

Centrality of Each Observer In The Universe and Christ's Very Credible Reconciliation Of General Relativity and Quantum Mechanics

A 'Christian interpretation' offers a very credible, empirically backed, reconciliation of General Relativity with Quantum Mechanics:

First a little background:

,,, First I noticed that the earth demonstrates centrality in the universe in this video Dr. William Dembski posted a while back on his blog;

The Known Universe – Dec. 2009 – a very cool video (please note the centrality of the earth in the universe)

<http://www.youtube.com/watch?v=17jymDn0W6U>

,,, for a while I tried to see if the 4-D space-time of General Relativity was sufficient to explain centrality we witness for the earth in the universe,,,

Where is the centre of the universe?:

Excerpt: The Big Bang should not be visualized as an ordinary explosion. The universe is not expanding out from a centre into space; rather, the whole universe is expanding and it is doing so equally at all places, as far as we can tell.

<http://math.ucr.edu/home/baez/physics/Relativity/GR/centre.html>

,,,Thus from a 3-dimensional (3D) perspective, any particular 3D spot in the universe is to be considered just as 'center of the universe' as any other particular spot in the universe is to be considered 'center of the universe'. This centrality found for any 3D place in the universe is because the universe is a 4D expanding hypersphere, analogous in 3D to the surface of an expanding balloon. All points on the surface are moving away from each other, and every point is central, if that's where you live.,,,

4-Dimensional Space-Time Of General Relativity – video

<http://www.metacafe.com/watch/3991873/>

,,,yet I kept running into the same problem for establishing the sufficiency of General Relativity to explain our centrality in this universe, in that every time I would perform a 'thought experiment' of trying radically different points of observation in the universe, General Relativity would fail to maintain centrality for the radically different point of observation in the universe. The primary reason for this failure of General Relativity to maintain centrality, for different points of observation in the universe, is due to the fact that there are limited (10^{80}) material particles to work with. Though this failure of General Relativity was obvious to me, I needed more proof so as to establish it more rigorously, so I dug around a bit and found this,,,

The Cauchy Problem In General Relativity – Igor Rodnianski

Excerpt: 2.2 Large Data Problem In General Relativity – While the result of Choquet-Bruhat and its subsequent refinements guarantee the existence and uniqueness of a (maximal) Cauchy development, they provide no information about its geodesic completeness and thus, in the language of partial differential equations, constitutes a local existence. „, More generally, there are a number of conditions that will guarantee the space-time will be geodesically incomplete.,, In the language of partial differential equations this means an impossibility of a large data global existence result for all initial data in General Relativity.

http://www.icm2006.org/proceedings/Vol_III/contents/ICM_Vol_3_22.pdf

„,and also ‘serendipitously’ found this,,

THE GOD OF THE MATHEMATICIANS – DAVID P. GOLDMAN – August 2010

Excerpt: Gödel’s personal God is under no obligation to behave in a predictable orderly fashion, and Gödel produced what may be the most damaging critique of general relativity. In a Festschrift, (a book honoring Einstein), for Einstein’s seventieth birthday in 1949, Gödel demonstrated the possibility of a special case in which, as Palle Yourgrau described the result, “the large-scale geometry of the world is so warped that there exist space-time curves that bend back on themselves so far that they close; that is, they return to their starting point.” This means that “a highly accelerated spaceship journey along such a closed path, or world line, could only be described as time travel.” In fact, “Gödel worked out the length and time for the journey, as well as the exact speed and fuel requirements.” Gödel, of course, did not actually believe in time travel, but he understood his paper to undermine the Einsteinian worldview from within.

<http://www.firstthings.com/article/2010/07/the-god-of-the-mathematicians>

„,But if General Relativity is insufficient to explain the centrality we witness for ourselves in the universe, what else is? Universal Quantum wave collapse to each unique point of observation is! To prove this point I dug around a bit and found this experiment,,

This following experiment extended the double slit experiment to show that the ‘spooky actions’, for instantaneous quantum wave collapse, happen regardless of any considerations for time or distance, i.e. The following experiment shows that quantum actions are ‘universal and instantaneous’ for each observer:

Wheeler’s Classic Delayed Choice Experiment:

