

THE SHROUD OF TURIN AND NUCLEAR PHYSICS: WHY THE RADIOCARBON DATING RESULTS ARE PROOF OF CHRIST'S RESURRECTION!

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Abstract:

The Shroud of Turin remains the most contentious and passionately debated artifact known to humanity for both believer and skeptic alike. Adding to the controversy are the results of the 1988-radiocarbon testing results that placed the age of the Shroud of Turin between 1260-1390 CE with 95% confidence. The official and complete reports of the radiocarbon dating results of the Shroud of Turin are published in June 1989 issue of Nature.¹ Included in the published results was an acknowledgment of a statistical anomaly in the measurements, which most scientist and writers tend to ignore.

But what if the anomaly as reported in radiocarbon dating results is, in fact, actual evidence of Christ's resurrection...?

Introduction:

Proverbs 25:2 (Revised Standard Version):

“It is the glory of God to conceal a thing: but the honor of kings is to search out a matter.”

For both the believer and skeptic alike when conducting a thorough scientific investigation of the Shroud of Turin, one must not forget whose burial shroud we are investigating and what event in history we are trying to illuminate - Jesus' passion, crucifixion, death, and then ultimately his bodily resurrection from the dead. Not that God violates the established natural laws of the universe as ordained but that we need to dig deeper for an understanding of the fundamental scientific principals at work and even others waiting to be discovered.

One of the problems in researching the Shroud of Turin, as with other obscure phenomena examined, is its inaccessibility for further scientific study and analysis. Therefore, like Albert Einstein when working at the Swiss Patent Office without a research budget or access to laboratories facilities, for this investigation of the Shroud of Turin because of limited resources, a heuristic approach was implemented to include numerous hours of applied Gedankenexperiments.

This paper intends to explore several anomalous facts known about the superficial body image on the Shroud of Turin when exploring the scientific data using principals in nuclear physics and quantum theory as a guide. To date, a hypothesis has eluded researchers of any known chemical or physical mechanism that can account for the body image in its totality and explained in scientific terms.

¹ (P. E. Damon)

Therefore, it is the objective of this thesis to follow the scientific data of the Shroud of Turin, and other phenomena, to formulate a hypothesis to explain in its entirety the anomalous properties of the superficial body image and provide a mechanism for how the image was formed on the linen cloth.

Scientific Facts Known About the Body and Other Images on the Shroud of Turin:

Following is a set of experimental data agreed upon by most sindonologists:

- The body image is anatomically correct, and the wounds agree with the passion, crucifixion, and death suffered by Jesus of Nazareth nailed to a wooden cross as recorded in gospel accounts.
- The image is similar to a photographic negative concerning the contrast of light and dark tones.
- Similar to an x-ray, in a negative photographic image of the body we can see both flesh and bone simultaneously.
- There are no dyes or pigments that were used to create the image. It is not a painting.
- The body image is not affected by heat or water.
- The body image is best described as rapid heating and dehydration of a carbohydrate layer on the very surface crown of individual linen threads, wrapped 360° around individual flax fibrils and only on the very surface against the body enveloped by the woven cloth.
- The body image is best viewed/visible from a distance greater than 12 feet. Viewed closer than 12 feet and the body image seems to disappear.
- The body image has dimensional properties concerning the spatial distance the body was from the cloth; the darkest body image comes from the tip of the nose.
- The image has a precise up/down directionality.
- The body image is displaced along the length of individual cells of the flax fibrils, from node to node.
- There are faint secondary images of flowers on the cloth, such as chrysanthemum and pistacia.
- There are no signs of rigor mortis or decay of the corpse in the body image, which is atypical of a body dead more than 36 hours.

Following is a set of experimental/observational data less accepted by shroud researchers:

- The body image has properties of a hologram; varying focal lengths obtained from negative photographic plates show additional three-dimensional information not readily seen by an unaided eye. It would appear there are solid objects placed over the eyelids, Roman coins have been suggested, and an amulet over the hollow of the neck that did not interfere with the mechanism that produced the body image.

- There is no flattening of the muscles on the dorsal side of the body image that would have occurred with direct contact from the body weight with the sepulcher in the tomb. As proposed by Dame Isabel Piczek, the body of Jesus may have been levitating in the tomb for a time before the resurrection event.
- The body image may be becoming fainter over time.

The Official Results of the 1988 Radiocarbon Dating of the Shroud of Turin:

In a well-attended press conference on October 13, 1988 Cardinal Ballestrero announced the official results - the radiocarbon testing dated the shroud from 1260-1390 CE, with 95% confidence. The official and complete report on the experiment can be found in Nature. The un-calibrated dates from the individual laboratories, with 1-sigma errors (68% confidence), were as follows:

Tucson: 646 ± 31 years; Zürich: 676 ± 24 years; Oxford: 750 ± 30 years. The weighted mean was 689 ± 16 years, which corresponds to calibrated ages of CE 1273-1288 with 68% confidence and CE 1262-1384 with 95% confidence.

It would seem that the results of the radiocarbon dating, although in stark contrast to numerous other scientific experiments, is still considered to be the definitive test when determining if the Shroud of Turin is truly the burial shroud of Jesus. But what if the radiocarbon dating results are correct? What if they belong to the same set as the multitude of other scientific experiments testifying to the truth that a corpse in a tomb after three days can be resurrected from the dead to what scriptural accounts describe as a glorified body?

Understanding the Numbers:

Radiocarbon Dating 1σ Results: the year radiocarbon dating tests were performed in 1988.

Tuscan (Arizona #1) Results: linen sample tested closest to the body image

646 ± 31 years	$646 + 31 = 667$	$1988 - 677 = 1311$
	$646 - 31 = 615$	$1988 - 615 = 1373$
		$1988 - 646 = 1342$

Zürich Results:

676 ± 24 years	$676 + 24 = 700$	$1988 - 700 = 1288$
	$676 - 24 = 652$	$1988 - 652 = 1336$
		$1988 - 676 = 1312$

Oxford Results: linen sample tested farthest from the body image

750 ± 30 years	$750 + 30 = 780$	$1988 - 780 = 1208$
	$750 - 30 = 720$	$1988 - 720 = 1268$
		$1988 - 750 = 1238$

Age difference with the smallest calculated Δ 43 years

Age difference with the greatest calculated Δ 165 years

“As reported in *Nature*, Professor Bray of the Instituto di Metrologia 'G. Colonetti', Turin, "confirmed that the results of the three laboratories were mutually compatible, and that, on the evidence submitted, none of the mean results was questionable." (See Figure 2)

