

Quantum Entanglement Has Been Proven To Exist But What Can You Do With It?

- Transporting energy, movies, dreams, communications, thoughts and social shift at the speed of ‘now’ without any cost, latency loss or corporate censorship via Quantum Entanglement (QE) may be able to be accomplished
- Quantum effects require less than one millivolt (or 0.01 volts) to achieve and your brain produces millions of times this much energy in electrostatic force
- Scientists are working to help you to move energy, communications and social trends: ***With Your Mind! ..and the science behind it is now PROVEN!***
- Because **you** control quantum effects with your brain, no corporation can control it
- Could QE deployment create a paradigm shift in the way the world works?
- Are some savants already able to manipulate QE effects because of their novel brain processes?

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Revision 2.2

The Satellite Test

In a landmark study, a team of Chinese scientists using an experimental satellite has tested quantum entanglement over unprecedented distances, beaming entangled pairs of photons to three ground stations across China—each separated by more than 1,200 kilometers. The test verifies a mysterious and long-held tenet of quantum theory, and firmly establishes China as the front-runner in a burgeoning “quantum space race” to create a secure, quantum-based global communications network—that is, a potentially unhackable “quantum internet” that would be of immense geopolitical importance. The findings were published.

“China has taken the leadership in quantum communication,” says Nicolas Gisin, a physicist at the University of Geneva who was not involved in the study. “This demonstrates that global quantum communication is possible and will be achieved in the near future.”

The concept of quantum communications is considered the gold standard for security, in part because any compromising surveillance leaves its imprint on the transmission. Conventional encrypted messages require secret keys to decrypt, but those keys are vulnerable to eavesdropping as they are sent out into the ether. In quantum communications, however, these keys can be encoded in various quantum states of entangled photons—such as their polarization—and these states will be unavoidably altered if a message is intercepted by eavesdroppers. Ground-based quantum communications typically send entangled photon pairs via fiber-optic cables or open air. But collisions with ordinary atoms along the way disrupt the photons’ delicate quantum states, limiting transmission distances to a few hundred kilometers. Sophisticated devices called “quantum repeaters”—equipped with “quantum memory” modules—could in principle be daisy-chained together to receive, store and retransmit the quantum keys across longer distances, but this task is so complex and difficult that such systems remain largely theoretical.

“A quantum repeater has to receive photons from two different places, then store them in quantum memory, then interfere them directly with each other” before sending further signals along a network, says Paul Kwiat, a physicist at the University of Illinois in Urbana–Champaign who is unaffiliated with the Chinese team. “But in order to do all that, you have to know you’ve stored them without actually measuring them.” The situation, Kwiat says, is a bit like knowing what you have received in the mail without looking in your mailbox or opening the package inside. “You can shake the package—but that’s difficult to do if what you’re receiving is just photons. You want to make sure you’ve received them but you don’t want to absorb them. In principle it’s possible—no question—but it’s very hard to do.”

To form a globe-girdling secure quantum communications network, then, the only available solution is to beam quantum keys through the vacuum of space then distribute them across tens to hundreds of kilometers using ground-based nodes. [Launched](#) into low Earth orbit in 2016 and named after an ancient Chinese philosopher, the 600-kilogram “Micius” satellite is China’s premiere effort to do just

that, and is only the first of a fleet the nation plans as part of its \$100-million Quantum Experiments at Space Scale (QUESS) program.

Micius carries in its heart an assemblage of crystals and lasers that generates entangled photon pairs then splits and transmits them on separate beams to ground stations in its line-of-sight on Earth. For the latest test, the three receiving stations were located in the cities of Delingha and Ürümqi—both on the Tibetan Plateau—as well as in the city of Lijiang in China’s far southwest. At 1,203 kilometers, the geographical distance between Delingha and Lijiang is the record-setting stretch over which the entangled photon pairs were transmitted.