Excerpt: Now, for many billions of years the photon is in transit in region 3. Yet we can choose (many billions of years later) which experimental set up to employ – the single wide-focus, or the two narrowly focused instruments. We have chosen whether to know which side of the galaxy the photon passed by (by choosing whether to use the two-telescope set up or not, which are the instruments that would give us the information about which side of the galaxy the photon passed). We have delayed this choice until a time long after the particles “have passed by one side of the galaxy, or the other side of the galaxy, or both sides of the galaxy,” so to speak. Yet, it seems paradoxically that our later choice of whether to obtain this information determines which

side of the galaxy the light passed, so to speak, billions of years ago. So it seems that time has nothing to do with effects of quantum mechanics. **And, indeed, the original thought experiment was not based on any analysis of how particles evolve and behave over time – it was based on the mathematics. This is what the mathematics predicted for a result, and this is exactly the result obtained in the laboratory.**

http://www.bottomlayer.com/bottom/basic_delayed_choice.htm

"Thus one decides the photon shall have come by one route or by both routes after it has already done its travel"

John A. Wheeler

Alain Aspect speaks on John Wheeler's Delayed Choice Experiment - video

<http://vimeo.com/38508798>

Genesis, Quantum Physics and Reality

Excerpt: Simply put, an experiment on Earth can be made in such a way that it determines if one photon comes along either on the right or the left side or if it comes (as a wave) along both sides of the gravitational lens (of the galaxy) at the same time. However, how could the photons have known billions of years ago that someday there would be an earth with inhabitants on it, making just this experiment? ,, This is big trouble for the multi-universe theory and for the "hidden-variables" approach.

<http://www.asa3.org/ASA/PSCF/2000/PSCF3-00Zoeller-Greer.html.ori>

Quantum physics mimics spooky action into the past - April 23, 2012

Excerpt: The authors experimentally realized a "Gedankenexperiment" called "delayed-choice entanglement swapping", formulated by Asher Peres in the year 2000. Two pairs of entangled photons are produced, and one photon from each pair is sent to a party called Victor. Of the two remaining photons, one photon is sent to the party Alice and one is sent to the party Bob. Victor can now choose between two kinds of measurements. If he decides to measure his two photons in a way such that they are forced to be in an entangled state, then also Alice's and Bob's photon pair becomes entangled. If Victor chooses to measure his particles individually, Alice's and Bob's photon pair ends up in a separable state. Modern quantum optics technology allowed the team to delay Victor's choice and measurement with respect to the measurements which Alice and Bob perform on their photons. **"We found that whether Alice's and Bob's photons are entangled and show quantum correlations or are separable and show classical correlations can be decided after they have been measured"**, explains Xiao-song Ma, lead author of the study.

According to the famous words of Albert Einstein, the effects of quantum entanglement appear as "spooky action at a distance". The recent experiment has gone one remarkable step further. "Within a naïve classical world view, quantum mechanics can even mimic an influence of future actions on past events", says Anton Zeilinger.

<http://phys.org/news/2012-04-quantum-physics-mimics-spooky-action.html>

„As well, there is even a experiment that shows the preceding quantum experiments will never be overturned by another ‘future’ theory,,,

An experimental test of all theories with predictive power beyond quantum theory – May 2011
Excerpt: **Hence, we can immediately refute any already considered or yet-to-be-proposed alternative model with more predictive power than this (quantum theory).**

<http://arxiv.org/abs/1105.0133>

„ and to make universal Quantum Wave collapse much more ‘personal’ I found this,,,

“It was not possible to formulate the laws (of quantum theory) in a fully consistent way without reference to consciousness.” Eugene Wigner (1902 -1995) from his collection of essays “Symmetries and Reflections – Scientific Essays”; Eugene Wigner laid the foundation for the theory of symmetries in quantum mechanics, for which he received the Nobel Prize in Physics in 1963.

„Here is Wigner commenting on the key experiment that led Wigner to his Nobel Prize winning work on quantum symmetries,,,

Eugene Wigner

Excerpt: **To express this basic experience in a more direct way: the world does not have a privileged center, there is no absolute rest, preferred direction, unique origin of calendar time, even left and right seem to be rather symmetric. The interference of electrons, photons, neutrons has indicated that the state of a particle can be described by a vector possessing a certain number of components. As the observer is replaced by another observer (working elsewhere, looking at a different direction, using another clock, perhaps being left-handed), the state of the very same particle is described by another vector, obtained from the previous vector by multiplying it with a matrix. This matrix transfers from one observer to another.**

http://www.reak.bme.hu/Wigner_Course/WignerBio/wb1.htm

i.e. In the experiment the ‘world’ (i.e. the universe) does not have a ‘privileged center’. Yet strangely, the conscious observer does exhibit a ‘privileged center’. This is since the ‘matrix’, which determines which vector will be used to describe the particle in the experiment, is ‘observer-centric’ in its origination! Thus explaining Wigner’s dramatic statement, “It was not possible to formulate the laws (of quantum theory) in a fully consistent way without reference to consciousness.”