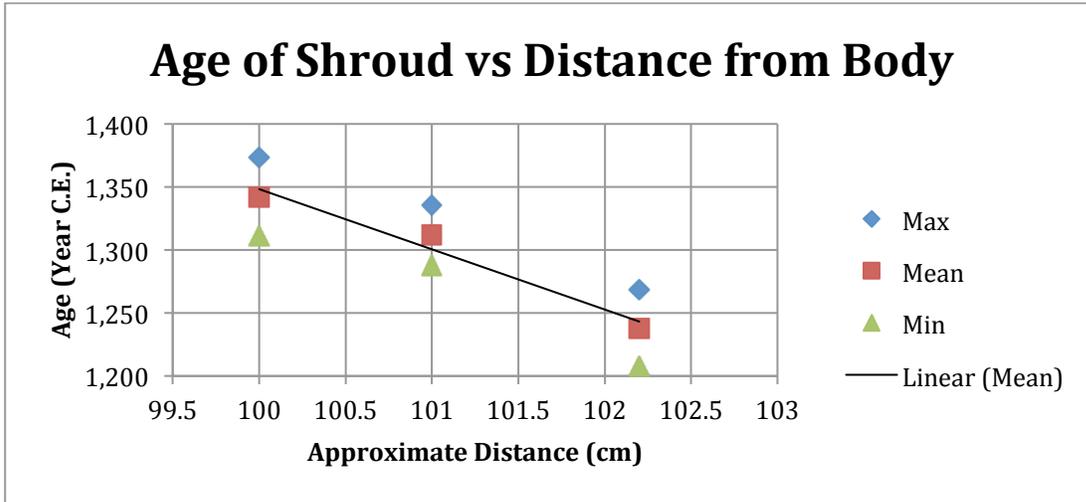


Figure 1 - In the graph provided above a graphical method was used to approximate the distance the center of the samples tested would have been from the center of mass of the body image on the Shroud of Turin. Since the slope of the line is negative, it demonstrates the linen tested older the further the samples were taken from the center of mass of the body image.

But not so fast Professor Bray!
When understanding the numbers, clearly the linen cloth is dating older the further the samples were taken from the body as it was wrapped in the linen burial shroud (See Figure 2).

The maximum error as reported by the three laboratories that performed the radiocarbon dating testing on the Shroud of Turin *should have been* ± 31 years. As demonstrated in the above calculations, the

least possible difference in age is 43 (1311 - 1268) years at a minimum and 165 (1373 - 1208) years at a maximum per the measurements made by the three laboratories, which does not fall within the expected range of the error analysis. However, because the age difference was within the same range, the laboratories concluded that the age of the linen cloth was between 1260 – 1390 C.E. with a 95% confidence.

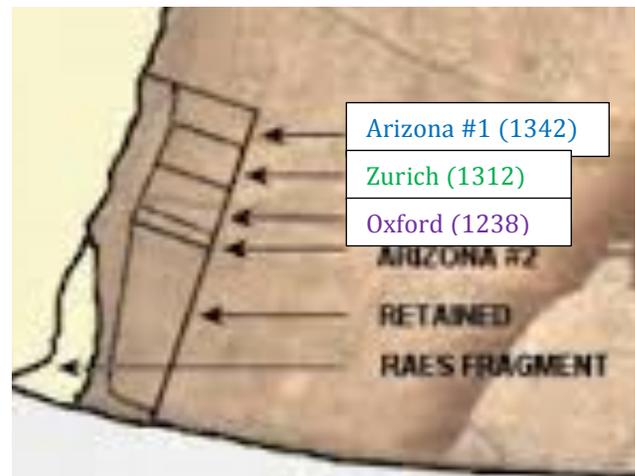


Figure 2 - Location of samples tested for ¹⁴C on the Shroud of Turin

Essentially there is approximately 16% more ^{14}C than there should be if the burial shroud is genuinely that of Jesus when crucified near the beginning of the first century. At first, this might seem like a lot, but when measuring the ratio between naturally occurring carbon-12 (^{12}C) and its radiocarbon isotope carbon-14 (^{14}C) for every ^{14}C atom, there are approximately 739,000,000,000 ^{12}C atoms. So, in reality, there was very little change in the amount of ^{14}C that was measured in the linen cloth.

As a result of my research, the results of these experiments are not in dispute but are actually significant clues in determining why the radiocarbon dating results are in fact actual proof of Christ's resurrection. The results are an essential and important insight of who and what we are on the quantum level - *energy!*

So, let's examine the results of the radiocarbon dating performed on the shroud more closely. It is of significant import that the three samples tested on the shroud date older, the further the samples were taken from the body image. The spatial distance of body image, contrasts with respect to light and dark, along with the radiocarbon dating, all follow a direct mathematical relationship. This principle in science is known as the *Inverse Square Law*. In other words, the further one moves away from the source of energy or force, the intensity is decreasing as follows:

$$\text{Intensity} \propto \frac{1}{\text{distance}^2}$$

Evidence that the Mass of ^{14}C can be Increased in Linen Cloth by Radiative Capture:

Shortly after the results of the radiocarbon dating were leaked by the three laboratories conducting the testing on the Shroud of Turin, some scientists, given the statistical anomaly reported, proposed that neutron activation and radiative capture might have been responsible for the excess mass of ^{14}C as measured by the laboratories. Therefore, the results reported when conducting the ^{14}C testing were interpreted as a false positive given their expectations of the radiocarbon dating, which has been the cause for much confusion for the last 30 plus years.

Two of these scientists were Thomas J. Phillips of Harvard University and Jean-Baptiste Rinaudo from the Faculty of Medicine of Montpellier in France. They proposed that a neutron flux during the resurrection event could account for the discrepancy in the radiocarbon dating on the Shroud of Turin. In their experiment, they irradiated linen from a Lyma mummy of a known age with a neutron flux of $1 \times 10^{13} \text{ n/cm}^2$ from a research nuclear reactor.

Their conclusion:

“The most evident result of our research is the increase of the ^{14}C content after neutronirradiation⁶ and the impossibility, even with the most severe pretreatments, to reach the "historic" age (calibrated on dendro-

chronological curves) of the non-irradiated sample (TO-13583 - 40/10/0 BC).

Therefore, if an irradiation had happened, the result would explain the anomalous data obtained in the analyses of the Shroud made in 1988.⁷

It is evident that the ¹⁴C content increases with the increase of the neutron flux. The sample TO-12553 (Table V), although subjected to a cleaning pretreatment with a yield of 7.8 %, shows a result of the ¹⁴C content greater than the sample TO-5305 (Tab. III).”

Simply interpreted, that even after thoroughly cleaning the linen sample of any contaminants, they were able to increase the measured amount of ¹⁴C in the cloth by exposing the linen fiber to thermal neutrons from a research reactor. This result could be the basis of the statistical anomaly observed by the three laboratories that performed the radiocarbon dating of the Shroud of Turin in 1988.

In 1998, when conducting a similar experiment as proposed by Phillips and Rinaudo, a modern linen sample was exposed to thermal neutrons at the Reactor Laboratory at Ohio State University. The irradiated cloth was almost destroyed. The linen became a very dark sepia color and curled at the edges of the sample.

Robert Rucker in his analysis when using the Monte Carlo N-Transport computer program was able to demonstrate that the Shroud of Turin and the Sudarium of Oviedo (discussed below) would date older than the expected age from the first century and as a function of the distance the linen clothes would have been from the body of Jesus during the resurrection event. In his investigation, Rucker also concluded that if the neutrons came from anywhere other than the body of Jesus, the analysis fell apart.