For now the system remains mostly a proof of concept, because the current reported data transmission rate between Micius and its receiving stations is too low to sustain practical quantum communications. Of the roughly six million entangled pairs that Micius’s crystalline core produced during each second of transmission, only about one pair per second reached the ground-based detectors after the beams weakened as they passed through Earth’s atmosphere and each receiving station’s light-gathering telescopes. Team leader Jian-Wei Pan—a physicist at the University of Science and Technology of China in Hefei who has pushed and planned for the experiment since 2003—compares the feat with detecting a single photon from a lone match struck by someone standing on the moon. Even so, he says, Micius’s transmission of entangled photon pairs is “a trillion times more efficient than using the best telecommunication fibers. ... We have done something that was absolutely impossible without the satellite.” Within the next five years, Pan says, QUESS will launch more practical quantum communications satellites.

Although Pan and his team plan for Micius and its nascent network of sister satellites to eventually distribute quantum keys, their initial demonstration instead aimed to achieve a simpler task: proving Einstein wrong.

Einstein famously derided as “spooky action at a distance” one of the most bizarre elements of quantum theory—the way that measuring one member of an entangled pair of particles seems to instantaneously change the state of its counterpart, even if that counterpart particle is on the other side of the galaxy. This was abhorrent to Einstein, because it suggests information might be transmitted between the particles faster than light, breaking the universal speed limit set by his theory of special relativity. Instead, he and others posited, perhaps the entangled particles somehow shared “hidden variables” that are inaccessible to experiment but would determine the particles’ subsequent behavior when measured. In 1964 the physicist John Bell devised a way to test Einstein’s idea, calculating a limit that physicists could statistically measure for how much hidden variables could possibly correlate with the behavior of entangled particles. If experiments showed this limit to be exceeded, then Einstein’s idea of hidden variables would be incorrect.

Ever since the 1970s “Bell tests” by physicists across ever-larger swaths of spacetime have shown that Einstein was indeed mistaken, and that entangled particles do in fact surpass Bell’s strict limits. The most definitive test arguably occurred in the Netherlands in 2015, when a team at Delft University of Technology [closed several potential “loopholes”](#) that had plagued past experiments and offered slim-

but-significant opportunities for the influence of hidden variables to slip through. That test, though, involved separating entangled particles by scarcely more than a kilometer. With Micius's transmission of entangled photons between widely separated ground stations, Pan's team has now performed a Bell test at distances a thousand times greater. Just as before, their results confirm that Einstein was wrong. The quantum realm remains a spooky place—although no one yet understands why.

“Of course, no one who accepts quantum mechanics could possibly doubt that entanglement can be created over that distance—or over any distance—but it's still nice to see it made concrete,” says Scott Aaronson, a physicist at The University of Texas at Austin. “Nothing we knew suggested this goal was unachievable. The significance of this news is not that it was unexpected or that it overturns anything previously believed, but simply that it's a satisfying culmination of years of hard work.”

That work largely [began](#) in the 1990s when Pan, leader of the Chinese team, was a graduate student in the lab of the physicist Anton Zeilinger at the University of Innsbruck in Austria. Zeilinger was Pan's PhD adviser, and they collaborated closely to test and further develop ideas for quantum communication. Pan returned to China to start his own lab in 2001, and Zeilinger started one as well at the Austrian Academy of Sciences in Vienna. For the next seven years they would compete fiercely to break records for transmitting entangled photon pairs across ever-wider gaps, and in ever-more extreme conditions, in ground-based experiments. All the while each man lobbied his respective nation's space agency to green-light a satellite that could be used to test the technique from space. But Zeilinger's proposals perished in a bureaucratic swamp at the European Space Agency whereas Pan's were quickly embraced by the China National Space Administration. Ultimately, Zeilinger chose to collaborate again with his old pupil rather than compete against him; today the Austrian Academy of Sciences is a partner in QUESS, and the project has plans to use Micius to perform an intercontinental quantum key distribution experiment between ground stations in Vienna and Beijing.

“I am happy that the Micius works so well,” Zeilinger says. “But one has to realize that it is a missed opportunity for Europe and others, too.”