Quotes of note:

"It will remain remarkable, in whatever way our future concepts may develop, that the very study of the external world led to the scientific conclusion that the content of the consciousness is the ultimate universal reality" -

Eugene Wigner - (Remarks on the Mind-Body Question, Eugene Wigner, in Wheeler and Zurek, p.169) - received Nobel Prize in 1963 for 'Quantum Symmetries'

<http://www.informationphilosopher.com/solutions/scientists/wigner/>

Quantum Enigma: Physics Encounters Consciousness - Richard Conn Henry - Professor of Physics - John Hopkins University

Excerpt: It is more than 80 years since the discovery of quantum mechanics gave us the most fundamental insight ever into our nature: **the overturning of the Copernican Revolution, and the restoration of us human beings to centrality in the Universe.**

And yet, have you ever before read a sentence having meaning similar to that of my preceding sentence? Likely you have not, and the reason you have not is, in my opinion, that physicists are in a state of denial...

<http://www.uncommondescent.com/intelligent-design/the-quantum-enigma-of-consciousness-and-the-identity-of-the-designer/>

“I’m going to talk about the Bell inequality, and more importantly a new inequality that you might not have heard of called the Leggett inequality, that was recently measured, it was actually formulated almost 30 years ago by Professor Leggett, who is a Nobel Prize winner, but it wasn’t tested until about a year and a half ago (in 2007), when an article appeared in Nature, that the measurement was made by this prominent quantum group in Vienna led by Anton Zeilinger, which they measured the Leggett inequality, which actually goes a step deeper than the Bell inequality and rules out any possible interpretation other than consciousness creates reality when the measurement is made.”

– Bernard Haisch, Ph.D., Calphysics Institute, is an astrophysicist and author of over 130 scientific publications.

Preceding quote taken from 3:50 minute mark of this following video;

Quantum Mechanics and Consciousness: A New Measurement 2/4

<http://www.youtube.com/watch?v=Z31oGddiaCU>

Quantum physics says goodbye to reality - Apr 20, 2007

Excerpt: Many realizations of the thought experiment have indeed verified the violation of Bell's inequality. These have ruled out all hidden-variables theories based on joint assumptions of realism, meaning that reality exists when we are not observing it; and locality, meaning that separated events cannot influence one another instantaneously. But a violation of Bell's inequality does not tell specifically which assumption – realism, locality or both – is discordant with quantum mechanics.

Markus Aspelmeyer, Anton Zeilinger and colleagues from the University of Vienna, however, have now shown that realism is more of a problem than locality in the quantum world. They devised an experiment that violates a different inequality proposed by physicist Anthony Leggett in 2003 that relies only on realism, and relaxes the reliance on locality. To do this, rather than taking measurements along just one plane of polarization, the Austrian team took

measurements in additional, perpendicular planes to check for elliptical polarization.

They found that, just as in the realizations of Bell's thought experiment, Leggett's inequality is violated – thus stressing the quantum-mechanical assertion that reality does not exist when we're not observing it. "Our study shows that 'just' giving up the concept of locality would not be enough to obtain a more complete description of quantum mechanics," Aspelmeyer told Physics Web. "You would also have to give up certain intuitive features of realism."

<http://physicsworld.com/cws/article/news/27640>

And to further solidify the case that 'consciousness precedes reality', the violation of Leggett's inequalities were extended, and solidified, in 2010:

Violation of Leggett inequalities in orbital angular momentum subspaces - 2010

Main results. **We extend the violation of Leggett inequalities to the orbital angular momentum (OAM) state space of photons, which is associated with their helical wavefronts. We define our measurements in a Bloch sphere for OAM and measure the Leggett parameter LN (where N is the number of settings for the signal photon) as we change the angle χ (see figure). We observe excellent agreement with quantum mechanical predictions (red line), and show a violation of five and six standard deviations for $N = 3$ and $N = 4$, respectively.**

<http://iopscience.iop.org/1367-2630/12/12/123007>

I find it extremely interesting, and strange, that quantum mechanics tells us that instantaneous quantum wave collapse to its 'uncertain' 3-D state is centered on each individual conscious observer in the universe, whereas, 4-D space-time cosmology (General Relativity) tells us each 3-D point in the universe is central to the expansion of the universe. These findings of modern science are pretty much exactly what we would expect to see if this universe were indeed created, and sustained, from a higher dimension by a omniscient, omnipotent, omnipresent, eternal Being who knows everything that is happening everywhere in the universe at the same time. These findings certainly seem to go to the very heart of the age old question asked of many parents by their children, "How can God hear everybody's prayers at the same time?,,, i.e. Why should the expansion of the universe, or the quantum wave collapse of the entire universe, even care that you or I, or anyone else, should exist? Only Theism offers a rational explanation as to why you or I, or anyone else, should have such undeserved significance in such a vast universe:

Psalms 33:13-15

The LORD looks from heaven; He sees all the sons of men. From the place of His dwelling He looks on all the inhabitants of the earth; He fashions their hearts individually; He considers all their works.