Therefore, it is highly probable that another mechanism other than **nuclear fission** was responsible for thermal neutrons being emitted from the body of Christ during the resurrection event.

The Sudarium of Oviedo:

There remains a questionable chain of custody for the Shroud of Turin after disappearing from the historical record when Constantinople fell during the Fourth Crusade in April of 1204. This, when combined with the results of the radiocarbon dating, has led many to believe the Shroud of Turin to be a medieval forgery. Such is not the case of the Sudarium of Oviedo. To best comprehend this linen cloth provided is a description in the Gospel of John 20:7:

⁷and the napkin, which had been on his head, not lying with the linen cloths but rolled up in a place by itself. (Revised Standard Version)

It is entirely possible, given its historical evidence, the Sudarium of Oviedo was the cloth used to cover Jesus' face and sewn in place with his own hair. Presently this cloth is being conserved in the Cathedral of San Salvador in Oviedo Spain and is believed to be this very same linen cloth mentioned in the Gospel of John. It was brought from the Palestine area in 614 C.E. The earliest written record of the cloth's existence, other than the Gospel of John, is referenced by Antoninus of Piacenza when it was being cared for in a cave near St. Mark's monastery near Jerusalem.

Like the Shroud of Turin, the Sudarium of Oviedo is stained with blood, type AB, resulting from puncture wounds from the crown of thorns. There are plant spores, that were also found on the Shroud of Turin near the head from *gundelia tournefortii*, one of the plant species used to fashion the crown of thorns during the passion of Christ. The cloth is also discolored with pleural fluids expelled from the lungs, most likely from the body of Jesus being placed face down to remove the nails from his hands and feet when taken from the cross. When a transparency of the Sudarium of Oviedo is placed over a photograph of the Shroud of Turin, there is a high correlation between the bloodstains from the two clothes leading many researchers to conclude with a high degree of confidence that both linen cloths covered the same corpse.

Therefore, if like the Shroud of Turin, the Sudarium of Oviedo had been in the tomb during the resurrection it would have also been subjected to a thermal neutron flux. Since the Sudarium of Oviedo was further away from the body of Jesus, "rolled up in a place by itself", following the principle of the inverse square law, the intensity of the neutron radiation effecting the Sudarium of Oviedo would also have been less. Thus, the radiative capture of neutrons would also have been reduced, and as a result, the linen cloth from the Sudarium of Oviedo should date older than the Shroud of Turin but still not from the first century when Jesus was crucified.

Given this hypothesis, nuclear physics validates the theory. When the Sudarium was tested for radiocarbon ^{14}C in 2007, the results are as follows: 653-786 AD Toronto, and 642-769 AD (in another version 642-869 AD) Tucson. The data once again demonstrates that neutron activation through the *inverse square law* was most likely the cause of the discrepancy in age when dating both the Shroud of Turin and the Sudarium of Oviedo. Ergo, the radiocarbon dating results of the Shroud of Turin in combination with the results of the Sudarium of Oviedo are the proverbial *smoking gun* of Christ's bodily resurrection from the dead!

Light, Magnetism, and the Subatomic Particles:

Therefore, when investigating a possible mechanism responsible for these image formations, those aspects in science that also demonstrate the principles of the *inverse square law* should be investigated. These are:

* Heat * Light * Sound * Magnetism * Radiation

Nikola Tesla considered that all matter is nothing more than a condensate of light, and light is nothing more than an ultra-high frequency electromagnetic wave. Tesla

also proposed the resurrection of Christ to be the consequence of the physical mass of Jesus' body returning to a state of higher energy - to a state of pure light.

Nikola Tesla stated:

“We are whirling through space with an inconceivable speed. All around us, everything is spinning; everything is moving, everywhere is energy. There must be some way of availing ourselves of this energy more directly. Then, with the *light* obtained from our medium, with the power derived from it, with every form of energy without effort, from the store forever inexhaustible, humanity will advance with great strides.”²

Another fascinating perspective is an ancient text, the Emerald Tablet of Thoth that describes our true nature (*nature of the soul*) as being creatures of light. For reference, Thoth was the God of Wisdom from Egyptian Mythology that gave humanity such knowledge as writing among many other technologies.

As part of this research light, as well as magnetism, and ionizing radiation were explored as possible sources for the formation of the body image on the linen burial shroud.

Further investigation included the strong nuclear force, the weak nuclear force, electromagnetism, and gravity. Of these forces, it is the electromagnetic force that also follows the *inverse square law* and acts at the spatial distance in which the body image was formed. It is important to note that magnetism and electricity are fundamentally interlinked and consistent with Einstein's theory of special relativity.

As a consequence of Einstein's theory of special relativity, electricity and magnetism are fundamentally interlinked. Both magnetism lacking electricity, and electricity without magnetism, are inconsistent with special relativity, due to such effects as length contraction, time dilation the fact that the magnetic force is velocity-dependent. However, when both electricity and magnetism are taken into account, the resulting theory (electromagnetism) is fully consistent with special relativity.³

https://en.wikipedia.org/wiki/Length_contraction

At a cosmic scale when considering the magnitude of the stars, the movement of planets orbiting the sun, and stars in the spiral galaxies, with a black hole at its center, Einstein's statement above is readily apparent. However, on the atomic scale with elemental particles such as electrons, quarks, leptons, and bosons, their interactions are only observable through experimentation. But each subatomic particle has a specific quantum spin number, which gives rise to magnetic fields.

² (Cawthorne 46)

³ (Magnetism)

All physical matter, when considering subatomic quantum spin numbers, exhibits properties of paramagnetism or diamagnetism; they are either attracted to or repelled by magnetic fields. Magnets are simple demonstrations of the inverse square law. The force of attraction or repulsion is the greatest when the magnets are near one another but drops off exponentially, as $1/x^2$, as they are moved further apart in space-time.

Only a few materials are ferromagnetic such as iron, cobalt, and nickel. But on the atomic level all elements are either paramagnetic or diamagnetic. All materials are either weakly attracted to or weakly repelled by a magnetic field depending on their quantum spin number and the force differential exhibited is only detectable in a laboratory. Therefore, when considering the resurrection of Jesus, it is important to consider the magnetic force acting at very short distances that would be measured in angstroms on the atomic scale.

An important point to consider is that in materials that are paramagnetic, the unpaired electrons are free to spin in any direction and can align their magnetic moment in any direction. The correlation here is that when the ferrimagnetic and ferromagnetic materials are very small, they act like a single magnetic spin and have the ability to move or change the orientation of the electron spin of atoms in the near proximity of the induced magnetic field.

Tesla also discovered in his early experiments with high voltage at high frequencies, that electricity exhibits what is known as a skin effect.⁴ An induced magnetic field pushes the current to the outside of the conductor, which will then travel along the surface of a wire. This allows transmission of electricity at 40,000 volts via high-tension lines without melting the wire from the towers. This phenomenon also provides another plausible explanation why the body image is incredibly superficial, only on the very inside surface of the burial shroud. The body image is also wrapped 360° around the individual surface fibrils, evidence of a magnetic curl, and is only on the crowns of individual threads that make up the weave of the linen cloth.

