Re: An Electron Structure?

Source: http://sci.tech−archive.net/Archive/sci.physics.relativity/2008−04/msg01376.html

- *From*: "Ken S. Tucker" <dynamics@xxxxxxxxxxxx>
- *Date*: Thu, 17 Apr 2008 15:05:23 −0700 (PDT)

On Apr 15, 8:52 am, "Ken S. Tucker" <dynam...@xxxxxxxxxxxx> wrote:

> On Apr 14, 1:09 pm, "Ken S. Tucker" <dynam...@xxxxxxxxxxxx> wrote:
>
> > On Apr 14, 12:20 pm, "Dirk Van de moortel"
> > <dirkvandemoor...@ThankS−NO−
> >
> > SperM.hotmail.com> wrote:
> >
> > > Ken S. Tucker <dynam...@xxxxxxxxxxxx> wrote in
> > > message
> > > 4f4a0e85−2047−4121−a695−f2421acab...@xxxxxxxxxxxxxxxxxxxxxxxxxxxx
> > >
> > > > On Apr 13, 2:48 am, "Ken S. Tucker"
> > > > <dynam...@xxxxxxxxxxxx> wrote:
> > > >
> > > > > Some corrections follow,
> > > >
> > > > > On Apr 12, 4:43 pm, "Ken
> > > > > S. Tucker"
> > > > > <dynam...@xxxxxxxxxxxx>
> > > > > wrote:
> > > >
> > > > > > On Apr 12,
> > > > > > 1:39 pm,
> > > > > > "Ken S.
> > > > > > Tucker"
> > > > > > <dynam...@xxxxxxxxxxxx>

wrote:

> On
> Mar
> 1,
> 3:17
> pm,
> "Ken
> S.
> Tucker"
> <dynam...@xxxxxxxxxxxx>
> wrote:

[snip]

> Regards
> Ken S. Tucker

[snip]

> Regards
> Ken S. Tucker

Well, they say if you don't like animals, how can you like
people?
Dirk Vdm

I wouldn't like people except wife won't let me,
so I gave the neighbours dog a weiner yesterday.

Assuming my arithmetic is correct, (I'm using
Purcell's E&M pg.12, Eq.(7) to obtain the energy
stored in the three charge configuration), he
recommends using cgs − esu units.

Although I used "numeralogy", to obtain the
dimensions, it proves to me that we can store
energy electrically in very small dimensions,
that has an apparent electrical charge of one,
and a *finite* structure, below what we are able
to currently detect.
That is a definitely required 1st step to research
the electron as a structure.

I used Angular Momentum = Energy*(v/c)*x, (#)
a (v/c) ~ .1285 produces hbar/2, in the
above electron structure.
That uses x=10^−20 cm. and further assumes
the Mass−Energy is concentrated in the two
negative charges. The Mass ~ 9.11*10^28 gm,
c = 3*10^10 cm/sec.

(#) I'm uncertain if that is the correct equation,
any input would be helpful.
I employed E=mc^2 for energy and for the angular
momentum L, used, p=mc*v , L=p*x , from
the 4−momentum.

Anyway, if necessary, I think I can boost to
relativistic speeds and masses and readjust
things, to provide a model for the conjecture
of a finite electron structure.
Thanks fella's
Ken S. Tucker

On Apr 14, 1:09 pm, "Ken S. Tucker" <dynam...@xxxxxxxxxxxx> wrote:
...

− Hide quoted text −
− Show quoted text −

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Ken S. Tucker

Let's reformulate the "electron structure"
based on an advanced solution to the GR
Field Equations, (Guv=Tuv), (unitivity).

Together with Mr. Diether we created
article,http://physics.trak4.com/GR_Charge_Couple.pdf

Ref to Eq(4), S^2 = X^2 + a*b, Eq(4).

I'll rewrite that more pragmatically as,

X^2 = S^2 − (2*K)*(a*b), Eq(X^2),

where K = G/c^2 and G=Newtons BIG G.

Recapping, I'll refer to the isoceles triangle,
of 3 charges , figuratively presented by,

+

− − FIG1 (as previously posted).

Set the distances between the charges,
S(−,+) = 2* S(−,−) , exactly,

and find the charge configurational energy

E = (−q*−q)/S + 2(−q*+q)/2*S = 0.

In place of S, we'll use a geometry affected
by the presence of the charges above using
Eq.(X^2), to find an energy E', by using X,

E'= q^2/sqrt(1−2Kq^2/s^2)
− 2q^2/sqrt(1+2Kq^2/4s^2),

to obtain the Electron Mass,

E'/c^2 ~ 9.11*10^28 gm

when S~1.818*10^−20 cm.

The above is a much more powerful solution
than numerology because it uses GR's charge
couple (ref'd above) solution to find an
electron structure.
Regards
Ken S. Tucker

My opinion follows.
Wave Mechanics (WM), is ending running
an appropriate GR solution to the electron
structure.
In the foregoing, I'll use Richtmyer, Kennard
Cooper (RKC) text, "Intro to Modern Physics",
which is fairly standard.

Ref to Eq.(RKC 9.15), the magnetic moment "(mu)"
is given by,

(mu) = −(q/2) v*r , Eq.(RKC 9.15),

q=charge, v=velocity, r=radius.

((I'm somewhat irritated by the use of the term
"v" as a velocity, as that implies a direction,
though "v" is depicted as a scalar, ok, I'll be
nice and let it go this time)).

Set dx^0/ds = 1/sqrt(1−v^2/c^2) = u^0.

Then r = x^0 so that Eq.(RKC 9.15) is,

(mu)^0 = −(q/2) v * x^0, Eq.(kst 9.15.1).

That last equation implies,

(mu)^0 => oo as v=>c as does the mass.

Regards
Ken S. Tucker
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