Moreover, the argument for God from consciousness can be framed like this:

- 1. Consciousness either preceded all of material reality or is a 'epi-phenomena' of material reality.**
- 2. If consciousness is a 'epi-phenomena' of material reality then consciousness will be found to have no special position within material reality. Whereas conversely, if consciousness precedes material reality then consciousness will be found to have a special position within material reality.**
- 3. Consciousness is found to have a special, even central, position within material reality.**
- 4. Therefore, consciousness is found to precede material reality.**

Three intersecting lines of experimental evidence from quantum mechanics that shows that consciousness precedes material reality (Wigner's Quantum Symmetries, Wheeler's Delayed Choice, Leggett's Inequalities, Quantum Zeno effect)

https://docs.google.com/document/d/1G_Fi50ljF5w_XyJHfmSIZsOcPFhgoAZ3PRc_ktY8cFo/edit

The expansion of every 3D point in the universe, and the quantum wave collapse of the entire universe to each point of conscious observation in the universe, is obviously a very interesting congruence in science between the very large (relativity) and the very small (quantum mechanics). A congruence that Physicists, and Mathematicians, seem to be having a extremely difficult time 'unifying' into a 'theory of everything'.(Einstein, Penrose).

The conflict of reconciling General Relativity and Quantum Mechanics appears to arise from the inability of either theory to successfully deal with the Zero/Infinity problem that crops up in different places of each theory:

THE MYSTERIOUS ZERO/INFINITY

Excerpt: The biggest challenge to today's physicists is how to reconcile general relativity and quantum mechanics. However, these two pillars of modern science were bound to be incompatible. "The universe of general relativity is a smooth rubber sheet. It is continuous and flowing, never sharp, never pointy. Quantum mechanics, on the other hand, describes a jerky and discontinuous universe. What the two theories have in common – and what they clash over – is zero.", "The infinite zero of a black hole — mass crammed into zero space, curving space infinitely — punches a hole in the smooth rubber sheet. The equations of general relativity cannot deal with the sharpness of zero. In a black hole, space and time are meaningless.", "Quantum mechanics has a similar problem, a problem related to the zero-point energy. The laws of quantum mechanics treat particles such as the electron as points; that is, they take up no space at all. The electron is a zero-dimensional object,, According to the rules of quantum mechanics, the zero-dimensional electron has infinite mass and infinite charge.

http://www.fmbr.org/editorial/edit01_02/edit6_mar02.htm

Quantum Mechanics and Relativity – The Collapse Of Physics? – video – with notes as to plausible reconciliation that is missed by materialists (Please note; the 'infinity problem' is focused primarily in black holes)

<http://www.metacafe.com/watch/6597379/>

Yet, the unification, into a 'theory of everything', between what is in essence the 'infinite Theistic world of Quantum Mechanics' and the 'finite Materialistic world of the 4-D space-time of General Relativity' seems to be directly related to what Jesus apparently joined together with His resurrection, i.e. related to the unification of infinite God with finite man. Dr. William Dembski in this following comment, though not directly addressing the Zero/Infinity conflict in General Relativity and Quantum Mechanics, offers insight into this 'unification' of the infinite and the finite:

The End Of Christianity – Finding a Good God in an Evil World – Pg.31 - William Dembski PhD. in Mathematics and Theology

Excerpt: "In mathematics there are two ways to go to infinity. One is to grow large without measure. The other is to form a fraction in which the denominator goes to zero. The Cross is a path of humility in which the infinite God becomes finite and then contracts to zero, only to resurrect and thereby unite a finite humanity within a newfound infinity."

http://www.designinference.com/documents/2009.05.end_of_xty.pdf

„Also of related interest to this 'Zero/Infinity conflict of reconciliation', between General Relativity and Quantum Mechanics, is the fact that a 'uncollapsed' photon, in its quantum wave state, is mathematically defined as 'infinite' information,,,

Wave function - wikipedia

Excerpt "wave functions form an abstract vector space",,, This vector space is infinite-dimensional, because there is no finite set of functions which can be added together in various combinations to create every possible function.

Quantum Computing – Stanford Encyclopedia

Excerpt: Theoretically, a single (photon) qubit can store an infinite amount of information, yet when measured (and thus collapsing the Quantum Wave state) it yields only the classical result (0 or 1),,,

<http://plato.stanford.edu/entries/qt-quantcomp/#2.1>

It is important to note that the following experiment actually encoded information into a photon while it was in its quantum wave state, thus destroying the notion, held by many, that the wave function was not 'physically real' but was merely 'abstract'. i.e. How can information possibly be encoded into something that is not physically real but merely abstract?