To comprehend this surface phenomenon, we need to first understand the properties of a subatomic alpha particle. An alpha particle is designated with the Greek letter, α .

An alpha particle is essentially a nucleus of a helium atom, composed of two protons and two neutrons but lack electrons. Because it has no electrons, an alpha particle carries a +2 e charge and designated as He^{2+} . An alpha particle also has the strongest ability to ionize - strip electrons from - other atoms and molecules.

There are four types of ionizing radiation, which are capable of stripping electrons from atoms and chemical bonds - alpha particles, beta particles, gamma rays, and neutrons.

A neutron is composed of one up quark and two down quarks. Although a neutron does not carry an electric charge, it does have a miniscule magnetic moment.

⁴ (Cawthorne 52)

Magnetic moment: $\mu_n = -9.6623647(23) \times 10^{-27} \text{ J}\cdot\text{T}^{-1}$
Magnetic polarizability: $3.7(20) \times 10^{-4} \text{ fm}^3$

Therefore, all isotopes that contain an odd number for the sum of protons and neutrons also have an intrinsic magnetic moment and angular momentum, in other words, a nonzero spin, while all nuclides with even numbers of protons and neutrons have a total net spin of zero. Since an alpha particle has paired protons and neutrons, its net magnetic spin and magnetic moment is zero but are deflected by magnetic fields.

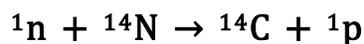
Under the influence of a very strong magnetic field, neutrons will move antiparallel to the field lines; or more specifically, they move in the same direction of the field lines but do not track precisely along the lines of force when drawing a flow net of the magnetic field.

Because neutrons do not have an electric charge, they are more difficult to shield than the three other types of ionizing radiation. Materials that have a high hydrogen content such as water, fats, oils, and plastics are used to shield people and objects from neutrons in the nuclear industry. Because hydrogen atoms have the smallest atomic radii, a neutron has the greatest probability of striking a hydrogen atom thereby releasing its kinetic energy to the proton in the nucleus of the atom. Kinetic Energy, $\mathbf{KE} = \frac{1}{2} \mathbf{mass}\cdot\mathbf{velocity}^2$.

When a neutron strikes the nucleus of an atom with a mass greater than hydrogen, and if the velocity is too high, the neutron will either be deflected or reflected back depending upon the angle of incidence at which the neutron struck the nucleus of the target atom. The target nucleus counteracts this disturbance by releasing a gamma ray to balance or dissipate the energy, in a heating effect, due to the inelastic collision. Therefore, neutrons are only ionizing as a secondary effect of their interaction with the nucleus of an atom by causing the emission of gamma ray radiation.

In contrast, other elements with large atomic radii, other than hydrogen and helium, are virtually transparent to neutrons because the atom is composed mostly of a vacuum of space in the electron shell configuration. Electrons, orbiting the nucleus of an atom, travel at nearly the speed of light in a vacuum. This has been described as a cloud of electrons, and at the center of the atom is a very tiny nucleus which contains almost its entire mass.

If the kinetic energy/velocity and angle of incidence are not too great, a neutron can be captured, also known as radiative capture. In this interaction, it is possible for the nuclear transmutation of nitrogen-14 atoms into radioactive isotope carbon-14. If a neutron (n) is captured by a nitrogen -14 atom, (seven protons, and seven neutrons), to form, (six protons and eight neutrons), a proton (p) is ejected from the nucleus of the atom as demonstrated with the following formula.



To better understand why the radiocarbon dating of the Shroud of Turin was affected by the radiative capture of neutrons by nitrogen atoms, it is vital to understand that nitrogen atoms are contained within the DNA molecules of the flax fibers.

In addition, during the production of linen fiber, bacteria-laden water is used to decompose or rot the pectin, the hard-woody outer stalk, of the flax plant. This bacterium through nitrogen fixation would also have left nitrogen atoms on the very surface of the linen fibers during the retting process and production of the linen textile.

Other sources of nitrogen that could have contributed to an increase in the production of carbon-14 in the linen cloth but to a lesser degree are as follows: nearly 80% of the earth's atmosphere is nitrogen gas as N_2 , and sweat that collected on the surface of Jesus's skin during the excruciating pain of his passion and crucifixion. Sweat contains nitrogen in the form of urea, CH_4N_2O .

Possibly it is the alignment of the magnetic moment of nitrogen atoms in the DNA molecules of the linen cells and other available sources, which is causing a higher than average nuclear transmutation of ^{14}C isotopes in the linen cloth. Much like how nitrogen atoms in the geomagnetic latitudes of earth's atmosphere near the magnetic north and south poles account for the greatest natural production of ^{14}C , a magnetic alignment of DNA molecules in the flax plant cells could be skewing the results of the 1988 radiocarbon dating of the Shroud of Turin.⁵

Also, when an atom undergoes alpha decay, alpha particles travel only a few centimeters in air. Of the four types of ionizing radiation, alpha particles have the greatest mass at $3.727379378(23) \text{ GeV}/c^2$, and carry a $+2 e$ charge. Thus, alpha particles are very easily stopped or shielded. Dead cells on the surface of our skin and materials thin as tissue paper are capable of shielding us from the damaging effects of ionizing alpha particle radiation.⁶

Typically, alpha decay only occurs with the heaviest nuclides. But if an alpha particle does not have enough energy to overcome the Coulomb Barrier flow/charge, it can also be emitted from the nucleus of an atom through a mechanism known as quantum tunneling.

Now the mechanics of the surface phenomena start to come together. First, alpha particles travel only a few centimeters in air. Second, very thin materials are capable of stopping/shielding alpha particles. Third, alpha particles are deflected by magnetic fields. The combination of these three principles, resulted in alpha particles collecting on the surface of the linen cloth causing the surface to become electrostatically charged with a positive $(+2 e)$ charge.

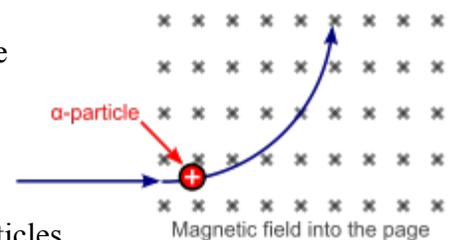


Figure 3 – A magnetic field deflects an alpha particle

A similar example is how a Xerox copier works. Charged carbon dust is either attracted to or repelled by a static charge that has been laid down on the surface of the paper.

⁵ (Carbon - 14)

⁶ (Alpha Particle)

However, in this case, alpha particles are the charged particles, carrying a positive $+2e$ charge, being distributed over the surface of linen cloth.

To provide a further understanding, rather than individual flax fibrils acting as a single conductor such as with a wire, the flax fibrils were behaving more like a series circuit of air induction coils connected end to end. In an air induction coil, the magnetic field is the greatest at the end of the coil, which can account for why the body image is from node to node throughout the body image. At a node, where two cells walls meet end to end, the cell walls could possibly be acting similarly to an air gap capacitor. With a limited charge, the alpha particles would be impeded and prevented from jumping the gap thus preventing the body image to be formed on an adjacent cell adjoining that node. This combination of induction and capacitance can possibly account for the dark bands that are noted at the nodes of the flax fibrils. Also, when an inductor is paired with a capacitor in a parallel circuit, the circuit would oscillate such as with a tank circuit thus increasing the amplitude with a specific resonance of the electric potential and current.

