

Is Quantum Entanglement The Same Thing As MAGIC?

Your brain produces and manipulates electric energy! You can spend 30 years on yoga and brain-training exercises to try to gain a small portion of the control of that power but...why wait? You can be "X-Men"-like turbo powered today!

Brain-to-computer interfaces are absolute *bullshit* and they are already being used in the most socially destructive means possible. Black-and-white computer logic and organic human fuzzy logic will never get along. Every intelligence industry "big data" spy project sold to the CIA by Google has failed spectacularly and caused the biggest intelligence failures in centuries. Sociopath frat boy billionaires are trying to be immortal on the internet or connect us all on the The Matrix. Every one of their projects has exemplified the delusional narcissism of Stanford tunnel-visioned elitism.

While "A.I." is a great catch phrase for investor pitches, AI is an utter failure in reality. Computers can't understand human process, they can only *fake it* for a few months before the fuzzy degradation anomalies appear and prove it all wrong. There is a way, though, to connect minds without using computers!

Modern devices are being developed to ORGANICALLY amplify the Quantum Energy manipulation that your brain already undertakes. These devices work, some-what, like a radio amplifier amplifies the sound for your stereo.

One has to wonder if the core of the person just unplugs and goes out exploring after the body dies. Is the soul individual? Or a group? Is soul the same as consciousness? Is the matrix? the web?

Can the mind move time, objects, ideas, reality, place (via teleport)? Are "ghosts" just people stuck half-way through the unplugging?

We all want to actually see people move time, objects, ideas, reality, place, politics, social process...today, right in front of other people. We all want to see it go from theory and TED lectures to physical reality that we can all watch happen right before us.

While CERN Switzerland has had to spend tens of billions of dollars on shiny hardware to try to accomplish these things, each person may already have everything they need to do "super-powers" right in their head...right now!

How did centuries of doing things one-way suddenly just start changing overnight? Where did all the newspapers go? Where did all the old TV go? Where did the old kind of politics go? Where did #MeToo come from? Where did media-on-demand come from? Where did all of the political leaks come from? When you go forward in time, and look at 2007 to 2020, you see more social changes-per-volume-of-people than in all of recorded history. How has that been accomplished?

We are exploring the dynamic of organic electrostratic Let me explain, first with some state-of-the-art science geeky stuff and then with some 1000 year old philosophical kinda' stuff.

The human brain is a power source, or rather, a collection of approximately 80 billion batteries.

Each [neuron](#), the functional unit of the nervous system, is a nerve cell that in the brain possesses the ability to accumulate a charge across its cell membrane, which results in a small, but meaningful [voltage](#). The average [neuron](#) contains a resting [voltage](#) of approximately 70 millivolts or 0.07 volts.

This is quite small when compared to the 1.5 volts in a AA battery or the 115 volts in a wall socket.

What is interesting though, is that although 70 millivolts may seem insignificant, the microscopic scale at which it occurs is fascinating.

Voltage is defined as an electropotential difference between two points. In the case of the AA battery, this potential difference is measured between the top (+) and bottom (-) of the battery and is due to an excess of negative charge at the negative pole. In a neuron, this potential difference is measured across the lipid bilayer and the intracellular side is generally more negative. Normally, the lipid bilayer is around 5 nanometers thick, which means that the 70 millivolt potential difference is separated by only 5×10^{-9} meters. In contrast, a AA battery's poles are at each end of the battery and are 2 inches (5×10^{-2} meters) apart.

When there is a potential difference between two separate points, like the potential difference across the lipid bilayer of a neuron, an electrostatic field is produced. A great example of an electrostatic field is the field generated between the clouds in the sky and the earth during a thunderstorm. This field is produced by a difference in charge that develops between the clouds and the surface of the earth. If this field becomes too strong, a spark of electricity shoots across the gap between the positive and negative poles and becomes lightning! Now the strength of this field is defined by a simple equation:

$$E = - \Delta\phi/d$$

where the *strength of the field* (E) is directly related to the *potential difference* ($\Delta\phi$, otherwise known as voltage) divided by the *distance* (d) between the poles. So, in a lightning storm, the electrical field would be measured as the difference in voltage of the earth and the clouds, divided by the distance between them. Lightning is produced when the electrostatic force (E) is around 3 million volts per meter!

How does a lowly neuron, with its 70 millivolts, compare to the awesome power of a lightning strike?