Ultra-Dense Optical Storage – on One Photon

Excerpt: Researchers at the University of Rochester have made an optics breakthrough that allows them to encode an entire image's worth of data into a photon, slow the image down for storage, and then retrieve the image intact.,,, **As a wave, it passed through all parts of the stencil at once,,,**

<http://www.physorg.com/news88439430.html>

Here is a more rigorous measurement of the wave function which establishes it as 'physically real';

Direct measurement of the quantum wavefunction - June 2011

Excerpt: **The wavefunction is the complex distribution used to completely describe a quantum system, and is central to quantum theory. But despite its fundamental role, it is typically introduced as an abstract element of the theory with no explicit definition.,,, Here we show that the wavefunction can be measured directly by the sequential measurement of two complementary variables of the system. The crux of our method is that the first measurement is performed in a gentle way through weak measurement so as not to invalidate the second. The result is that the real and imaginary components of the wavefunction appear directly on our measurement apparatus. We give an experimental example by directly measuring the transverse spatial wavefunction of a single photon, a task not previously realized by any method.**

<http://www.nature.com/nature/journal/v474/n7350/full/nature10120.html>

The following mathematically corroborated the preceding experiment:

Quantum Theory's 'Wavefunction' Found to Be Real Physical Entity: Scientific American – November 2011

Excerpt: Whereas many physicists have generally interpreted the wavefunction as a statistical tool that reflects our ignorance of the particles being measured, the authors of the latest paper argue that, instead, **it is physically real.**,,, David Wallace, a philosopher of physics at the University of Oxford, UK, says that the theorem is the most important result in the foundations of quantum mechanics that he has seen in his 15-year professional career. "This strips away obscurity and shows you can't have an interpretation of a quantum state as probabilistic," he says.

<http://www.scientificamerican.com/article.cfm?id=quantum-theorys-wavefunction>

„Moreover there is actual physical evidence that lends strong support to the position that the 'Zero/Infinity conflict', that we find between General Relativity and Quantum Mechanics, was successfully dealt with by Christ,,,

THE EVENT HORIZON (Space-Time Singularity) OF THE SHROUD OF TURIN. – Isabel Piczek – Particle Physicist

Excerpt: **We have stated before that the images on the Shroud firmly indicate the total absence of Gravity. Yet they also firmly indicate the presence of the Event Horizon. These two seemingly contradict each other and they necessitate the past presence of something more powerful than Gravity that had the capacity to solve the above paradox.**

<http://shroud3d.com/findings/isabel-piczek-image-formation>

Particle Radiation from the Body - M. Antonacci, A. C. Lind - 2012

Excerpt: **The Shroud's frontal and dorsal body images are encoded with the same amount of intensity, independent of any pressure or weight from the body. The bottom part of the cloth (containing the dorsal image) would have borne all the weight of the man's supine body, yet the dorsal image is not encoded with a greater amount of intensity than the frontal image. Radiation coming from the body would not only explain this feature, but also the left/right and light/dark reversals found on the cloth's frontal and dorsal body images.**

<http://www.academicjournals.org/sre/PDF/pdf2012/30JulSpelss/Antonacci.pdf>

Turin Shroud: a medical forensic study of its blood marks and image (Body Position) – G.Lavoie – May 2010

<http://www.acheiropoietos.info/proceedings/LavoieWeb.pdf>

General Relativity, Quantum Mechanics, Entropy, and The Shroud Of Turin - video

<http://vimeo.com/34084462>

Colossians 1:15-20

The Son is the image of the invisible God, the firstborn over all creation. For in him all things were created: things in heaven and on earth, visible and invisible, whether thrones or powers or rulers or authorities; all things have been created through him and for him. He is before all things, and in him all things hold together. And he is the head of the body, the church; he is the beginning and the firstborn from among the dead, so that in everything he might have the supremacy. For God was pleased to have all his fullness dwell in him, and through him to reconcile to himself all things, whether things on earth or things in heaven, by making peace through his blood, shed on the cross.

Natalie Grant - Alive (Resurrection music video)

<http://www.godtube.com/watch/?v=KPYWPGNX>

Turin Shroud Enters 3D Age – Holographic Pictures, Articles and Videos

<https://docs.google.com/document/pub?id=1gDY4CJkoFedewMG94gdUk1Z1jexestdy5fh87RwWAfg>

“Miracles do not happen in contradiction to nature, but only in contradiction to that which is known to us of nature.”

