Re: Through a glass darkly

Source: http://sci.tech−archive.net/Archive/sci.physics.relativity/2005−03/5946.html

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From: Dr *** (*paulpsremove_at_freeuk.com*)
Date: 03/27/05

Date: Sun, 27 Mar 2005 18:25:32 +0100

"jahn" <susysewnshow@yahoo.com.au> wrote in message
news:3anue3F6d46fdU1@individual.net...
|
| "Dr ***" <paulpsremove@freeuk.com> wrote in message
news:1111913701.2960.1@nnrp−t71−03.news.uk.clara.net...
| >
| [snip]
| > | > Tell me if I'm converting this right:−
| > |
| > | I doubt it LOL
| > | I have seen such a table for a simple dipole but
| > | I can't seem to google it up today. Anyway,
| > | atomic oscillators are eliptical structures.
| > |
| >
| > Only if moving or Tx/RXing ? unmoving against background vacuum, stable
non
| > occulting atomic oscilators in a zero gravity field should be spherical?

| Circular or Eliptical. Isotropic raditors are impossible. No magnetic
| monopoles.

Neutrons to you :−)? But I do think they are 2D polarised spatial radiators
if you force um.?
Monopoles, totempoles give me instance of either but preferably the first.?

|
| Exerpt:
| Various polarization states of the wave are characterized by the
| way the amplitude vector for the electric field depends on time:
| When is constant in time, it always points in the same direction;
| we refer to this case as plane polarization.
| When the magnitude, is constant, but the direction rotates with
| time, we refer to that as circular polarization.
| When not even the magnitude is constant, we refer to that as
| elliptical polarization.
| The elliptical case is clearly the most general case;

| −−Daniel Finley 2001−01−23

Have to check your links later.

| http://panda.unm.edu/courses/finley/P262/CircPolar2/CircPolar2.html
|
| http://physics.tamuk.edu/~suson/html/4323/polar.html
| >
| > | >
| > | > a)wave at 0 E,H at 0
| > | > b) wave at +max E,H at 90 deg
| > | > c) wave at 0 E,H at 0
| > | > d) wave at −max H,E at 90 deg
| > | > e) wave at 0 E,H at 0
| > | > f) = one cycle = E,H have traversed 360 deg = 90D open+ 90D close 90D
| > open −
| > | > 90D close =one wavelength
| > | >
| > | > I don't quite get the significance of your question as this is a partial
| > | > description of EMR generation the shift due to motion of the particle
| > would
| > | > be caused by the generation point moving against the vacuum state and
| > would
| > | > compress or decompress the transmitted wavelength. I still cant parse
| > your
| > | > question as it seems to make no sense as it seems impossible not to have
| > | > 360D for one wavelength
| > |
| > | Sadly... there is just no simple way to model the gears and cogs in
| > | the first few wavelenghts of any particular structure. This is one of
| > | the reasons QM is pressed beyond it's limits.
| >
| > Working..... :−) Ah! ha! but am digesting below

See new posting this thread update

| >
| > |
| > | Exerpt:
| > | The boundary between the near and far fields is generally considered
| > | to fall at about /(2p). Furthermore, the reactive field typically becomes
| > | negligible at distances of 3 to 10 . It is interesting to compute the
| > | boundary at different frequencies. At 60 Hz, the boundary is 833 km.
| > | Therefore, almost all cases of 60−Hz interference occur in the near

| > | (reactive) field. At 100 MHz, the boundary is 0.5m, making this
| > | frequency useful for radio communication. At 5x1014 Hz (optical
waves),
| > | the boundary is 0.1 µm, explaining why optical sources such as light
| > bulbs
| > | always appear as radiating sources and never as reactive sources.
| > |
| > | The near and far fields have other characteristics. The shape of the
near
| > field
| > | is closely related to the structure of the source, whereas the far
field
| > becomes
| > | independent of the source, taking the form of spherical waves. At
large
| > | distances, the far field takes the form of traveling plane waves. The
| > requirement
| > | for the plane−wave approximation is r>2(ds +dr)2 / , where ds is the
size
| > of the
| > | source antenna, dr is the size of the receiving antenna, and r is the
| > distance
| > | between the antennas. The wave impedance (ratio of electric− to
| > | magnetic−field magnitude) of the near field is also a function of the
| > source
| > | circuit, whereas in the far field, the wave impedance, , depends only
on
| > the
| > | medium (=377W in free space). Figure 11 graphs the wave impedance as
a
| > | function of distance. Table 1 summarizes the field characteristics.
| > | −− Ron Schmitt, Sensor Research and Development Corp −− EDN, 3/2/2000
| > |
| > |
| > |

