to zeusrdx@Yahoo.com and I'll mail you one of Milo Wolff's books (I've got an extra of one of them). **Replied Fitz**

TB stated>Taking an electron mass to be at 0.51 MeV, the effective electron/up-quark mass-ratio calculates as 0.021 or about 1/48.

The down-quark would be so 58 times more energetic as the electron base and the strange-quark 287 times as such.

So your stated Wolff-frequency (scalar) for the quarks are not square those of the electron with respect to their measured energy content.>

Fitz said: Yes, I understand this. I'm simply saying, outside the proton, "*the quark to distant quark quantum units of binding energy (gravity & inertial mass) is the square of the quark to electron quantum units of binding energy (that hold the electrons in their respective orbitals).*"

Remember, nothing is at rest. Everything is moving on geodesics determined by their same frequency Machian surroundings and even though you are correct that motion does NOT exist, I'm afraid if we want our minds to catch an Occam's razor glimpse of what is really going on then we MUST bring in motion and geodesics for everything and we must use *Ampere's Laws* simply because they are the only universal laws that I know about that can be used in both the macrocosm and microcosm as well.

Once that's done we can state that "*energy is any binding change.*"

"*A geodesic path*" is being determined by a binding energy balance between the same frequency surroundings and the material which is being orbited.

A binding energy change either way is going to upset this balance and therefore the geodesic path.

Energy is produced with ANY **different** type of Binding.

That's the BEST definition of what energy is all about.

(Tony Berdanseder's writing in **black**)
(Fitzpatrick's writing in **blue**)

TB stated>So your stated Wolff-frequency (scalar) for the quarks are not square those of the electron with respect to their measured energy content.

I presume, you mean an internal quarkwave-state, de Broglie phase related.

Your heterodyne eigenresonator must be bounded by the superbrane parameters however, as those define Re and the electronic properties.

So you are seeking a finestructure for the manifested quark-lepton hierarchies.

Fitz said: You are correct here. I was wrong. I ran my mouth or typing fingers before putting my mind into gear. So please forget this and see above definition AGAIN "*the quark to distant quark quantum units of binding energy (gravity & inertial mass) is the square of the quark to electron quantum units of binding energy (that hold the electrons in their respective orbitals).*"

TB stated>Your *h* is the Action Quantum (in units Js); which reconstitutes the Modular Time in the identity [hxModular Time=Energy]; Modular Time being the scalar frequency.>

DPFJr **Exactly and I believe Milo Wolff sees this as well.**

TB stated>All this is true, but only indirectly linked to the quark-spins which you are seeking to finestructure.

Space is indeed frequency conscious, because of the natural SourceCurrents, as given in the above.

They also relate to the unitisation of resistance/impedance in the magnetic constant/electric constant ratio which is dimensionless in the definition (120Pi)^2.

And the Maxwell-Constant of course defines c^2 in the inverse production of those two finestructure constants.

Fitz then stated: Let's first return to this AGAIN: "*the quark to distant quark quantum units of binding energy (gravity & inertial mass) is the square of the quark to electron quantum units of binding energy (that hold the electrons in their respective orbitals).***"**

Yes, if we could finestructure the quark to distant quark energy then it would indeed fit right in but I'm afraid this is beyond the Weyl limit. Wouldn't it be?

One thing this does predict is that the smallest gravitational/inertial quantum should be *h* squared.

Then Fitz added>Our superheterodyne oscillator, at the *h* momentum frequency, gives us our spacetime picture.

Now back to TIMEFRAME:

As you stated the quark is at a higher energy/higher frequency but will be seen by us and even a portion of our math as in the same timeframe.>

To which TB replied>I do not understand your proposition properly here. There is only the one timeframe, which could however become subject to finestructure, due to the de Broglie phases within the wormhole.

Only after the wormhole parameters have been dilated, can the Holographic Principle of the scale relative cosmos engage itself.

In my posts I have associated higher spin of nuclear resonances with higher energy.

This is simply the addition of VPE in higher vibrational eigenstates; similar to electron levels in the atom.>

To which Fitz stated: Yes, I have no argument with this.

Yes, the finestructure is only for us in our timeframe.

The finestructure is <u>only</u> EVIDENCE of something going on in other time frames. It is not really good and sufficient evidence of what's going on there either but it's the only evidence we have. Quantum theory implies much from that evidence the same as I imply much from *Ampere's Laws* which actually will dilate the wormhole parameters as far as giving us an approximate big picture BUT still cannot eliminate the wormhole parameters as far as the math goes.

But even this is better than nothing, which we are using now. It can be used to check faulty math roads and give you a big picture approximation too. This IS Occam's razor and Dirac's prediction rolled into one.

TB stated>The c^2 constant is a superbrane parameter and because of the dualities can appear dimensionless; such as in the Microscale of 9 microns being a simple magnification of the wormhole perimeter (x c^2) as the infrared unification and the atmospheric window where the infrared radiation is not absorbed by water molecules.