When the frequency of a magnetic resonance was high enough, the electric current of positively charged alpha particles would then travel along the surface of individual flax fibrils acting as a conductor.

Unlike a low voltage Direct Current (DC) circuit, the electron drift through the conductor has a velocity of several meters per second. In an Alternating Current (AC) circuit electrons tend to stay in place and vibrate energetically in what would be more accurately described as a sea of charged particles that have the ability to flow. However, in this case instead of electrons, alpha particles were carrying the charge and flowing along the surface of the flax fibrils as a result of an induced magnetic resonance.

The magnetic curl provides further evidence that an alternating current produced by a nuclear magnetic resonance was the principle fundamental force that resulted in the superficial body image being formed on the surface of the cloth. It is also through the constructive/destructive interference of this magnetic field that gives the body image three-dimensional properties similar to how a standing wave of photons from a LASER produces a hologram in the plane of the film. The acronym, LASER is derived from "Light Amplification by Stimulated Emission of Radiation."

It is also important to note that although in an induced electric field the energy moves from positive to negative, the electron drift moves from negative to positive. In this case, since we are considering charged alpha particles to be causing an electric potential distributed on the surface of the cloth, the magnetic curl was wrapping these positively charged alpha particles around the surface of the flax fibrils. This also follows the right-hand rule for the curl of the magnetic field.

Finally, given the varying spatial distance the body was from the linen cloth there would be an unequal concentration of charge (alpha particles) creating a potential difference, or

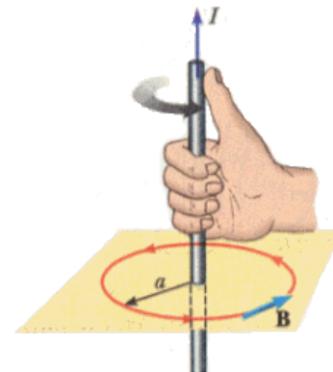


Figure 4 - Magnetic Curl - Right Hand Rule
(Photo Credit: Right-Hand Rule Engineering.com)

voltage, across the surface of the cloth. Therefore, without the need for a closed/completed circuit, alpha particles would move from a greater concentration to a lesser concentration of electrical potential/voltage across the surface of the linen burial shroud.

Evidence suggests that the body image resulted from a release of energy and/or light emanating from the heart but with a precise up and down directionality. It is proposed, the energy released would probably be more accurately described as a nuclear magnetic resonance (NMR) causing a directional magnetic field emanating from the body of Jesus linearly, in a vertical plane, and collinear with the direction of the force of gravity.

Consider for a moment the possibility for unpaired electrons spinning freely in any direction, to align, and at a distance on the nuclear scale, to act as a single super strong magnet. Although the magnetic moment of a neutron is very small, one type of magnetism strong enough and capable of directing neutrons at the atomic level is superparamagnetism.⁷ What then would happen to the electrons and the nucleus of atoms surrounding the location of this developed force of superparamagnetism?

Typically, superparamagnetism occurs in materials composed of nanoparticles consisting of ferromagnetic and ferrimagnetic compounds. We have such nanoparticles consisting of both ferromagnetic and ferrimagnetic flowing throughout our bodies. The electron configuration for iron Fe: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^6$. Hemoglobin in the blood at times has a valence of 2+ or 3+ and corresponding oxidation number of $Fe^{2+}: 1s^2 2s^2 2p^6 3s^2 3p^6 3d^6$ and $Fe^{3+}: 1s^2 2s^2 2p^6 3s^2 3p^6 3d^5$ depending if the hemoglobin in the blood is oxygenated (appearing red in color) or deoxygenated (appearing blue in color).

Ergo, we now have for consideration neutrons and alpha particles forming the superficial body image and increased production of ^{14}C of the linen cloth with magnetic properties. These particles can be directed or deflected with powerful magnetic fields and that are also ionizing. Another important aspect of neutrons to consider, is that they can also propagate space-time as a wave.

The DNA Molecule – The Key that Unlocks the Mystery:

A crucial issue surrounding this research is the mechanism that caused the superficial body image to form on the surface of the linen cloth. It had to be independent of the density (mass per unit volume) or specific gravity of the particular parts of the body wrapped in the shroud. For example, the varied density of flesh, bone, and hair is substantial. We know that hair was also involved in the image formation because it can be seen on the dorsal image on the shroud that Jesus was sporting a ponytail during the crucifixion.

⁷ (Superparamagnetism)

Also, there were off body flower images produced on the linen surface as a result of the resurrection event. Like hair, flower petals would be less dense than flesh and bone. Another important aspect of the body image is that no image formed under the blood that adhered/cemented to the surface of the cloth. The understanding is that the blood was on the cloth before the body image was formed. This result would be expected given the crucifixion ended with Jesus' death on Friday during the 9th hour, understood to be sometime around 3:00 p.m. and the resurrection occurred sometime early Sunday morning.

Although disputed by some shroud researchers, for the sake of argument let's consider Dr. Petrus Soons', M.D. postulation, that there were Roman coins placed on Jesus' eyelids and a solid metal amulet placed over the neck of Jesus when he was placed in the tomb.⁸ Arguments against coins and an amulet being present is that image of the coins, to see the widow's mite of Roman coins from the 1st century, the resolution of the image would have to be finer than the weave of the cloth. However, there appears to be something solid with a defined edge causing a doubled-lined image to form on the lower part of the neck area that is not inherent of the body image. These lines are plainly seen with the unaided eye in the negative image provided in Figure 5.



Figure 5 - Negative face image from the Shroud of Turin

Line form a crease in the linen cloth
Edge of a solid object placed over the front of the neck

Another argument suggests if there were coins over the eyes and an amulet on the neck, the body image would not have been produced under these items because the linen cloth would have been shielded from the energy or light released during Christ's resurrection. For those parts of the body image shielded by such objects, there would be blank areas void of the body image on the linen burial shroud.

Therefore, what did the parts of the body such as hair, flesh, bone, and secondary flowers images have in common that the coins and amulet did not, that could possibly be responsible for the production of the body image on the cloth? The answer - DNA molecules...!

For clarification, hair shafts contain only mitochondrial or mtDNA. Also, because mature red blood cells lose their organelles, they do not contain nuclei, organelles, DNA nor mtDNA molecules. This could explain why the blood outside the corpse was not caught up in the resurrection event and remains on the cloth and why there is no image body image under the blood. It is important to note that DNA and mtDNA molecules are

⁸ (Meier)

consistent throughout the human body for cells that contain those specific types of DNA material.

Like the magnetic curl formed by a moving charge, the double helix of a DNA molecule also follows the right hand rule or twist also referred to as a “Z” twist of the lattice structure. The “Z” twist of the double helix is attributed to the unpaired electron spin of covalent chemical bonds in the rails of the ladder structure of the DNA molecule.