We can simply calculate the electrostatic force across the lipid bilayer to find out. We know that the voltage across a neuron's membrane is 0.07 volts and the average thickness of the membrane is 5 nanometers.

$$E_{\text{Neuron}} = -(0.07 \text{ volts}) / (5 \times 10^{-9} \text{ meters})$$

$E_{\text{Neuron}} = 14$ million volts per meter! That's more than *four times* the electrostatic force required to produce lightning during a thunderstorm!

Ok. Got it? Your brain moves your body and other stuff with it's own energy!

If you think that is freaky, get ready for the REALLY shocking part:

Quantum entanglement is a physical phenomenon that occurs when pairs or groups of [particles](#) are generated, interact, or share spatial proximity in ways such that the [quantum state](#) of each particle

cannot be described independently of the state of the others, even when the particles are separated by a large distance ie: from one side of the planet to the other or across the universe!!!

Measurements of physical properties such as position, momentum, spin, and polarization, performed on entangled particles are found to be correlated. For example, if a pair of particles is generated in such a way that their total spin is known to be zero, and one particle is found to have clockwise spin on a certain axis, the spin of the other particle, measured on the same axis, will be found to be counterclockwise, as is to be expected due to their entanglement. However, this behavior gives rise to seemingly paradoxical effects: any measurement of a property of a particle performs an irreversible collapse on that particle and will change the original quantum state. In the case of entangled particles, such a measurement will be on the entangled system as a whole.

Such phenomena were the subject of a 1935 paper by Albert Einstein, Boris Podolsky, and Nathan Rosen,^[1] and several papers by Erwin Schrödinger shortly thereafter,^{[2][3]} describing what came to be known as the EPR paradox. Einstein and others considered such behavior to be impossible, as it violated the local realism view of causality (Einstein referring to it as "spooky action at a distance")^[4] and argued that the accepted formulation of quantum mechanics must therefore be incomplete. Einstein was WRONG!

Later, however, the counterintuitive predictions of quantum mechanics were verified experimentally^[5] in tests where the polarization or spin of entangled particles were measured at separate locations, statistically violating Bell's inequality. In earlier tests it couldn't be absolutely ruled out that the test result at one point could have been subtly transmitted to the remote point, affecting the outcome at the second location.^[6] However so-called "loophole-free" Bell tests have been performed in which the locations were separated such that communications at the speed of light would have taken longer—in one case 10,000 times longer—than the interval between the measurements.^{[7][8]}

According to *some* interpretations of quantum mechanics, the effect of one measurement occurs instantly. Other interpretations which don't recognize wavefunction collapse dispute that there is any "effect" at all. However, all interpretations agree that entanglement produces correlation between the measurements and that the mutual information between the entangled particles can be exploited, but that any *transmission* of information at faster-than-light speeds is impossible.^{[9][10]}

Quantum entanglement has been demonstrated experimentally with photons,^{[11][12][13][14]} neutrinos,^[15] electrons,^{[16][17]} molecules as large as buckyballs,^{[18][19]} and even small diamonds.^{[20][21]} On 13 July 2019, scientists from the University of Glasgow reported taking the first ever photo of a strong form of quantum entanglement known as Bell entanglement.^{[22][23]} The utilization of entanglement in communication and computation is a very active area of research.

So what does this have to do with brain energy? It only takes 70 millivolts of power to produce a single Quantum Entanglement effect and remember, from above, that your brain has been proven to produce billions of times as much as that?

So, the questions arise: "*Can I move stuff with my mind further than the reach of my hand?*"

Can you "*create 'your own parking spot' or job offer or hot girlfriend...*" just by thinking about it?

Can you cause the future to be one way, or the other, just by thinking about it?

Can Quantum Entanglement really help us communicate better?

It does not need to be "faster-than-light" in our system. *A forehead dot QE-VR phone does need to be faster than light. We are not teleporting people, we are just sounding and looking better than 5G in a safer, cheaper, better way. Can it really work? Let's discuss:*

"...To transfer information between Alice in Paris and Bob in the Antarctic at Station 7 under 20 feet of ice, the simplest way is for Alice to create a bit of information (e.g. a binary 1 or 0) and send (stimulate) it across the QE field to Bob. For there to be real information transfer, Bob MUST NOT be able to predict what Alice is going to send. In a normal phone call, you already can't predict what the person you are talking to will say next, right? So we are already part ways there in today's world.