This also relates to the inversion of c as proposed by POAMS and others in the modular duality of gravitational radiation to electromagnetic radiation.>

To which Fitz stated: Which I'm still digesting. BUT Thanks for teaching me all you have about your string theory world. I've still got a lot to learn. I certainly hope all these string theory 101 College kids will read all your posts at http://h.webring.com/hub?ring=quantumrelativit **which is now on my website consolidating all your prolific lion's den work.**

btw my server statistics show they ARE reading them.

z (Daniel P. Fitzpatrick Jr.)

Why E = mc2

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Re: One more question for Tony B./zeus

Tony B. stated:

>And the higher resonances are all spin-related; increased spin implies higher mass/energy in what are called Regge Poles.>

>But by itself, this is not in a different timeframe with the leptons (electrons, muons and tauons); because their short-lived existence engages the leptonic rings as s-quark constituents.>

[DPFJr](#) Thanks Tony,

Dear Zeus, I'll interleave.

[DPFJr](#) TIMEFRAME:

Let's say a certain quark, such as the green down quark in the proton, has a Wolff scalar frequency the square of the electron.

You must define your terms, before doing mathematical analysis.

Why do you single out the green-down quark?

The down quark is one kernel (up) quark (charge +2/3 and spin 1/2); joined to the -1 charged mesonic ring, SHARING the spin as h/4Pi.

What do you mean with scalar frequency?

I presume you relate to E/h as the individuated quark-energy?

Here you must incorporate the gluonic confinement, something termed lattice-QCD.

Electrons then emerge from the resonating mesonic ring into the leptonic ring via agency of the W-weakons (intermediate Vector Gauge Bosons); the W-weakons being defined in a (anti)neutrino kernel with such a leptonic ring (muon or electron).

In proposing a Wolff-scalar frequency of magnitude c^2 compared for the quark, as to say c- for the electron; you relate the wavelength of the mass-frequency equivalent via $mc^2=hf=hc/\text{wavelength}$, say as the lightpath $Re=ct$ and t the time for light to cross the protonic diameter Re (as the classical Electronic Radius).

So according to your statements, $f=c/\text{wavelength}=c/Re$, which you relate to the electron (say via the electronic radius).

Now $2Re.c^2=e*=1/hfps$ as one of the definitions for the magnetocharge, BEING the source energy for the macroquantised HE(8x8) heterotic supermembrane.

So the 'electron frequency' $f=c/Re = c/(e*/2c^2.)=2c^3/e*=2c^3.hfps=1.08\times10^{23};$

expressed in terms of the superbrane parameters.

{Recall that $Re=10^{10}$ (ps-wavelengths)/360 }.

To express the quark energies as frequency equivalents, one now engages the Higgs-Scale Induction mechanism to

relate the couplings between kernels and the rings.

The effective up-quark mass approximates as 24.72 MeV and the effective down-quark mass becomes 29.41 MeV and the effective strange quark as 146.12 MeV.

All those masses are perturbed by the gluonic energy contributions, which disallow isolated quarks due to the magnetocharge confinement.

Taking an electron mass to be at 0.51 MeV, the effective electron/up-quark mass-ratio calculates as 0.021 or about 1/48.

The down-quark would be so 58 times more energetic as the electron base and the strange-quark 287 times as such.

So your stated Wolff-frequency (scalar) for the quarks are not square those of the electron with respect to their measured energy content.

I presume, you mean an internal quarkwave-state, de Broglie phase related.

Your heterodyne eigenresonator must be bounded by the superbrane parameters however, as those define Re and the electronic properties.

So you are seeking a finestructure for the manifested quark-lepton hierarchies.

DPFJr Let's also consider two complete electron spins, all completed electron orbitals and all completed electron precession cycles to be Wolff scalar frequencies.

Let's consider us having an oscillator in us similar to a superheterodyne detector and we will therefore see only ONE matching spin/orbit frequency as SPACE and one matching scalar frequency as TIME. We will, as in string theory, see all the other harmonics as FOLDED UP.

This internal oscillator must be the heterotic superbrane in its vibratory part and so possess energy 0.002 Joules per wormhole perimeter.

The frequency for this defines the timeinstanton and its modular dual ($t_{ss}=f_{ps}$) defines the eigenfrequency for mass as the inverse.

So TIME and SPACE are intimately related via this duality in $c=wavelenght.t_{ss}$.

This can be written as c=SPACEx(Modular TIME).

This superbrane oscillator then is finestructured as SPACE and MODULAR TIME together forming the c-invariant demetricated 'quasi-ether' or Mach Frame.

DPFJr If our timeframe, represented by h, is the completion of one entire orbital precession cycle of the electron - which I believe it is - then faster scalar frequencies such as the electron itself and the quark would APPEAR to both us and our math as being in the same timeframe.

Your h is the Action Quantum (in units Js); which reconstitutes the Modular Time in the identity [hxModular Time=Energy]; Modular Time being the scalar frequency.

