

Re: Photons shapeshifting to wave prior to measurement

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RP <no_mail_no_spam@yahoo.com> wrote in news:3ap35kF68keohU1@individual.net:

- > *It's classical wave interference, by the book. The fringes are caused*
- > *by constructive and destructive interference as the wavelets that have*
- > *traveled different distances to points on the target.*

yes.

- > *The notion that*
- > *a single photon at a time sent through the slits produces the same*
- > *pattern, is first of all not realizable, since untold number of*
- > *photons are passing through those slits in any vanishingly small*
- > *interval.*

No. There are single photon experiments, where the beam has been so attenuated that only single photons go through. CCD Detectors with microchannel multipliers are sensitive enough to detect single photons.

http://www.teachspin.com/products/two_slit/experiments.html

- > *The reason that the same pattern emerges is that this wave*
- > *(photon), in combination with the ambient field, borrows energy from*
- > *that field as it catalyzes a transition between orbitals. The*
- > *probability of this event is higher at the bright bands because the*
- > *amplitude is greater there. The probability is itself that of the atom*
- > *to absorb energy, which of course is higher when the available energy*
- > *is higher.*

Interesting.

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bz

please pardon my infinite ignorance, the set-of-things-I-do-not-know is an infinite set.

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