*Information theory calls this (by analogy) a **high entropy state**. Bob **must** be able to accurately determine WHAT Alice has actually sent once she sends it, even if he cannot predict ahead of time what it was going to be. An AI system can do this for Bob. Bob must have a high certainty that any change he observes is due to the agreed system protocol that Alice and Bob's hardware agreed to upfront. AI can ensure that it is accurately transmitted with low error. Bob can't calculate this, but AI can.*

So how could Bell QE, or other entanglement, be used to communicate? There are a few ways. First is transmission of the particles. To communicate, Alice generates a "1" particle and the entanglement guarantees that a partner particle which is also a "1" is sent over to Bob. AI checks this with Quantum pings. So assuming that Bob knows the channel distortion with some accuracy, he can then determine what Alice sent. AI takes care of the heavy-lifting and cross-checking here.

Now some people may say that this is no different than Alice just sending her "1" particle over a calibrated channel.

It IS different, otherwise the CIA and Russian spy agencies would not be spending tens of billions of dollars to try to optimize it. All that "distance viewing" stuff that Russia and MK Ultra experimented on in the 60's and 70's was not anything supernatural. It was just plain old vanilla QE that was not yet understood. Now CERN, and other hard device labs, have built hardware that manipulates QE, photographs it, and proves it!

At the quantum level, Alice can now test what particle she actually sent/stimulated without destroying that information on Bob's particle. In some cases, the quantum theory cannot establish that entanglement has actually occurred until both ends have received the particle pair, measured them, and then compared notes. A second checking channel can do this. One approach is known as the SKY KING approach.

Much like the current DEFCON Skyking messages and EAMs where a voice endlessly speaks a series of numbers on radio HF channels such as, 8992 KHz USB, 11175 KHz USB, 6737 KHz USB, 8890.94 KHz USB, 8991 KHz USB, etc.; there could be a Quantum

communications verification channel that anyone can use. Many gamers already use the DEFCON Sky King broadcasts to coordinate game moves in GOW. This would help to double check entanglement status.

When Alice generated both particles and tested them for entanglement before sending the second particle to Bob, the quantum measurement process may not preserve the entanglement beyond the measurement process. She would destroy the entanglement! (Making it super secure, right? A highly desirable feature in the Post-Snowden world). A QE ping solves this bug and turns it into a feature.

Another way to potentially communicate over QE is for Alice's AI to create a large pool of "1" particles and "0" particles in a prep repository in her device, or on The Cloud, and, ahead of time, send the entangled partners over to Bob. When Alice wants to communicate, her forehead dot QE-VR phone performs a standard protocol operation on one of her particles, and in theory, Bob's AI on his QE-VR phone should suddenly see one of his particles change state.

"But!" cry some limited vision VC's, "...Alice is not actually "sending" anything to Bob; she is just stimulating his particles!".. BOO F*CKING HOO. It does not matter as long as Bob hears her "Hello". Yes, some are freaking out because "there is nothing you can bill for". Some fools without vision are trying to slam QE because they think they will lose money because they can't put a faucet or a meter on it. Are you kidding! The big bucks in QE is in the AI to run it! People will pay trillions to experience a photo-perfect experience in the greatest scenic spots in the world with the most famous celebrities on the planet.

The QE "theorists" say they are not sure whether this is really possible since, for a low error rate, Alice has to be sure that the particles received by Bob are indeed in the correct state! AI co-linear validation-runs can solve this.

Most of us say: "Screw all theoretical physicists!... most original "theoretical" physics has been proven to be wrong. Einstein screwed the pooch. Most famous scientists now agree that Einstein was **WRONG** on some big theories. CERN has proven that PHYSICS HAS NO LIMITS AND NO LAWS! Just build the damn device and tweak it until it does what you want. THAT is the only LAW of physics: **ANYTHING CAN BE BUILT!**" Every major invention that changed society was built in about a week. You can spend decades on theories or a few weeks just knocking it out in the prototype lab. Who cares if it blows up a few times, the one time it works you just made a billion dollars.

Alice may destroy one communication of the word "Hello" at the quantum level. It is fine if she destroys the entanglement that created the word "Hello". Bob only needed to hear it once and both Bob and Alice don't want hackers to ever hear it again. Tough luck for good old "Hello", but it served it's purpose....on to the next word...

For every bit of information to be transmitted to Bob, Alice first has to stimulate the entangled partner particle to Bob before she communicates. Alice 's forehead dot QE-VR phone then changes one of her bits and then Bob's forehead dot QE-VR phone should see

his entangled bit changing, and he can then determine whether it was a "1" or "0" sent by Alice....