For years now, other researchers and institutions have been scrambling to catch up, pushing governments for more funding for further experiments on the ground and in space—and many of them see Micius's success as the catalytic event they have been waiting for. “This is a major milestone, because if we are ever to have a quantum internet in the future, we will need to send entanglement over these sorts of long distances,” says Thomas Jennewein, a physicist at the University of Waterloo in Canada who was not involved with the study. “This research is groundbreaking for all of us in the community—everyone can point to it and say, ‘see, it does work!’”

Jennewein and his collaborators are pursuing a space-based approach from the ground up, partnering with the Canadian Space Agency to plan a smaller, simpler satellite that could launch as soon as five years from now to act as a “universal receiver” and redistribute entangled photons beamed up from ground stations. At the National University of Singapore, an international collaboration led by the physicist Alexander Ling has already launched cheap shoe box-size CubeSats to create, study and perhaps even transmit photon pairs that are “correlated”—a situation just shy of full entanglement. And

in the U.S., Kwiat at the University of Illinois is using NASA funding to develop a device that could someday test quantum communications using “hypercentanglement” (the simultaneous entanglement of photon pairs in multiple ways) onboard the International Space Station.

Perhaps most significantly, a team led by Gerd Leuchs and Christoph Marquardt at the Max Planck Institute for the Science of Light in Germany is developing quantum communications protocols for commercially available laser systems already in space onboard the European Copernicus and SpaceDataHighway satellites. Using one of these systems, the team successfully encoded and sent simple quantum states to ground stations using photons beamed from a satellite in geostationary orbit, some 38,000 kilometers above Earth. This approach, Marquardt explains, does not rely on entanglement and is very different from that of QUESS—but it could, with minimal upgrades, nonetheless be used to distribute quantum keys for secure communications in as little as five years. Their results appear in [*Optica*](#).

“Our purpose is really to find a shortcut into making things like quantum key distribution with satellites economically viable and employable, pretty fast and soon,” Marquardt says. “[Engineers] invested 20 years of hard work making these systems, so it’s easier to upgrade them than to design everything from scratch. ... It is a very good advantage if you can rely on something that is already qualified in space, because space qualification is very complicated. It usually takes five to 10 years just to develop that.”

Marquardt and others suspect, however, that this field could be much further advanced than has been publicly acknowledged, with developments possibly hidden behind veils of official secrecy in the U.S. and elsewhere. It may be that the era of quantum communication is already upon us. “Some colleague of mine made the joke, ‘the silence of the U.S. is very loud,’” Marquardt says. “They had some very good groups concerning free-space satellites and quantum key distribution at Los Alamos [National Laboratory] and other places, and suddenly they stopped publishing. So we always say there are two reasons that they stopped publishing: either it didn’t work, or it worked really well!

So, 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.

The human brain *is* a power source that can manipulate QE...

... 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.

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

$E_{\text{Neuron}} = 14$ 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 counter-intuitive 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:

Alice And Bob

"...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 its 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 (8000 line by 8000 line video resolution) 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...

These links show how far we have come:

<https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.123.070505>

[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](#)

Can Weird Things Really Work?

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 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.



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

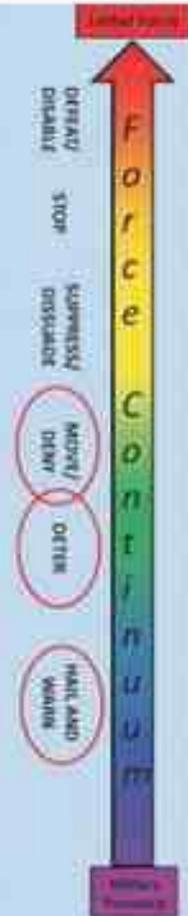
into ergonomic and effective system-of-systems elements that hail, warn, move, disrupt and suppress individuals with very low risk of significant injury.

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



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.

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 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?

Other Possible Benefits Of QE

For the energy needs of the world, QE could offer spectacular upside. Some of our associates are working to build Quantum Batteries.

Quantum methods can easily and effectively transfer whole amounts of electrical energy with zero quantity loss. The advantages associated with the technology are immensely useful in context to our current advancement streak: -

The costs of mile-long durable transmission lines are diminished for the generation-to-consumption point run.

10% of the produced electrical energy is lost from the grid station too which can be reduced when overloading is controlled after implementing transmitting terminals instead of hundreds of transmission poles around the station itself.

