

Exhibit 6 Transcript of *Shape of a Photon?*

Youtube restored the original video and it is now listed as private at:

<https://www.youtube.com/watch?v=rSFaY1X6Fg4>

Plaintiff uploaded this video as evidence for trial...

<https://www.youtube.com/watch?v=IjwfO-cQ530>

Highlighted in **blue** are the instances of plagiarized terms, phrases, and concepts.

Visualizing Light

Light...

It allows us to read, to see the faces of the people that we love. It even allows us to reach out and touch countless distant objects in a single moment.

And yet few of us possess a rational **visualization of how light works** to accomplish these feats.

This video aims to synthesize the known empirical behavior of light as thoroughly described by the theoretical framework of Quantum Mechanics into a **rational visual explanation**.

We hope to improve upon typical particle-wave depictions while preserving the topology of the established mathematical descriptions.

Light refers to electromagnetic radiation of any wavelength.

In this sense gamma rays, x-rays, microwaves, and radio waves are also light.

To visualize the concept of EM radiation, as with any atomic phenomenon, we start with **the surface of the atom: the electron shell**.

See our videos on electricity and magnetism to follow up on how these phenomena are actually two sides of the same coin.

Experimentation suggests that 99.999 % of the electron exists within 430 picometers of the nucleus while the remainder extends indefinitely.

We illustrate the tiny thin 0.001 % of the electron as these **radial filaments that extend outwards from the electron shell.**

Physically, light is an exchange process that begins at one atom and ends at another.

We start our visualization with **two hydrogens** because they are the simplest of atoms, **each having a single electron shell.**

From Quantum we expect that there's a small probability that the extended electrons of each atom overlap.

We illustrate these overlapping electrons as entwined into a hypothetical helical structure.

We visualize the process of light mechanically by considering **the photon as a deformation of this overlapping electron structure between atoms.**

A photon is traditionally described as an impulse that results from the relaxation of an atom's electron from a higher energy state to a lower.

An electron may be excited due to electric stimulation or as the result of receiving photons from its neighbors.

We depict each electron shells as expanding and contracting.

This regular motion serves to signify the energy state or excitation level of the electron.

A fast breath rate indicates a high energy relative to a slow one.

Because **the electron shells of these two atoms are entwined, the expansion of one shell pulls on its neighbor's shell to contract.**

These two atoms have the same energy, so they display equivalent breath rates.

This means their e-shells are in perfect mechanical harmony.

There is darkness between the atoms though **the entwined filaments stretched between them twist back and forth incessantly.**

However, if only one atom's electron is suddenly excited to a higher energy state, their entwined filaments must deform to accommodate the excess **torsional pressure.**

The torsional propagation of this pressure constitutes the photon.

The photon equalizes the energy states of the electrons.

After the photons, the receiver atom's electron has a slightly higher energy and the emitter is slightly less.

Darkness resumes between the atoms.

Light is thus imagined as a discrete torsional deformation of the thin tails of atomic electron shells.

Note that the helical interlocking e-shells display a natural periodicity or wavelength which shortens as the filaments are wound tighter and tighter.

The interconnection can be thought to store elastic energy like a torsion spin, and this helps us visualize the relationship between wavelength and energy of the photon.

We hope this model of light serves you well.

Please share your ideas in the comments.

Subscribe and ring the bell to be the first to see the next installment in the series: Visualizing Gravity.

Thanks for watching!