Who cares? Why not just use radios and cell phones instead of trying to grill up some old organic quantum energy network that has been laying around for centuries?

Because radio and cell phones can't communicate with PERFECT sound and video (8Kx8K+) through the Earth, around the globe, into space and everywhere at once, like QE can, for free...and the entire network already exists, without any new construction! Quantum energy exists. It is everywhere at once. It is not new age BS. It is PHD level science that has been proven...."

Bell and particle concurrence entanglement have now been proven in scientific studies. Get ready to put on your forehead quantum dot and go light years beyond old VR!



Just stick your forehead dot device on and talk to, and see, Bob on the other side of the world just like in the movies...

Hyperparallel transistor, router and dynamic random access memory with unity fidelities

W. Pan, "Quantum teleportation of multiple degrees of freedom of a single photon," Nature 518(7540), 516-519 (2015). [Crossref] Y. B. Sheng, F. G. Deng, and G. L. Long, "Complete hyperentangled-Bell-state analysis for quantum communication," Phys.

'The Next Leap Forward' - Four Quantum Technologies Hubs to lead UK's research drive

[Process Control Today](#)

The National **Quantum** Technologies Programme, which began in 2013, has now entered its second phase of funding, part of which will be a £94 million investment by the UK government, **via** UKRI ... conventional **communications**, or using **entanglement** working ...

[How Einstein Set Back Quantum Mechanics Three Decades](#)

<https://stuartbramhall.wordpress.com/2019/07/13/how-einstein-set-back-quantum-mechanics-three-decades/>

However China, which has recently launched a **quantum communications** satellite, is far and away the world leader in this area. *A qubit is a two-state **quantum** entangled mechanical system. An example would be a polarized photon (an elementary particle or **quantum** of light) that ceases to be entangled if a hacker tries to hack it.

[First image of Einstein's 'spooky' particle entanglement – PROVEN](#)

['spooky' effect of physics that Einstein couldn't believe has been photographed f... - PROVEN](#)

If you think QE is outlandish, consider this fact: The Pentagon Already Has Lasers That Beam Messages Into Your Head :

While this is not particularly what we are working on, it demonstrates that the “impossible” is only one micro-chip away from becoming a reality. Previously the realm of “crackpot science”, the military has openly proven that it can beam messages into your brain. Here is their powerpoint on it:



Posted By: [Jon Lockett](#)

Talking lasers can send audible messages directly into your head from up to hundreds of miles away. When perfected, this technology will be used by military and civilian applications to control crowds and individuals. - TN Editor

Military scientists at the Pentagon are developing 'talking' lasers which can beam warnings straight into the enemy's head from hundreds of miles away.

Weapons researchers at the [Department of Defense say the hi-tech weapon](#) will be able to send brief messages – in the form of audible speech – across combat zones.

The aircraft, ship and truck-mounted devices are being developed as part of a military initiative called the Joint Non-Lethal Weapons Directorate.

The scientists plan to use a phenomenon of physics called the Laser-Induced Plasma formation to make the laser a reality. First, they fire a powerful laser that creates a ball of plasma. Then, a second laser works to oscillate the plasma creating sound waves.

These intense laser bursts can then perfectly mimic human language, chief scientist Dave Law [told the Military Times](#).

He added that the technology could be ready for battle in just five years.

A video shared to publicise the Pentagon project shows the weapon saying 'Stop or we'll be forced to fire upon you.'

Scientists say these laser-grams will soon be able to beam hundreds of miles away.

The news will send shudders through the conspiracy theorist community who have long claimed the US government uses radio waves as part of a thought-control programme.

The Pentagon has revealed it is ploughing tens of millions into developing state-of-the-art laser weapons – to ensure it doesn't lag behind Russia and China.

[Read full story here...](#)



Dept. of Defense Non-Lethal Weapons Program

<http://jnlwp.defense.gov/>



Directed Energy Portfolio: Sound and Light

Hail, Warn and Communicate

Sound and Light (S&L) Directed Energy (DE) Non-Lethal Weapons (NLW) systems integrate various independent technologies such as:

- dazzling lasers
- high-intensity lights
- acoustics
- operating interface systems

into ergonomic and effective system-of-systems elements that hail, warn, move, disrupt and suppress individuals with very low risk of significant injury.