St. Augustine

While I agree with a criticism, from a Christian, that was leveled against the preceding Shroud of Turin video, that God indeed needed no help from the universe in the resurrection event of Christ since all things are possible with God, I am none-the-less very happy to see that what is considered the number one problem of Physicists and Mathematicians in physics today, of a ‘unification into a theory of everything’ for what is in essence the finite world of General

Relativity and the infinite world of Quantum Mechanics, does in fact seem to find a successful resolution for 'unification' within the resurrection event of Jesus Christ Himself. It seems almost overwhelmingly apparent to me from the 'scientific evidence' we now have in hand that Christ literally ripped a hole in the finite entropic space-time of this universe to reunite infinite God with finite man. That modern science would even offer such a almost tangible glimpse into the mechanics of what happened in the tomb of Christ should be a source of great wonder and comfort for the Christian heart.

Psalms 16:10

because you will not abandon me to the grave, nor will you let your Holy One see decay.

Acts 2:31

He seeing this before spake of the resurrection of Christ, that his soul was not left in hell, neither his flesh did see corruption.

Matthew 28:18

And Jesus came up and spoke to them, saying, "All authority has been given to Me in heaven and upon earth."

Brooke Fraser – Hillsong: "Lord Of Lords" (HQ)

<http://www.youtube.com/watch?v=WB4Tc5zJMUc>

Further note:

"The shroud image is made from tiny fibres that are (each) 1/10th of a human hair. The picture elements are actually randomly distributed like the dots in your newspaper, photograph or magazine photograph. To do this you would need an incredibly accurate atomic laser. This technology does NOT exist (even to this day)."

Kevin Moran - Optical Engineer

Scientific hypotheses on the origin of the body image of the Shroud - 2010

Excerpt: **for example, if we consider the density of radiation that we used to color a single square centimeter of linen, to reproduce the entire image of the Shroud with a single flash of light would require fourteen thousand lasers firing simultaneously each on a different area of linen. In other words, it would take a laser light source the size of an entire building.**

http://www.30giorni.it/articoli_id_22597_l3.htm

"the closest science can come to explaining how the image of the Man in the Shroud got there is by comparing the situation to a controlled burst of high-intensity radiation similar to the Hiroshima bomb explosion which "printed" images of incinerated people on building walls."

Frank Tribbe - Leading Scholar And Author On Shroud Research

Shroud Of Turin Is Authentic, Italian Study Suggests - December 2011

Excerpt: **Last year scientists were able to replicate marks on the cloth using highly advanced ultraviolet techniques that weren't available 2,000 years ago — nor during the medieval times, for that matter.,,, Since the shroud and “all its facets” still cannot be replicated using today's top-notch technology, researchers suggest it is impossible that the original image could have been created in either period.**

<http://www.thegopnet.com/shroud-of-turin-is-authentic-italian-study-suggests-87037>

Also of note as to providing a viable 'mechanism' for the apparent 'burst of light' emanating from the body of Christ:

Cellular Communication through Light

Excerpt: **Information transfer is a life principle. On a cellular level we generally assume that molecules are carriers of information, yet there is evidence for non-molecular information transfer due to endogenous coherent light. This light is ultra-weak, is emitted by many organisms, including humans and is conventionally described as biophoton emission.**

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0005086>

Biophotons - The Light In Our Cells - Marco Bischof - March 2005

Excerpt page 2: **The Coherence of Biophotons: ,, Biophotons consist of light with a high degree of order, in other words, biological laser light. Such light is very quiet and shows an extremely stable intensity, without the fluctuations normally observed in light. Because of their stable field strength, its waves can superimpose, and by virtue of this, interference effects become possible that do not occur in ordinary light. Because of the high degree of order, the biological laser light is able to generate and keep order and to transmit information in the organism.**

<http://www.international-light-association.eu/PDF/Biophotons.pdf>

Are humans really beings of light?

Excerpt: **"We now know, today, that man is essentially a being of light.",,, "There are about 100,000 chemical reactions happening in every cell each second. The chemical reaction can only happen if the molecule which is reacting is excited by a photon... Once the photon has excited a reaction it returns to the field and is available for more reactions... We are swimming in an ocean of light."**

<http://viewzone2.com/dna.html>

Coast to Coast - Vicki's Near Death Experience (Blind From Birth) part 1 of 3

<http://www.youtube.com/watch?v=e65KhcCS5-Y>

Quote from preceding video: **'I was in a body and the only way that I can describe it was a body of energy, or of light. And this body had a form. It had a head. It had arms and it had**

legs. And it was like it was made out of light. And 'it' was everything that was me. All of my memories, my consciousness, everything.' -