These terminals will be able to wirelessly transfer electrical energy to the districts; owing to atmospheric intervention in the city area, the inside-district transmission will be carried out by conventional wires but the entire process would have saved a high factor of energy which would have been otherwise lost completely.

The dangers associated with the high-voltage wires and poles i.e. car accidents etc. are completely avoided with the introduction of wireless energy transfer.

The part of the energy that is lost as heat energy is minimized up to the point where some heat is lost in the entanglement process. It is economical as the only running costs required will be of controlling the terminals.

There is seemingly no setback to the technology currently. The terminals will, of course, require expert management and maintenance and with those essentials we can, perhaps, fulfill our requirements with the current amount of electricity produced itself. Other than preserving energy, quantum entanglement has a key role to play in future communication technologies owing to its special properties. When analyzing the pros and cons of implementing the set-up in our current system, we will only come across benefits and hardly any setbacks once we have mastered the reigns of the quantum realm.



A Quantum Dot on the forehead could amplify brain effect manipulation of Quantum fields

SPOOKY-ACTION-AT-A-DISTANCE

Quantum Entanglement

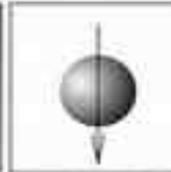
In quantum physics, entangled particles remain connected so that actions performed on one affect the other, even when separated by great distances. The phenomenon so irked Albert Einstein he called it "spooky action at a distance."

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.

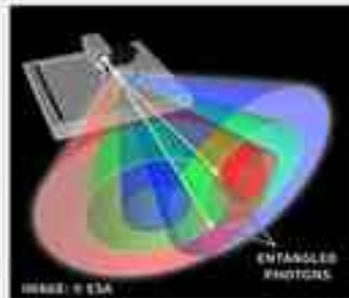


Observed photon is only in one state (spin-up or spin-down).

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 20,000 times the speed of light, possibly even instantaneously, regardless of distance.

SOURCE: en.wikipedia.org/wiki/Quantum_entanglement © 2006, 2011 / © LiveScience.com

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-Hyung Park, a research associate at the Neural Engineering Center at Case Western Reserve University in the US, believes that it 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 Dumas, 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 in 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."

Can Our Brain Waves Affect Our Physical Reality?

The higher the frequency of our thought/brain wave, the higher our consciousness. The level of our consciousness is what makes our reality what it is and what it will continue to be.

By [Peter Baksa](#)

So, what is thought and how does it connect up with quantum mechanics?

Your brain is comprised of a tight network of nerve cells, all interacting with one another and generating an overall electrical field. This electric field is detectable with standard medical equipment. Your brain waves are simply the superposition of the multitude of electrical states being formed by your nervous system.

Not only your brain, but your entire body has an electric field. Anywhere there's a nerve cell, there's electricity. It's just concentrated the greatest around your head because that's where the bulk of your nerve cells are. Any time you've felt the shock of static electricity, or used a touch-sensitive screen, you've proven that you have an electric field.

So, nothing mysterious about that part.

Being an electric field, all those overlying electric wave patterns that comprise your brain waves are governed by the same equations governing the electromagnetic spectrum, light, particles and everything else in the universe. The light seen coming from a star and the energy of your mind are one and the same type.

Your thoughts are formed in this electric field. The measurable perturbations and disturbances in the brain's overall electric field are your actual thoughts racing through your mind. As you read this article, the thoughts you are thinking of, the words your mind is processing, are all electrical impulses that can be measured if you had a few wires hooked up between your head and a machine. So thoughts are energy, the same as everything else.

That means they are governed by the rules of quantum mechanics and Schrödinger's wave equations as well. All those same weird things about quantum mechanics that describe how an electron or photon behave, apply to you and your thoughts as well. The particle-wave duality, the uncertainty principle, and of course, entanglement.

This implies that, like any other set of particles or source of energy, we are entangled with everything we've ever encountered, the environment around us and the rest of the universe through the zero point field. We'd mentioned that consciousness is the key to making the mysteries of quantum mechanics work in past articles -- well, this is how it happens.