OPERATIONAL IMPACT: Enable commanders to control or de-escalate a situation using NLW to hail, warn, dazzle and/or communicate. The Program's S&L portfolio supports National Defense Strategy objectives, including:

- Defending the Homeland
- Deterring aggression
- Defending U.S. interests below armed conflict
- Full-scale war

Future Efforts:

- Operational assessments
- Fully integrated system of systems
- Laser and acoustic enhancements
- Unmanned/autonomous operation

So you see, QE is not as far off as some say. Our version of QE is for the common good, though. PEOPLE THAT NAY-SAY QUANTUM PHYSICS ARE THE SAME PEOPLE THAT SAID:

"...nobody will ever need more than 640k ram..."

"...Humans will never be able to fly to the moon..."

"...Richard Nixon is not a crook..."

"...Humans can never fly on machines..."

"...nobody will watch movies on the internet..."

"...mesh networks cannot exist..."

...and tens of thousands of other things that they were entirely, totally, wrong about ...

In July 2019, physicists reported, for the first time, capturing an image of a strong form of [quantum entanglement](#), called Bell entanglement.[\[7\]\[8\]](#)

Deep research centers, defense related analysis centers and bleeding edge physicists state that quantum devices can accomplish anything you can imagine: time-shifting, communications across unfathomable distances, teleportation, object materialization from energy-level construction, etc... *"just think it, and it happens"*, some say.

Can you shift the direction of the socialization trends, politics, interests or news focus of an entire nation just by getting a small part of a population to start thinking in the same direction? Can you "Quantum Induce" the future? Thousands of years of eastern religions and philosophies "guarantee it". The western feature film called: *"The Men Who Stare At Goats"*, with George Clooney, documents the U.S. Defense Department's attempts to embrace the technology. A trillion dollars of government research by China, Russia and the U.S. military and millennia of eastern writings prove there is something to QE. Is your mind able to accomplish "magic"? Can a simple amplifier help you generate impossible realities?

Keep an eye on the next stage of developments in this fascinating arena of product preparation.

Physicists help to decode the brain

An increasing number of physicists are using their expertise to understand the human brain. Paula Gould spoke to several researchers who have made the move to neuroscience

Doctors know that they can control epileptic seizures without having to perform surgery by placing the patient's brain in an electric field. In doing so, they are exploiting the fact that an electric field can cause neurons to fire in synchrony. But they do not understand exactly how the process works. Eun-Hyoung Park, a research associate at the Neural Engineering Center at Case Western Reserve University in the US, believes that is important to understand the way in which the neurons respond to the field. "This is an area where mathematicians and physicists can help," she says. "You need to understand why these therapies work."

Park is one of a growing number of researchers who have opted to apply their physics training to problems in neuroscience. Park initially completed a PhD and postdoctoral work in chaos theory and phase synchronization. She then moved to Case Western to apply the same theoretical tools to medical applications. "I wanted to expand my knowledge into a more applied field," she says. "Synchronization prevails in nature in a lot of different areas."

Dominique Durand, editor in chief of a new *Journal of Neural Engineering* published by the Institute of Physics, believes that the contribution of physical scientists and engineers is crucial to understanding the brain. "While neuroscientists and engineers from varied fields such as brain anatomy, neural development and electrophysiology have made great strides in the analysis of this complex organ, there remains a great deal yet to be uncovered," he says. "The potential for applications and remedies deriving from scientific discoveries and breakthroughs is extremely high."

Denis le Bihan, director of the Institute of Functional Neuroimaging, in Paris, agrees that physicists' theories are critical to advancing treatment of neurological and psychiatric disorders. "Models and tools used today in high-energy physics could show how clusters of neurons work together," he says. "In fact, the secrets of the brain could be in the hands of physicists."

Le Bihan's perspective on interdisciplinary collaboration is aided by his dual background in medicine and physics; he left college as a qualified medical doctor and with a PhD in physics. He has subsequently emerged as a world authority on magnetic resonance imaging (MRI), developing pioneering techniques to study acute brain diseases and connectivity disorders.

Le Bihan is currently overseeing plans for a new neuroimaging centre within the re-



Smart stuff - physicists are using techniques such as MRI to make detailed studies of the brain.

search campus of the French atomic energy commission (CEA) on the outskirts of Paris. The NeuroSpin complex will house four ultrahigh-field MRI units suitable for human and animal studies. The state-of-the-art scanners will offer sufficient spatial resolution to visualize neurons and neuronal connections directly. Scanner access will be split between full-time staff members and researchers from other institutions who have bought time slots, a concept more familiar to physicists than biological neuroscientists. "I do not say that NeuroSpin is exactly like CERN, but it provides a good working model for sharing large, expensive equipment," says le Bihan.

