

Re: Is electromagnetic field theory unified?

Source: <http://sci.tech-archive.net/Archive/sci.physics/2005-03/0881.html>

From: Franz Heymann (*notfranz.heyman_at_btopenworld.com*)

Date: 03/01/05

Date: Tue, 1 Mar 2005 20:47:56 +0000 (UTC)

"Ken S. Tucker" <dynamics@vianet.on.ca> wrote in message
news:1109679825.893876.17420@141g2000cwc.googlegroups.com...
> *Franz Heymann wrote:*
> > *"JM Albuquerque" <jm.aREM.OVE@sapo.pt> wrote in message*
> > *news:38hq00F5n299jUI@individual.net...*
>
> [...]
>
> > *The fact is that I want to learn why it radiates and not*
induces,
> > *and so on,*
> > *and so on.*
> >
> > *There are an induction field as well as a radiation field*
associated
> > *with a rotating or oscillating dipole in free space. The field*
has
> > *one term which decreases as r^{-2} and a second term which decreases*
as
> > *r^{-1} . The former is the induction field. It has a component in*
the
> > *direction of propagation. It dominates at small distances from*
the
> > *oscillator. The latter is the radiated field. It dominates at*
large
> > *distances, and it has components which are at right angles to each*
> > *other and to the direction of propagation*
>
> *Well ain't that pretty.*
> *Franz with the blessing of Bjeorn and Crieghton*
> *have decided a rotating electrostatic dipole*
> *radiates just like a rotating bar magnetic.*

With E,D and H,B interchanged, and the occasional c stuffed in to
retain dimensional homogeneity.

> *Well that old theory about the ground state of*

sci.physics: Re: Is electromagnetic field theory unified?

- > *da Hydrogen atom not radiating, you know, details*
- > *like that pesky Quantum Theory, aren't needed*
- > *acording to the 3 wise men. They've pronounced*
- > *otherwise.*

At the moment we are talking classical physics, just in case your meagre intellect has failed to notice it.

- > *They say rotat*