The one difference between us and a photon is that we can think, we are conscious. As such, we can choose which of the possibilities before us to collapse our wave function into. But more than that, since we are entangled with our environment we can thus affect that as well and influence the randomness, just as it can influence us.

Since we are conscious, we can choose what part of the randomness around us to be affected by, and how we in turn would like to affect it. It is through the property of entanglement that we can affect change in our environment. Our minds are transceivers, able to receive and send signals into the "quantum soup" of the zero point field by way of the highly coherent frequencies of our thoughts.

The higher the frequency of our thought/brain wave, the higher our consciousness. The level of our consciousness is what makes our reality what it is and what it will continue to be. If you are seeking change, set an intention, declare a path (align your behaviors with your desire), then detach and allow the universe to handle the details.

[Peter Baksa](#) has written "[The Point of Power](#)", available now on Amazon. He is also the author of "It's None of My Business What You Think of Me!" "Thinking Yourself Young," which will include interviews with Tibetan Monks from earlier this spring, and "The Faith Wave; I think therefore it is," release date Jan 2012.

Check out this live interview by cutting and pasting this into your browser:
<http://answers4thefamilyblog.com/the-point-of-power/>.

What is the Schumann Resonance?

The earth's magnetic field has a set of resonant frequencies that scientists theorize could have an effect on human behavior.



By [Trevor English](#)



[NASA](#)

The Earth has been the focus of a massive amount of scientific studies over the years. From the shrinking [ozone layer](#) to the changes in our planet's magnetic field, there's plenty to keep researchers busy.

One possibly surprising area of research is in the way the Earth acts like a giant electrical circuit. The atmosphere of the Earth is actually a weak conductor. If there was no source of electric charge for the atmosphere, its energy would dissipate in about 10 minutes – but it doesn't.

The ionosphere is the region of the Earth's atmosphere that starts at around **50-100km** above the surface and reaches upward for several hundreds of kilometers.

[RELATED: LIGHTNING MAY ACTUALLY PROTECT LIVING ORGANISMS](#)

Due to solar radiation, individual electrons are dislodged from otherwise neutral gas atoms in this region, creating positively charged ions. This makes the ionosphere conductive and able to trap electromagnetic waves.

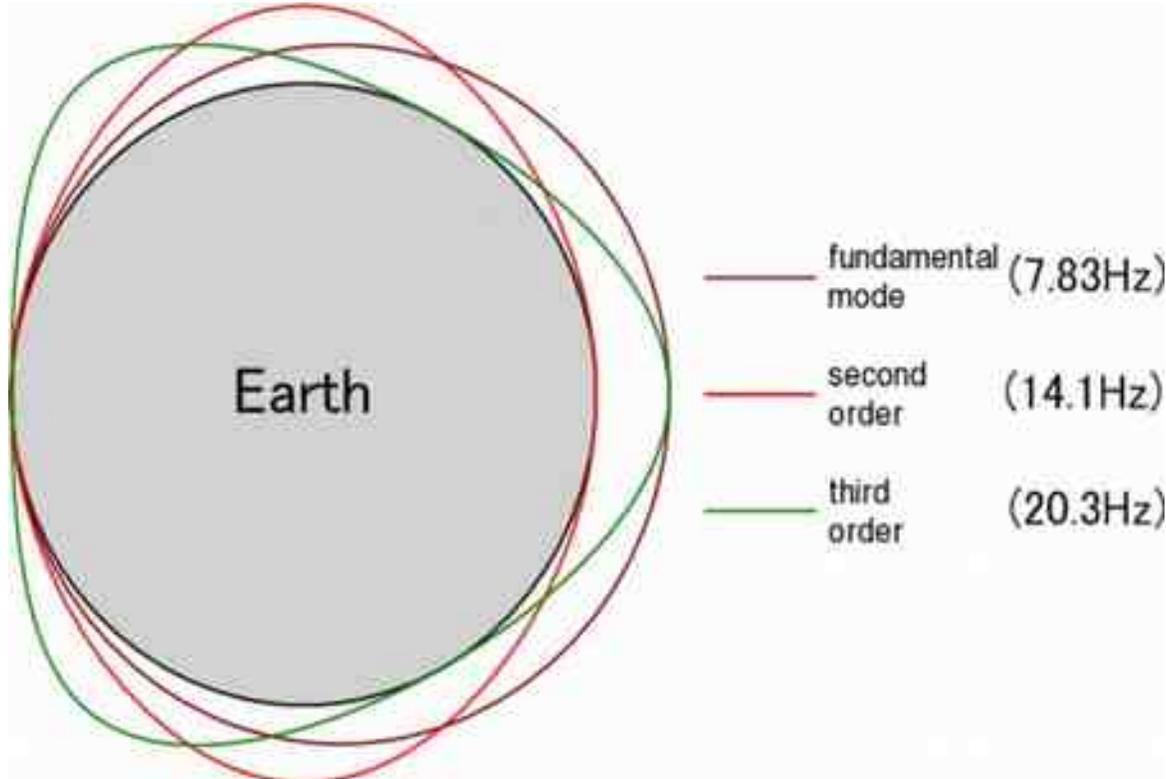
Between the Earth's surface and the ionosphere is a cavity containing a total electrical charge of **500K Coulombs**. There is a vertical current flow between the ground and the ionosphere. The atmosphere has a resistance of **200 Ohms** and a voltage potential of **200,000 Volts**.