Look at below later have read such years ago but cant remember details

| > | From:
| > | Understanding electromagnetic fields and antenna radiation takes
(almost)
| > no math
| > | http://www.edn.com/contents/images/82250.pdf
| > | http://www.edn.com/article/CA82250.html
| > | pdf above recommended for equations
| > |
| > | http://ccrma.stanford.edu/~jos/gdwn/Multivariable_Wave_Impedance.html
| > | http://farside.ph.utexas.edu/teaching/em1/lectures/node46.html
| > |
| > | 5.5. High−Frequency Electromagnetic Field Simulation
| > | http://www.oulu.fi/atkk/tkpalv/unix/ansys−6.1/content/thy_emg5.html

| > |
| > | I will keep an eye open for the sketch that shows reactive
| > | energy distribution. because it is almost the table you produced
| > | above.
| > |
| > | Sue...
| > |
| > |
| > | > |
| > | > | http://www.conformity.com/0102reflectionsfig3.gif
| > | > | From:
| > | > | http://www.conformity.com/0102reflections.html
| > | > |
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| > | > |
| >
http://scienceworld.wolfram.com/physics/Ewald−OseenExtinctionTheorem.html
| > | > | > | > | > | > |
| > | > | > | > | > | > | I see blue sky or red sky. I have no delusions
that
| > the
| > | > | > cornea of
| > | > | > | > my
| > | > | > | > | > eye
| > | > | > | > | > | > | is playing tricks on me or that the sun is
responsible
| > for
| > | > the
| > | > | > | > | > spectral
| > | > | > | > | > | > chanes.
| > | > | > | > |
| > | > | > | > This is nothing to do with the shift changes due to the
earths
| > | > rotation
| > | > | > | > which are zero because the velocity difference are zero with
| > respect
| > | > to
| > | > | > our
| > | > | > | > sun. come on dont get caught be the same confusion as PD.
| > | > | > |
| > | > | > | Try USNO ... apparent horizon or mirage.
| > | > | > | google.com

| > | > | > | or have one of your minion do it for you.
| > | > | > | Thanks for the warning.
| > | > | >
| > | > | > What was I warning you of ? and I have no minions I ate them all
for
| > | > | > breakfast:−)
| > | > |
| > | > |
| > | >
| >
http://www.google.com/search?hl=en&lr=&q=+site:aa.usno.navy.mil+usno+atmosph
| > | > ere+sunset
| > | > |
| > | > | >
| > | > | > | >
| > | > | > | > | > | > | With few if any *measurements* we can make
resonable
| > | > | > inferences
| > | > | > | > that
| > | > | > | > | > | > | the upper atmosphere is the culprit in the
illusion.
| > | > | > | > | > | >
| > | > | > | > | > | > Uh! your off on a siding to my meaning. The SOL in
| > | > independent
| > | > | > of
| > | > | > | > the
| > | > | > | > | > | > velocity of the source ?
| > | > | > | > | > |
| > | > | > | > | > | Probably not, for short paths.
| > | > | > | > | >
| > | > | > | > | > | > Ugg! are you now shifting to a variable for SOL ?
| > | > | > | > | > | No... Rembemer the disclaimer paragraph I posted.
| > | > | > | > | > | The near field space is dominated by the coupling
structure.
| > | > | > | > | > | (See Maxwell's equations: Advanced and retarded
potentials.)
| > | > | > | > | > | E and H plane energy division is different in the near
field.
| > | > | > | > | > | Motion of the structure wrt neighboring matter alters the
| > | > | > | > | > | isotropy of the 2D wave impedance.
| > | > | > | > | >
| > | > | > | > | > Yes and this generates the shift due to relative motion in
the
| > | > vacuum ok
| > | > | > | > ?
| > | > | > | > | > |
| > | > | > | > | > | A torpedo swims out of it's tube with the addition
| > | > | > | > | > | of the ships motion.
| > | > | > | > | >
| > | > | > | > | > Yes so v+v=v1= torpedo velocity
| > | > | > | > | >