Vicky Noratuk

Kevin Moran, a scientist working on the mysterious '3D' nature of the Shroud image, states the 'supernatural' explanation this way:

"It is not a continuum or spherical-front radiation that made the image, as visible or UV light. It is not the X-ray radiation that obeys the one over R squared law that we are so accustomed to in medicine. It is more unique. It is suggested that the image was formed when a high-energy particle struck the fiber and released radiation within the fiber at a speed greater than the local speed of light. Since the fiber acts as a light pipe, this energy moved out through the fiber until it encountered an optical discontinuity, then it slowed to the local speed of light and dispersed. The fact that the pixels don't fluoresce suggests that the conversion to their now brittle dehydrated state occurred instantly and completely so no partial products remain to be activated by the ultraviolet light. This suggests a quantum event where a finite amount of energy transferred abruptly. The fact that there are images front and back suggests the radiating particles were released along the gravity vector. The radiation pressure may also help explain why the blood was "lifted cleanly" from the body as it transformed to a resurrected state."

<http://www.shroudstory.com/natural.htm>

If scientists want to find the source for the supernatural light which made the "3D - photographic negative" image I suggest they look to the thousands of documented Near-Death Experiences (NDE's) in Judeo-Christian cultures. It is in their testimonies that you will find mention of an indescribably bright 'Light' or 'Being of Light' who is always described as being of a much brighter intensity of light than the people had ever seen before. All people who have been in the presence of 'The Being of Light' while having a deep NDE have no doubt whatsoever that the 'The Being of Light' they were in the presence of is none other than 'The Lord God Almighty' of heaven and earth.

The Scientific Evidence for Near Death Experiences - Dr Jeffery Long - Melvin Morse M.D. - video

<http://www.metacafe.com/watch/4454627>

Near Death Experience – The Tunnel, The Light, The Life Review – video

<http://www.metacafe.com/watch/4200200/>

In The Presence Of Almighty God - The NDE of Mickey Robinson - video

<http://www.metacafe.com/watch/4045544>

Encounter with God - NDE of Lawyer

http://www.cbn.com/media/player/index.aspx?s=/vod/RH32v2_WS&search=heavenhell&p=1&parent=0&subnav=false

The Day I Died - Part 4 of 6 - The NDE of Pam Reynolds - video

<http://www.metacafe.com/watch/4045560>

It should be noted: All foreign, non-Judeo-Christian culture, NDE studies I have looked at have a extreme rarity of encounters with 'The Being Of Light' and tend to be very unpleasant NDE's save for the few pleasant children's NDEs of those cultures that I've seen (It seems there is indeed an 'age of accountability'). The following study was shocking for what was found in some non-Judeo-Christian NDE's:

Near-Death Experiences in Thailand - Todd Murphy:

Excerpt: **The Light seems to be absent in Thai NDEs. So is the profound positive affect found in so many Western NDEs. The most common affect in our collection is negative. Unlike the negative affect in so many Western NDEs (cf. Greyson & Bush, 1992), that found in Thai NDEs (in all but case #11) has two recognizable causes. The first is fear of 'going'. The second is horror and fear of hell. It is worth noting that although half of our collection include seeing hell (cases 2,6,7,9,10) and being forced to witness horrific tortures, not one includes the NDEer having been subjected to these torments themselves.**

<http://www.shaktitechnology.com/thaindes.htm>

Bill Wiese - 23 Minutes In Hell - 2010 video

<http://vimeo.com/16155839>

Entire Video:

<http://www.vimeo.com/16641462>

further note: It should also be pointed out that Special and General Relativity reveal two very, very, different 'qualities of eternity' within space-time. The 'entropic eternality of time' revealed for black holes is rather disturbing for those of us of a spiritual persuasion:

On The Mystery, and Plasticity, of Space-Time:

https://docs.google.com/document/d/1FFKL3FeyebpNNya1DQ64y20zlpVrjkaLXrM0P5ES4/edit?hl=en_US

further notes:

Evolution is a Fact, Just Like Gravity is a Fact! UhOh!

Excerpt: The results of this paper suggest gravity arises as an entropic force, once space and time themselves have emerged.

<http://www.uncommondescent.com/intelligent-design/evolution-is-a-fact-just-like-gravity-is-a-fact-uhoh/>

Corroborating evidence is found, that gravity does indeed arise as a entropic force once space-time itself has emerged, since black holes, the largest generators of gravity in the universe, are now also found to be the largest contributors of entropy (as defined by randomness) in the universe:,,,

Thermodynamics – 3.1 Entropy

Excerpt: Entropy – A measure of the amount of randomness or disorder in a system.

http://www.saskschools.ca/curr_content/chem30_05/1_energy/energy3_1.htm

Entropy of the Universe – Hugh Ross – May 2010

Excerpt: Egan and Lineweaver found that supermassive black holes are the largest contributor to the observable universe's entropy. They showed that these supermassive black holes contribute about 30 times more entropy than what the previous research teams estimated.