Around the Earth, there are roughly two thousand lightning storms at any given period of time, producing around 50 flashes of [lightning](#) every second. This accounts for much of the measured flow in this electromagnetic cavity.

But what does all this mean?

It means that there is a great deal of electrical activity between the surface of the Earth and the ionosphere. Some of this is in the form of standing waves of electricity. These standing waves are known as [Schumann Resonances](#).

Each lightning burst creates electromagnetic waves that begin to circle Earth in the cavity between Earth's surface and the ionosphere. Some of the waves - if they have just [the right wavelength](#) combine and increase in strength to create a Schumann resonance.



Source: [STW/Wikimedia](#)

The 'sweet spot' for creating this resonance is when the wave is as long or longer than the circumference of Earth. This is an extremely low-frequency wave of up to one hundred thousand times lower than the [lowest frequency radio waves](#) used to send signals to your AM/FM radio. As this wave flows around Earth, it hits itself again in such a way that the crests and troughs of the wave are aligned.

Scientists speculate that the waves are related to the electrical activity in the atmosphere.

The base atmospheric electromagnetic resonant frequency is **7.83 Hz**. This means our atmosphere is continuously resonating with a radio frequency of **7.83 Hz**, along with progressively weaker harmonics at **14.3, 20.8, 27.3** and **33.8 Hz**. These are what is known as the Schumann resonance.

History

The atmosphere was first proposed as a good conductor of electricity in 1893 by George FitzGerald. He was able to estimate that, based on the layers of the atmosphere where he saw the best conductors, there would be electromagnetic oscillations of around **0.1 seconds**. He had theorized and essentially discovered the lowest mode of Schumann resonances.

Although it has been suggested that the resonances be renamed Schumann-Fitzgerald, his findings weren't well known and received little scientific discussion at the time.



It wasn't until 1902 that it was suggested the ionosphere existed, and in 1925, the existence of the ionosphere was experimentally proven.

Although mathematical tools for dealing with spherical waveguides were developed in 1918 by G. N. Watson, the theoretical aspects of global resonances were not substantively studied before Winfried Otto Schumann's work in 1952-1954.

