Re: electron emitter details for double slit experiment

Source: http://sci.tech−archive.net/Archive/sci.electronics.design/2008−04/msg02603.html

- *From*: John Devereux <jdREMOVE@xxxxxxxxxxxxxxxxxx>
- *Date*: Thu, 17 Apr 2008 09:12:01 +0100

John Larkin <jjlarkin@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx> writes:

> On Thu, 17 Apr 2008 01:52:27 GMT, Jamie Morken <jmorken@xxxxxxx>
> wrote:
>
> > Hi,
> >
> > Do you have a link to the experiment setup that you were
> > describing with the photon detectors? I would like to
> > take a look at it closer but didnt see the exact setup.
>
> No specific reference. You'll have to hunt. The page you just cited
> says pretty much the same thing.
>
> > Regarding entanglement where the two measured particles have
> > opposite spins, I would think that when the two particles are
> > created they get their opposite spins at that point.
>
> What's amazing is that they got opposite spins at creation, but the
> spin axis is totally undefined. The spin of particle X is undefined
> and the spin of particle Y is undefined, but they are strictly
> opposite. So, after they are a light−year apart, if someone measures
> the up−down spin of X and discovers that X is up, then the spin of Y
> is down. But if you consider spin to be a left−right thing and measure
> one as left, then instantly the other becomes right. The particles
> have no idea of your definition of spin until the instant you do the
> test, except that they know that spin is quantized, +1 or −1 along
> *any* axis you pick, and they know that their spin is the opposite of
> their mate's.

> I know people, some who have posted here, that think that consciousness does not exist. They say that the brain is just a mechanism that follows physical laws, just a state machine. The fact that randomness is involved just makes it a flakey state machine. If you cling to classical physics, then that's a perfectly reasonable viewpoint. We're just a bag of chemicals.
>
> But in fact the brain is a quantum−mechanical computer, and quantum mechanics is mystical. Things happen in concert, light−years apart. A photon is indivisible, but knows that there is a slit far away, and acts accordingly. A photon can interfere with itself over a path that's miles long, a path that it provably does not take. Matter is solid and is a wave; it's mostly here but a little bit everywhere. To cling to classical physics is to deny magic and, I think, to deny spirituality and consciousness itself.
>
> How's that on the rant−o−meter?

Not bad.

I don't think there is much actual evidence that the brain relies on quantum effects though. (I mean the "spooky" ones of which you speak − obviously quantum mechanics is the mechanism underlying e.g. chemistry).

And the "We're just a bag of chemicals" theory does seem to dispose of a lot of the "problems" in philosophy and religion.

−−

John Devereux
.