| > | > | > It soon forgets the ships motion
| > | > | > | and adds it's velocity to the sea currents.
| > | > | > | >
| > | > | > | > Ug! what the torpedo ands its velocity to the sea current?
| > | > | > | >
| > | > | > | > Sea current = vsc so vsc+v1 = new sea current :−) ?
| > | > | > | >
| > | > | > | > | The submarine's speed is added directly to the
| > | > | > | > | torpedo's speed for a 2 meter range.
| > | > | > | > |
| > | > | > | > Ah! so this is what you mean v+v=v1 torpedo speed on exit
| > relative
| > | > to
| > | > | > sub
| > | > | > | >
| > | > | > | > Torpedo speed >2m = v1+sc = new torpedo speed relative to 0
?
| > | > | > | >
| > | > | > | > | Paths this short are not popular with railroad engineers
| > | > | > | > | or submarine skippers.
| > | > | > | > |
| > | > | > | > I have no problem with driving a train or skippering a
sub:−)
| > | > | > | > |
| > | > | > | > | Zealotry about the constant speed of
| > | > | > | > | light can conceal the mechanism that reconciles the
| > | > | > | > | two postulates of SR.
| > | > | > | > |
| > | > | > | > There is no need to be a zealot as v1=v1 there is no
conflict.
| > you
| > | > need
| > | > | > to
| > | > | > | > skipper more subs :−)
| > | > | > |
| > | > | > | Even I know torpedos have propellers so arent' ballistic.
| > | > | > |
| > | > | > Ballistic means being able to travel at different velocities in
any
| > | > given
| > | > | > medium so torpedoes are ballistic. No wonder you have difficulty
| > getting
| > | > a
| > | > | > job as a kipper on a sub:−)
| > | > |
| > | > | ICBM's are ballistic so I'll surrender on that fine point.
| > | > | But not on the principle I was illustrating with the swimming
| > | > | torpedo.
| > | > |
| > | > | A submarine dominates the motion of the water in it's tubes.
| > | > | An EM structure dominates the propagation of EM waves

| > | > | in it aperture.
| > | > |
| > | > | >
>	>	>
>	>	>	>
>	>	>	>	>
>	>	>	>	>	I though we were on the shift generated by velocity
>	>	>	>	>	> of source not pretty sky's.
>	>	>	>	>	>
>	>	>	>	>	>	That was not the point. We identified the place in the
>	>	>	>	>	>	path where the distortion ocuurs.
>	>	>	>	>	>
>	>	>	>	>	> Are you now at the atmospher boundry? see above
>	>	>	>	>
>	>	>	>	>	Sigh... The two GPS frequencies demonstrate this effect.
>	>	>	>	>	Again, we don't blame it on glaucoma or shakey satellites.
>	>	>	>	>
>	>	>	>	> How can f shift in GPS clearly relate to source spectral
shift
> and I
>	> can
>	>	>	> sigh as well but for much longer and in capital :−)
>	>	>	>
>	>	>
>	>
>
SIGH.....
>	>
>	>	SIGH...LOOK...
>	>	http://www.conformity.com/0102reflectionsfig3.gif
>	>
>	>	Is this what you mean by "source spectral shift" ?
>	>
>
> Only if you are prepared to concede that moving point 1/2*pi relative to
the
> vacuum causes frequency shift
I am not even gonna conceed that is causes a wavelengh shift untill
you allow electrons, women and other minority to participate in
the United Republic of Vacuum.

You are a cracker in the nicest nicest possible way :−)

Electrons are collapsed negative far field cycles. Woman are woman and are unamenable to analysis because they wriggle about to much :−) Does that let you in but please don't bust it to much:−)

Ardvark nearly fogottmy name then :−)

| Sue...
|
| [snip]
|
|