

Re: Coulomb and Lorentz Gauge

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[snip green cheess... putrid]

> : > *Ah, but there is a problem.*
> : > *Ripples on a pond have diminishing amplitude.*
> : *Approximately $1/r^2$*
> : > *When that amplitude*
> : > *is less than the height of one molecule, we can't really call it a*
> : > *wave.*
> : *So we hire a mathematician and he will call it a probability wave*
> : *function for us and we don't have to use any bad words.*
> : > *It has become Brownian motion. The energy is shared over an area.*
> : > *For light from star, the energy is shared over the surface of an*
> : *ever*
> : > *expanding sphere.*
> : *I am not sure very much sharing goes on after emission but what*
> : *you are saying is not that different from sum of all paths.*
> : > *And what do we observe of light from distant stars? Red shift.*
> : *I don't know much about Brownian motion but I do detect a hint of*
> : *Hubble heresy.*
>
> *Particles travel forever, but only go one way.*
> *Waves travel in all directions, but not forever.*
Forever? Send me a post card when ya confrim it.

Seriously... (arrragh) I am not following. Is that the same as my phrase that matter hates EM energy but loves other matter?

>
>
> *Let me tie up one more loose end on Doppler,*
> : *below and then I'll try to grasp what Brownian has to do with*
> : *redshifts.*
> : >
> : >
> : >
> : >
> : >
> : > *Hmm... You seem to have caught my cold. That would confirm viruses*
> : *are*

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- > : > transmitted by computers.
- > : *Bad Joke! I am gettin a daily visit from that CWS trojan and can't*
- > *find where it's reloader is hiding.*
- > : > *Androcles.*
- > : *I ran across this from the same author, Straus.*
- > : <http://www.conformity.com/0102reflectionsfig3.gif>
- > : *From:*
- > : <http://www.conformity.com/0102reflections.html>
- >
- >
- > *"Hence wave impedance isn't of interest here either – it would be*
- > *zero. In fact, for both the electrostatic and magnetostatic cases,*
- > *wave impedance is meaningless, because there are no waves—nothing is*
- > *changing, and field information doesn't propagate."*
- >
- > *I knew there was somehing weird about that guy. If it won't let a*
- > *wave through the impedance is infinite, not zero.*

The power dissipation in a zero ohm resistor is exactly the same as the power dissipation in a gazillion ohm resistor.

So his statement is correct.

- >
 - >
 - > : *It say's a lot about what we need to consider in calculating*
 - > *wavelength/frequency for relative moving dipoles and loops. There is a*
 - > : *profund implcation for Einstein's trick of moving a box of Maxwell's*
 - > *ether along with the antenna(s)(ae) which you'll recall is why*
 - > : *he felt compelled to fiddle the clocks.*
 - > :
 - > : *Your own experience with induction fields will confirm the near*
 - > *field predominance of E or H for loops or dipoles. I'll hazzard a*
 - > : *guess you're familiar with path reciprocity, where swapping*
 - > *transmitter and receiver indoor units, affect only the direction, not*
 - > : *the loss of a path. It is well tested and the preferred method of*
 - > *testing expensive hi power UHF arrays on a test range.*
 - > :
 - > : *Now... Look at*
 - > : <http://www.conformity.com/0102reflectionsfig3.gif> *again but imagine*
 - > *a *receiving* antenna. There is no ether to affect the incoming*
 - > : *EM wave but you can clearly see from the diagram that the antenna*
 - > *structure dominates the space fully a wavelength out from a*
 - > : *structure of significant (1/2 wave ?) size.*
 - >
 - > : *Androcles wrote: "The energy is shared over an area"*
 - > : *How about a volume?*
 - >
 - > *Not really. There'll be another bus coming along behind.*
- In the near field... for sure.

But you haven't identified any storage mechanism in a vacuum. I have. Material impurites in the vacuum.

- >
- > *The spherical shell of expanding energy moving away from the source*
- > *obeys the*
- > *inverse SQUARE law. At one parsec the same quantity of radiation*
- > *falling*
- > *on one square eyeball will fall on four square eyeballs at two*
- > *parsecs.*

No argument from me.

- >
- > *We need to be careful here, though. Dipoles don't radiate much*
- > *straight up. No market for it. Stellar radiation (and candlelight) is*
- > *spherical. Radio towers radiate disks of energy. That's more a 1/r*
- > *law.*

Stars aren't coherent sources.

- >
- >
- >
- > *The business of balancing incoming E and H fields, consistent with the*
- > *dipole or loop characteristics doesn't*
- > *: involve energy or mass transfer so there is no speed limit for these*
- > *transactions in the near field region.*
- > :
- > *: As you pointed out the dipole has significant Q so I am tending to*
- > *the notion that its length will predominate in determining the*
- > *: wavelength irrespective of the doppler shifted frequency. It's as*
- > *tho Maxwells box of ether moves with the antenna, but only*
- > *: because the structure has some influence on the E H ratios in its*
- > *neighborhood.*
- > :
- > *: So... with a little different view of Doppler shift, are you still*
- > *interested in using pollen grains to explain the Hubble curve?*
- >
- > *In the sense that the energy goes somewhere, yes. We don't use wooden*
- > *dipoles*
- > *or look for brownian motion in solids.*
- >
- > *: I'll wager you haven't even checked to see which planets have the*
- > *best soil and climate for growing ornamentals?*

Anyway... I think the point is we probably didn't lay a sufficient foundation to deduce how frequency and wavelength are doppler shifted with and without media and for loops and dipoles. The curves in Straus's paper, and the principle of Faraday rotation, leads me to believe it is not a "one size fits all" type of relation.

I AM tickled pink to learn that Einstein's moving box of ether might actually be a viable model... tho not in the sense Maxwell described. Maxwell had a lot of notions we consider absurd today but because he chose the ones that agreed with experiment, they work out anyway. I.E you could write a lot of electronic equations fully believing invisible fluid was flowing in a pipe. ;-)

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I'll have to ruminate over this a few more days before I hazard another guess about doppler shifted frequency and wavelength.

Kind regards,
Sue...

>
> *I know some that won't. :)*
> *Androcles.*

[snip]
> : > :>