Learning from biology

Physicists have much to learn from their colleagues in biological neuroscience too. "In physics you always try to use a simple model to explain experimental results, but neuroscientists always try to simulate everything in detail. They want a real model, not a simple model," says Jianwei Shuai, a neurologist at the University of California, Irvine, who originally did a PhD in theoretical physics. He now uses tools from nonlinear dynamics to model the way cells communicate via calcium signalling. A lone theorist in a laboratory of experimentalists, Shuai now regards himself as both a physicist and neuroscientist. Yet it took a good three years to complete the philosophical transition, he says.

Zhaoping Li, reader in psychology and honorary reader in physics at University College London, is equally adamant that physicists should adopt an alternative mindset when moving into neuroscience. When interviewing prospective postdoctoral students, she quizzes them if they expect to be

asking original questions about neurological systems themselves. "This is not a field where other people ask the questions and you just solve them. You need to ask the questions yourself. Open your mind to be more ambitious," she says.

But this more creative approach can be quite daunting at first, says John Hertz, professor of biophysics at the Nordic Institute of Theoretical Physics in Copenhagen. Hertz trained in statistical physics and condensed-matter physics before becoming interested in disordered systems and eventually biological information processing. He worked first on spin glasses, systems with a highly irregular magnetic configuration. Spotting an analogy with neural circuitry, he then started to apply his ideas on magnetic systems to model memory. "Initially I really felt I was too ignorant about real neuroscience to dare say much about it. But gradually I got more confident," he says.

Opening doors and minds

Experimentalists are also benefiting from closer collaboration with their theoretical colleagues, and recognizing the importance of theory within their discipline. "In the old days, experimental neurobiologists never read any theoretical papers. Everybody assumed they could do their own theory. But now people are realizing that a little higher level of mathematical abstraction helps," he says. "When I go to neuroscience meetings, most people do not think of me as a physicist, they think of me as a computational neuroscientist."

The route from physics to neuroscience is now easier, thanks to the advent of dedicated postgraduate programmes that help theorists catch up with biological knowledge, Hertz says. Many recent recruits to the field have been attracted by the novelty of neuroscience, he says. "Everybody is interested in how our brain works. Physicists are discovering that now you can study it in a useful way."

Li urges physicists to take advantage of today's welcoming climate in neuroscience, having battled for acceptance herself. "There is a growing community of people like myself, but, of course, I would like to see more," she says. "We are the generation that has to make a difference. We have to make some kind of a breakthrough to demonstrate that theoretical neuroscience is having an impact and attracting new students, and become an established discipline rather than bordering on the boundaries of other departments."

SPOOKY-ACTION-AT-A-DISTANCE Quantum Entanglement

In quantum physics, entangled particles remain connected so that actions performed on one affect the other, even when separated by great distances. The phenomenon so riled Albert Einstein he called it "spooky action at a distance."

Quantum Superposition

The rules of quantum physics state that an unobserved photon exists in all possible states simultaneously but, when observed or measured, exhibits only one state.



Unobserved photon exists in all possible states.

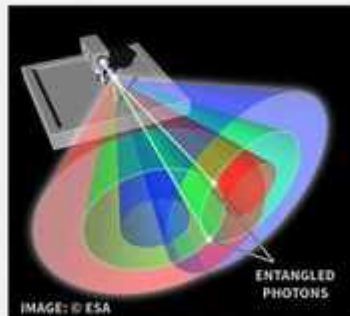


Measured photon is only in one state (spin = down).

Spin is depicted here as an axis of rotation, but actual particles do not rotate.

Quantum Entanglement

Entanglement occurs when a pair of particles, such as photons, interact physically. A laser beam fired through a certain type of crystal can cause individual photons to be split into pairs of entangled photons.



A photon is split into two entangled photons.



Entangled photons are widely separated.



When observed, Photon A takes on an up-spin state. Entangled Photon B, though now far away, takes up a state relative to that of Photon A (in this case, a down-spin state). The transfer of state between Photon A and Photon B takes place at a speed of at least 10,000 times the speed of light, possibly even instantaneously, regardless of distance.