Another property of the DNA molecule, given the Lorentz Force, is that it responds to the different poles of a magnet either by winding or unwinding the double-helix structure. The magnetic property also gives the DNA molecule **solenoidal properties** given the double helix structure of the molecule.⁹ DNA molecules given their highly organized three-dimension lattice structure have also been described as crystalline in nature.

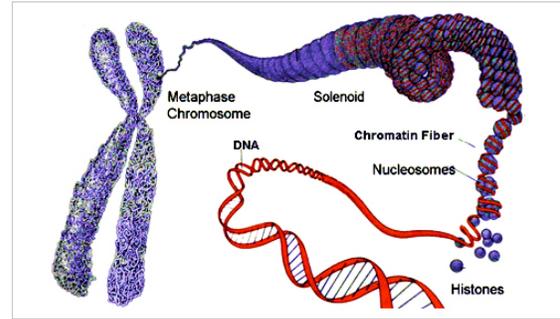


Figure 6 - The DNA molecule represented as a solenoidal coil in the metaphase chromosome of a cell.

For reference, provided below are the chemical formulas for the four nucleic acids that are the building blocks of the DNA molecule and life:

Adenine - $C_5H_5N_5$ Cytosine - $C_5H_5N_3O$ Guanine - $C_5H_5N_5O$ Thymine - $C_5H_6N_2O_2$

The inside core of the flax plant cells, like all living things, contains long strand deoxyribonucleic acid (DNA) molecules.

Linen textile is a product of the flax plant. It is composed of 71% cellulose, 18.6 - 20.6% hemicellulose, 2.2% lignin and 2.6% pectin. Hence, the primary chemical compound in the cell wall of the linen fiber is cellulose. Linen's fundamental structure is tubular with plant cells consisting of cellulose linked end to end. Cellulose is a polysaccharide molecule consisting of linear chains of several hundred to thousands of $\beta(1\rightarrow4)$ linked D-glucose units with a near perfect **crystalline structure**. Its chemical formula is $(C_6H_{10}O_5)_n$.

Logically, if the DNA molecule is truly responsible for all life in the universe, then to resurrect a body from the dead one must first start with the source of life. Hence, when exploring the functions of the DNA molecule from a perspective of quantum theory, a final solution appeared as an explanation for the mechanism for the body image formation on the Shroud of Turin.

Experiments, performed by a Russian biophysicist, discovered that photons, although random, will align along the lattice structure of the DNA molecule. Gamma ray radiation consists of very high-energy photons - light invisible to the human eye - which permeates

⁹ (Solenoid (DNA))

all of space-time as an electromagnetic wave. Arthur M. Young from Princeton University, also proposed in the 1970's that the DNA molecule itself is light, which is an interesting premise very much in line with Nikola Tesla's supposition that all matter on the fundamental level is actuality a condensate of light.

For a moment consider that blood is stagnant, not flowing, in the corpse of Jesus for a period of nearly three days. With the solenoidal properties of the DNA molecule, potential energy could have been stored in the form of a magnetic field built up in the body of Jesus as a result of being bombarded with cosmic gamma rays for three days while in the tomb. The electron spin of iron atoms in the red blood cells began to orientate/align the curl of the north and south magnetic field. The alignment of gamma rays along the DNA molecule could have resulted in superparamagnetism thus creating antigravity causing the body of Jesus to levitate in the tomb.

If Jesus weighing approximately 170 pounds were laying on the sepulcher of the tomb for three days, it would be logical for those parts of the corpse the muscles of the calves, thighs, buttocks, heel, and shoulder blades would be flattened from the weight of the body pressing against the limestone. That is not what is seen in the dorsal image of the body (See Figure 7). Therefore, as theorized by Dame Isabel Piczek sometime before the resurrection, the body of Jesus must have been levitating in the tomb.

As demonstrated with Flemings Right-Hand Rule, if a levitating force was acting upward, in opposition to the force of gravity in the vertical direction, the magnetic field and current flow would act within the horizontal plane oscillating along individual fibrils on the surface of the cloth. Levitation allowed a magnetic field to develop in the body. This was possible as the body was not grounded.



Figure 7 - The dorsal body image.

It has also been demonstrated with experiments in levitation, that differential capacitance can induce properties of antigravity. A Russian entomologist discovered that bumble bees, with their very diminutive wings, have microscopic magnetic cones on surface of the wings. The hollow tubes composing the structure of the wings also act as resonant chambers. When the bumble bee beats its wings it causes a resonance in the magnetic cones thus producing levitation making it possible for a bumble bee to fly. Another interesting phenomena is this magnetic resonance makes it possible for the bee to fly what is known as a "beeline", 30 mile per hour in a straight line to and from its food source irrespective of the relative wind direction.

Experiments by NASA may provide additional evidence that demonstrates this phenomenon, by using very strong magnetic fields to warping/bending space. This could

actually change the physical parameters of space-time and may also produce levitation/antigravity.

This reality is closer to science *fact* rather than science fiction. NASA has been conducting experiments with a device called the Alcubierre Drive, as shown in Figure 6. The Alcubierre Warp Drive (Figure 5) is a theoretical device conceptualized by Miguel Alcubierre as a solution to Einstein's field equations of general relativity using of a matrix of tensor equations. NASA is exploring the device as a way of possibly traveling to distance stars faster than the speed of light by manipulating the physical parameters of space-time with very strong magnetic fields.

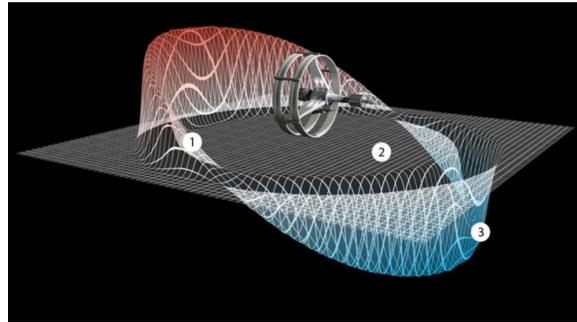


Figure 8 - The Alcubierre Warp Drive, the Picture is from NASA's website

By collapsing space-time in front of the vehicle and expanding it behind, stretching and shrinking the physical dimensions of space-time like a rubber sheet, a vehicle can travel faster than the relative speed of light. Now because the physical parameters of space-time are being manipulated/warped, the inertia of a body's mass given a change in rapid acceleration becomes irrelevant. So, like the bumble bee, the Alcubierre Warp Drive is creating a bubble in space-time making it possible to flying a beeline irrespective of the relative wind speed and direction. Also, by aligning the magnetic curl via the quantum spin numbers, it is possible to either negate or increase the effects of gravity. Einstein's theory of general relativity has demonstrated with a significant mass on the magnitude of stars, space-time will warp. This fact was proven when a double image of a star behind the sun was visible during a solar eclipse.

It is proposed that space-time itself is composed of electromagnetic fields. This is why light as an electro magnetic wave can propagate the dimensional parameters of space-time without the need for a medium, such as is required with sound vibrating air molecules. Also, possibly one of the results of warping space-time is neutron activation.