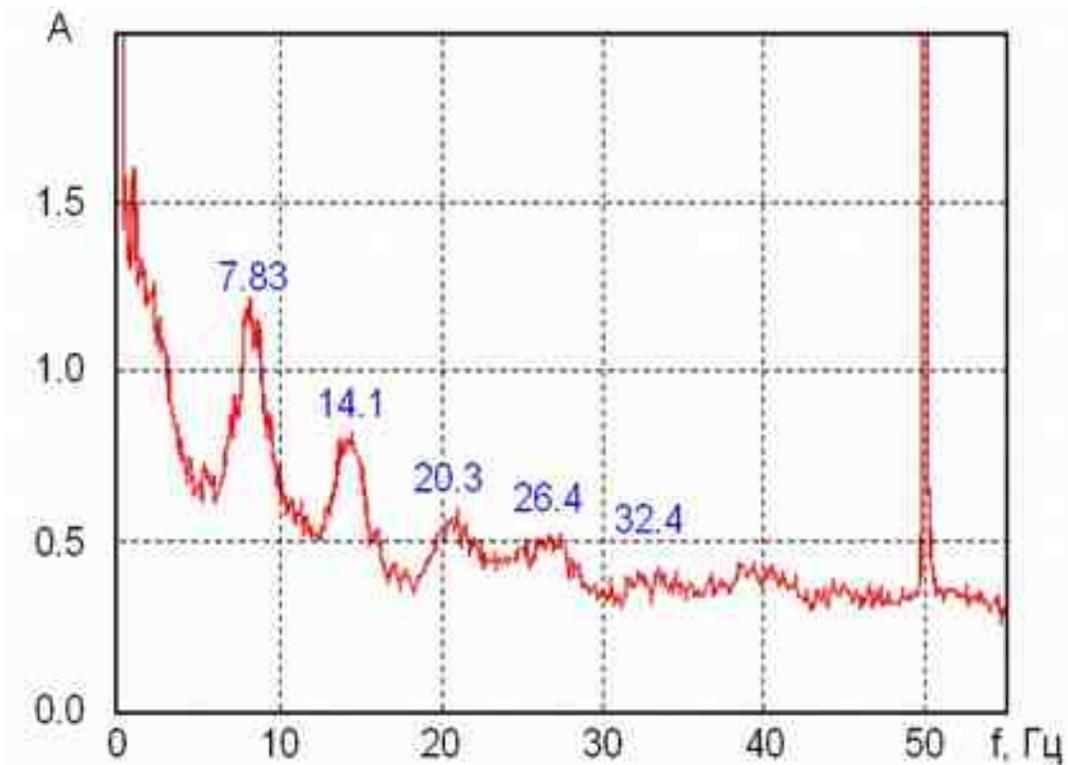
Schumann, working with H. L. König, was the first to attempt to measure the [resonant frequencies](#) of the Earth. However, it was not until 1963 that some techniques were developed for extracting the exact resonance frequencies from background noise.

What does a spike mean?

The amount of resonance fluctuates as the ionosphere becomes more or less dense. This depends largely on the amount of solar radiation striking it. At night, that part of the ionosphere that's in the Earth's shadow thins out.

The resonance can also be affected by the world's three lightning hotspots — Asia, Africa, and South America, which are seasonal and also follow a day/night cycle. Thus, the peaks of radio signal strength at the Schumann resonance follow a constantly shifting but reasonably predictable schedule.

It has also become common for some to associate the Schumann resonance with different types of brain wave states. Some have even gone as far as to relate the frequency of **7.83 Hertz** to hypnosis, suggestibility, meditation, and an increase in human growth hormones. However, there is no scientific proof for any of this.



Source: [Wikimedia/AdmiralHood](#)

Whether it's quackery or not is still being researched, but there are some researchers who believe that our bodies can be influenced by the electromagnetic resonant frequencies around us.

So when these frequencies spike, these people believe this can also have an effect on human and animal behavior.



Source: [NASA](#)

In January of 2017, the Schumann Resonance reached frequencies of above **36 Hz**, which was unusual. Historically any rise about **15 Hz** was considered large, so scientists were puzzled. According to some, these higher resonant frequencies on Earth are associated with more stressed, nervous systems than normal.

In the realm of "speculative" or "new age science," many believe that the Schumann Resonance can be affected by and affect human consciousness. So, if there is a global increase in [anxiety](#) or tension, this will also affect the Schumann Resonance.

There's also the belief among some new age proponents that an increase in these resonant frequencies could affect humanity as a whole and cause a global rise in anxiety, tension, and/or passion.



Although these ideas can be dismissed as having no basis in science, there is still a question of how whether the Earth's electromagnetic fields can have an effect on humans.