DPFJr NOW

Ampere is telling me that our time is being produced at h or the complete scalar orbital precession of an electron (using this horrible motion concept I see the electron orbiting many, many times while making

one h drop to a lower orbital).

Here you are inferring the Planck Action applied to the electron as a naturally occurring current element. This is an electron moving in a circular path.

Electron-Current $I_{electron}=ef$; producing a magnetic field with magnetic dipole moment, given by $[\mu]=IA=Pi.ef.r^2=-eh(mj)/(4Pim)$ as the Bohr Magneton for magnetic quantum number mj=1.

In QR the 'Natural Current' I=2eNf is a derivative from this in the substitution of the second order differential equation for current dq/dt becoming first order in 2Nef (N an integer) and chargequantum e acting as constant coefficient for changing variable frequency f.

You then intuit correctly the bosonic nature of superposed fermionic states, such as in superconductivities Cooper-Pairings, which align oppositely spinning electrons as 0-bosonic and scalar state.

In QR this natural supersymmetric state is given in the multiplier 2N.

[DPFJr](#) I also see an opposite spin, same matching impedance, electron (gaining this energy) doing the exact same thing while going up to a higher orbital.

Their impedances and spins being matched make them a temporary boson exchanging this energy.

But this is a VECTOR exchange.

Let's look at these vector energy exchanges:

In time they all add up to a scalar entity such as many deBroglie vector wave exchanges ending up with the scalar wave electron or a completed double electron spin or orbital etc.

These spins and orbitals WHEN LINRD UP PROPERLY give us all the vector energy exchanges and what we see as SPACE. But this makes space frequency concious.

All this is true, but only indirectly linked to the quark-spins which you are seeking to finestructure.

Space is indeed frequency conscious, because of the natural SourceCurrents, as given in the above.

They also relate to the unitisation of resistance/impedance in the magnetic constant/electric constant ratio which is dimensionless in the definition (120Pi)^2.

And the Maxwell-Constant of course defines c^2 in the inverse productation of those two finestructure constants.

Our superheterodyne oscillator, at the h momentum frequency, gives us our spacetime picture.

Now back to TIMEFRAME:

As you stated the quark is at a higher energy/higher frequency but will be seen by us and even a portion of our math as in the same timeframe.

I do not understand your proposition properly here. There is only the one timeframe, which could however become subject to finestructure, due to the de Broglie phases within the wormhole.

Only after the wormhole parameters have been dilated, can the Holographic Principle of the scale relative cosmos engage itself.

In my posts I have associated higher spin of nuclear resonances with higher energy.

This is simply the addition of VPE in higher vibrational eigenstates; similar to electron levels in the atom.

[DPFJr](#) BUT

It has to have a far different spacetime realm than us and a far different spacetime interval as well.

Our spacetime interval can be represented sort of as c (with h size chunks of momentum).

The spacetime interval in the quark realm, however has to be represented by a higher energy representation. The spacetime interval of the quark is being represented by c^2 and chunks of momentum of an, as yet, unknown constant.

The c^2 constant is a superbrane parameter and because of the dualities can appear dimensionless; such as in the Microscale of 9 microns being a simple magnification of the wormhole perimeter (x c^2) as the infrared unification and the atmospheric window where the infrared radiation is not absorbed by water molecules.

This also relates to the inversion of c as proposed by POAMS and others in the modular duality of gravitational radiation to electromagnetic radiation.

[DPFJr](#) When the closest sides of impedance matching electrons are going the same direction, in the same parallel path, then this gives us not only energy transfer but sigma and pi bonding and magnetic attraction. *Ampere's Laws*

Yes, this is the case, but you must remain careful to visualise the electron not as a kind of spherical particle with easily differentiated spacial coordinates.

[DPFJr](#) When the closest sides of two spinning quarks are going the same direction, in the same parallel path, then this gives us inertia and gravitational attraction. *Ampere's Laws*

Again,the quarks are not particles, but a kind a of wavefunction; characterised by quantum properties.

[DPFJr](#) This attraction in either of the above DOES NOT diminish with distance but continues, full strength, right up to the Hubble extent of our universe.

As the macroquantisation of the microcosmos of superbranes it does.

[DPFJr](#) Only the NUMBER of these vector couplings diminishes with the square of the distance.

It is not so simple, because of the cosmological principle and the relativity principles of the internalised Machian observer.

[DPFJr](#) Tony. if you can put all this into F theory or QR math then you not only win but rightly deserve the Nobel Prize.

I am really not interested in any of that. I'm just here to harmonise what is.

Tony B.

Love from the DragonHeart!

As a mathematical physicist, I also study ancient scrolls and the signature can be evaluated on a number of levels; from childishly naive to profoundly esoteric---Tony Whynot, Unicorn of SophiaGnosis !

ARMAGEDDON=DRAGONMADE=ANDROMEDAG=MARRY7=GODNAMEDRA=82
=666+1=1+2+3+...34+35+36+1=1+2.2+3.3+5.5+7.7+11.11+13.13+17.17

http://au.msnusers.com/quantumrelativity

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