Interesting to note, the leading theory in cosmology is that before the event of the Big Bang it was considered that the four known fundamental forces the universe – the strong nuclear force, the weak nuclear force, electromagnetic force, and the gravitational force were all acting as one single force. The theory postulates, it was only when the gravitational force momentarily separated from the other three forces that the spark of the big bang occurred. Data observed from the Supernova Cosmology Project suggests the expansion of the universe is still accelerating. In other words, the universe is still banging. To understand the Alcubierre Warp Drive more fully, the expansion of the universe is not *matter* moving further apart through space-time but the space-time

between the matter is expanding. The expansion of the universe is often demonstrated using pen marks on the surface of a ballon moving further apart as the ballon is inflated.

The Resurrection Event

It is hypothesized that the physical matter of Jesus' body was reorganized/transformed at the subatomic level during the resurrection to a glorified body which scripture also describes as "incorruptible".

Scripture tells us that when Jesus was resurrected from the dead he was resurrected to a *glorified body*. Clearly, when Jesus emerged from the tomb on Easter morning, his physical body/matter was transformed from the corpse that was placed in the grave late Friday afternoon. Therefore, the resurrection of Jesus must have been much different than Lazarus being raised from the dead in that the corrupt corpse needed to be shed and transformed into an incorruptible body (for reference see 1 Corinthians 15:53). Possibly what the authors of scripture were trying to describe, with a complete lack of understanding of nuclear physics, was the reorganization/assimilation of physical matter.

A particle was found near the heel of the body image on the Shroud of Turin and removed from by the STURP Team in 1978. The particle had an atomic mass of 131 amu. As pustulated by José Carlos Espriella Godinez, one of the up quarks in a neutron was replaced and/or transformed to a strange quark. Now instead of having an imbalance of two up quarks and a down quark composing the subatomic structure of the neutron the subatomic particle was more stable with an up, a down and a strange quark.

Now for this hypothesis to have merit, the physical mass of a human body would need to return to a state of higher energy. There must be an increase in the frequency of the electromagnetic waveform of matter.

Gamma rays permeate all of space-time, are omnipresent and invisible to the human eye. Gamma radiation is ultrahigh frequency electromagnetic waves with frequencies even greater than ultraviolet and x-rays and are above the visible spectrum. Naturally occurring gamma rays in the environment are believed to be part of the cosmic radiation left over from what cosmologists describe as the Big Bang, permeating all of space-time. To detect this cosmic radiation, one only needs to disconnect the antennae or a cable input to a television set. The snow seen on the television screen accompanied by the audible hiss is evidence of this residual background radiation as radio waves left over from the Big Bang.

Meditating on scripture, I wondered if God, creator of all things both visible and invisible, including light, and even more - energetic gamma-rays, uses high frequency gamma rays to manipulate the DNA molecules of living organisms. As stated previously it has been demonstrated that random photons will align along the DNA molecue. Can this be how the Holy Spirit,"the giver of life", interacts with living organisms through

gamma-ray radiation? Because like the sodium iodide crystal used to detect gamma-ray radiation, the DNA molecule is also a highly organized crystalline structure.

An induction coil can also store potential energy as a magnetic field. Suppose during three days in the tomb gamma-ray radiation interacted with the DNA molecules in Jesus corpse matching the frequency, or at least a harmonic thereof. Given their solenoidal properties the DNA started resonating in phase with one another and at their natural resonate frequency.

Evidence shows that the energy released from the body of Christ during the resurrection was acting in an up/down direction, and moving away from the body. As theorized resulting from superparamagnetism, neutrons would also have moved antiparallel in the direction of the magnetic field given their magnetic moments. If the DNA molecules in the linen fibrils induced a magnetic field within the plant cells, it is then possible that neutrons could be directed toward the DNA molecules. As a result, the rate of radiative capture of neutrons by the nitrogen atoms in DNA molecules would be increased rather than the neutrons emitting randomly in all directions.

Therefore, if this hypothesis is correct, an induced nuclear magnetic resonance of the DNA molecules in the body of Jesus caused a **mutual inductance** of unpaired electrons to align and propagate directionally in proximity to the linen cloth.

This mutual inductance, again following the inverse square law, would also cause the DNA molecules in individual linen cells comprising the fibrils on the surface of the cloth to align. With a close proximity of flowers to Jesus' body, the DNA molecules of the flowers would also start to resonate and align giving the faint secondary off body faint flower images that are also seen on the inside surface of the linen shroud.

One of the arguments against the resurrection of Jesus being a nuclear event, is that many people assume it would have been nuclear fission with fast-moving neutrons like an atomic bomb. But if the resurrection was a nuclear event with fast-moving neutrons, why wasn't Jerusalem destroyed if the physical mass of Jesus' body went critical?

First, thermonuclear devices such as an atomic bomb have fast-moving neutrons. In a nuclear reactor, we are dealing with slow-moving or thermal neutrons. However, even with a nuclear reaction containing slow-moving/thermal neutrons, there should have been large amounts of radioactive materials left over. Thus another indication the resurrection event most likely was not a fission reaction; and therefore must have been something else capable of producing neutrons with very slow thermal velocities.

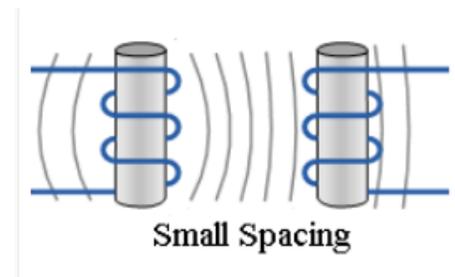


Figure 9 - The resonance of the DNA molecules in the body of Jesus through the principles of Mutual Inductance caused the DNA molecules of the linen cloth to resonant as well.

The Monte Carlo Neutron Particle Analysis Program¹⁰ is a computer software program used to predict neutron and photon transport thereby preventing criticality accidents in the nuclear industry. Using this computer program, assumed dimensional parameters of a limestone tomb, and particle velocities, Robert Rucker demonstrated on average, there would have been up to 780 interactions before attenuating neutrons to thermal velocities; before being slowed enough to match energies required for the radiative capture of neutrons by nitrogen atoms. At these assumed velocities, given the many interactions and the number of neutrons required to skew the results of the 1988 radiocarbon dating, there is a high degree of probability, that significant damage would have been done to the individual fibers and linen cloth.

A thermal neutron, or a slow-moving neutron, can have kinetic energy as low as 0.025 eV (about 4.0×10^{-21} J or 2.4 MJ/kg, hence a speed of 2.2 km/s). At this velocity, the energy also corresponds to the most probable velocity at a temperature of 290 Kelvin (17° Celsius or 62° Fahrenheit). It is also at this temperature which is the mode of the Maxwell-Boltzmann distribution.

At these temperatures, it is possible for thermal neutrons to interact with the flax fiber of the linen burial shroud without causing significant damage. It is important to note linen has the highest thermal conductance allowing it to disipate heat. This results in the greatest resistance to burning/scorching of all the other natural fibers such as wool, cotton, and silk that were used for the production of textiles during the first century.