<http://www.reasons.org/entropy-universe>

Blackholes- The neo-Darwinist ultimate 'god of randomness/chaos' which can create all life in the universe (at least according to them :))

https://docs.google.com/document/d/1fxhJEGNeEQ_sn4ngQWmeBt1YuyOs8AQcUrzBRo7wISw/edit?hl=en_US

Roger Penrose – How Special Was The Big Bang?

"But why was the big bang so precisely organized, whereas the big crunch (or the singularities in black holes) would be expected to be totally chaotic? It would appear that this question can be phrased in terms of the behaviour of the WEYL part of the space-time curvature at space-time singularities. What we appear to find is that there is a constraint $WEYL = 0$ (or something very like this) at initial space-time singularities-but not at final singularities-and this seems to be what confines the Creator's choice to this very tiny region of phase space."

"Is there a real connection between entropy in physics and the entropy of information?The equations of information theory and the second law are the same, suggesting that the idea of entropy is something fundamental..."

Tom Siegfried, Dallas Morning News, 5/14/90 - Quotes attributed to Robert W. Lucky, Ex. Director of Research, AT&T, Bell Laboratories & John A. Wheeler, of Princeton & Univ. of TX, Austin in the article

<http://www.bible.ca/tracks/dp-lawsScience.htm>

Further notes:

'What is referred to as M-theory isn't even a theory. It's a collection of ideas, hopes, aspirations. It's not even a theory and I think the book is a bit misleading in that respect. It gives you the impression that here is this new theory which is going to explain everything. It is nothing of the

sort. It is not even a theory and certainly has no observational (evidence),,, I think the book suffers rather more strongly than many (other books). It's not a uncommon thing in popular descriptions of science to latch onto some idea, particularly things to do with string theory, which have absolutely no support from observations.,,, They are very far from any kind of observational (testability). Yes, they (the ideas of M-theory) are hardly science." – Roger Penrose – former close colleague of Stephen Hawking – in critique of Hawking's new book 'The Grand Design'; The exact quote is in this following video clip:

Roger Penrose Debunks Stephen Hawking's New Book 'The Grand Design' - video
<http://www.metacafe.com/watch/5278793/>

String Theory Fails Another Test, the "Supertest" - December 2010
Excerpt: It looks like string theory has failed the "supertest". If you believe that string theory "predicts" low-energy supersymmetry, this is a serious failure.
<http://www.math.columbia.edu/~woit/wordpress/?p=3338>

Integral challenges physics beyond Einstein - June 30, 2011
Excerpt: However, Integral's observations are about 10,000 times more accurate than any previous and show that any quantum graininess must be at a level of 10-48 m or smaller.,,, "This is a very important result in fundamental physics and will rule out some string theories and quantum loop gravity theories," says Dr Laurent.
<http://www.physorg.com/news/2011-06-physics-einstein.html>

Testing Creation Using the Proton to Electron Mass Ratio
Excerpt: The bottom line is that the electron to proton mass ratio unquestionably joins the growing list of fundamental constants in physics demonstrated to be constant over the history of the universe.,,, For the first time, limits on the possible variability of the electron to proton mass ratio are low enough to constrain dark energy models that "invoke rolling scalar fields," that is, some kind of cosmic quintessence. They also are low enough to eliminate a set of string theory models in physics. That is these limits are already helping astronomers to develop a more detailed picture of both the cosmic creation event and of the history of the universe. Such achievements have yielded, and will continue to yield, more evidence for the biblical model for the universe's origin and development.
<http://www.reasons.org/TestingCreationUsingtheProtontoElectronMassRatio>

further notes:

Falsification Of Neo-Darwinism by Quantum Entanglement/Information
https://docs.google.com/document/d/1p8AQggFqiRQwyaF8t1_CKTPQ9duN8FHU9-pV4oBDOVs/edit?hl=en_US

Does Quantum Biology Support A Quantum Soul? – Stuart Hameroff – video (notes in description)

<http://vimeo.com/29895068>

More detailed notes and references are in the first part of this following paper;

Intelligent Design - The Anthropic Hypothesis

<http://lettherebelight-77.blogspot.com/2012/02/let-there-be-light.html>

Why should the human mind be able to comprehend reality so deeply? (article with references)

https://docs.google.com/document/d/1qGvbg_212biTtvMschSGZ_9kYSqhooRN4OUW_Pw-w0E/edit?hl=en_US