Robert Rucker was also able to demonstrate through his analysis that the Shroud of Turin and the Sudarium of Oviedo dated older than the expected age from the first century as a function of the distance the linen clothes from the body of Jesus. In his investigation, he also concluded that if neutrons came from anywhere other than the body of Jesus, the analysis fell apart.

Nikola Tesla demonstrated when the energy imputed to a system equals the resonate frequency of an object, the amplitude of the energy of the system is increased by an enormous amount. If sustained over a long enough period of time, the system will self-destruct.

As a result of this matching resonance, the cells in the body of Jesus built up an enormous magnetic potential. Then after three days in the tomb, reaching a saturation point when the soul of Jesus reentered his body, it caused the magnetic field to collapse. A burst of energy was then released in the form of an Electro Magnetic Pulse (EMP) emanating out through the bedrock surrounding the tomb.

Evidence of a release of a high energy EMP during the resurrection may have been found during renovations to the Tomb of the Holy Sepulcher in Jerusalem in 2017. It was discovered that after placing electronic/electrical equipment on the stone slab these

¹⁰ (Rucker)

devices malfunctioned. When tested, a permanent, anomalous, magnetic field was discovered above the stone slab that Jesus was laid upon. It is proposed that the resurrection was not caused by this magnetic field but rather the change in orientation of the electron spin left this residual magnetic field in the limestone as a result of the EMP when the magnetic field collapsed causing the resurrection.

As a result, having all of the DNA molecules resonating in phase could have also induced a Casimir Effect between the subatomic charged particles in the dead body of Jesus. The attractive force developed between particles became so great that now even the physical parameters of space-time were being changed as the dimensions in the vector field of space-time started to collapse.

In consideration of Einstein's equation for Energy and Mass Equivalence, $E = mc^2$ one of the problems with the theory as proposed is that an enormous amount of energy and mass is still missing from the reaction; where did it go? A possible explanation is to explore multiple dimensions of the universe as proposed with superstring theory and M-theory.

In cosmology, a current theory, that arose from superstring theory, is that the universe can be as many as ten different dimensions and possibly even eleven dimensions of space-time. This led to the more advanced Membrane or M-theory. For most people, our perception/consciousness is limited to just three dimensions of space length, depth, and height.

Could this also be how it was possible for Jesus to just appear in the upper room to the apostles after the resurrection by moving between interdimensional spaces?

When applying principals of Linear Algebra, working with multiple dimensions is possible and quite easy. Taking the cross product of two vectors, the resultant vector is orthogonal/perpendicular to the original two vectors, and like a magnetic curl, follows the right hand rule. Because as proposed, if it is possible to change the orientation of the electron spin throughout the body - orthogonal to their current dimensional space-time, the physical mass of a body could move to a resultant interdimensional vector/energy field. It could be analogous to dialing up an address on your Interdimensional GPS unit.

So, if it were possible within the physical body of Jesus to change the orientation of the electron spin, could he move between locations of interdimensional space-time? Several groups claiming to have esoteric knowledge believe the kingdom of heaven resides within an interdimensional space-time. Possibly this where free neutrons are emanating from during lightning strikes. When clouds discharge built-up static electricity to ground

the very strong magnetic field developed around the lightning bolt, there is a momentarily bending/collapsing space-time.

If the magnetic resonance were induced at a high enough frequency, it would also have caused alpha particles to wrap 360° around surface fibrils of the woven linen. The ionizing properties of the alpha particles, first being able to strip electrons from chemical bonds could explain what appears to be the oxidation, and then dehydration, furfural loss of two water molecules, thus bearing the conjugation bonds and a carbonyl group coating the of the microfibrils. The subsequent brownish-yellow/sepia tone/coloration of body image is the result of 5-hidroxi-metil furfural (HMF) causing a change in the angular bonds of the molecular structure. This is similar to how when the hemoglobin is oxygenated in blood. The angular structure of the molecule is changed causing red wavelengths of light to be reflected from the molecule rather than blue, causing the color change in the blood when seen through the skin.

As with a lightning strike, when the magnetic field collapsed, thermal neutrons could have been emitted from the body of Jesus. Hence, when considering the nuclear magnetic resonance of the DNA molecule, the superficial body image can best be described as a photo static quantum hologram.

There is very strong evidence for this phenomenon as discovered by Dr. Petrus Soons when changing the focal length from digitized black and white photographs taken of the Shroud of Turin in the 1930's. The data from the body image on the burial shroud also has 3-dimensional properties like a hologram.

As this energy was released from the resurrection, it propagated out through the bedrock of the tomb causing a 5.5 magnitude earthquake in the Palestine area in the year 33 C.E. as evidenced by mud flats in the Dead Sea. Because living organisms do not inhabit the waters of the Dead Sea, there is no mixing or disturbance of the sediments in the mud flats. To determine the year when the earthquake occurred in the Palestine area it is a simple matter of counting backward through the annual layers of mud from the surrounding watershed deposited in the Dead Sea.

Another possible test of this hypothesis is to examine limestone from the tomb of the Holy Sepulcher for evidence of neutron tracks. As proposed, because the velocity of the neutrons was within a thermal range and slow enough not to damage the linen cloth, heavier radioisotopes such as chlorine and other isotopes with half-lives greater than a couple of minutes would not have been produced as a result of the resurrection event.

For years, the argument has been there is not enough fissionable material in the human body to produce neutrons with thermal velocities. Therefore, logic would dictate that we should look for another source/mechanism capable of producing thermal neutrons within the human body without requiring nuclear fission.

Evidence of Human Bodies Being Able to Emit Thermal Neutrons without Nuclear Fission

Working with the late M. Sue Benford, a co-researcher in 1998, we set out to determine if there were any other examples in human history demonstrating a phenomenon where it was possible for a human body to emit a neutron flux with thermal velocities *without requiring nuclear fission*.

One such phenomenon and as controversial as the Shroud of Turin, where access to data, reports, and photographs are as difficult to obtain, is Spontaneous Human Combustion (SHC).

During the third quarter of the 18th century, one of the questions that puzzled medical doctors who investigated several of these mysterious SHC events is whether they were possibly the result of a visitation by God; that supposition might not be very far from the truth! It is important to remember that Jesus is the first fruits of the resurrection.

First, it is important to acknowledge that there are as many differences as there are similarities between the resurrection of Christ and SHC! For example, where there seems to be antigravity acting before the resurrection of Jesus, there seems to be an *increase* in the force of gravity when examining cases of SHC. So, for the sake of brevity the analysis herein will concentrate specifically on those shared aspects and provide evidence of neutron activation as discovered during fire investigations by trained and seasoned professionals.

A case of particular interest that was examined is that of George Mott who died in a mysterious fire in his Crown Point New York home on March 26, 1986. One of the more curious and unusual aspects of this case that baffled Tony Morret, the Chief Fire Investigator for Essex County, was George Mott's skull. Although his entire body was nearly incinerated, George's skull was shrunken proportionally to a size that was described as a softball. The fire investigation was like nothing Tony Morret had ever experienced before and was described more like a scene from the science fiction television program, "*The Twilight Zone!*"

Although the mattress and bedding had been severely burned in the immediate area surrounding the cremated body, including charring of the headboard, there was no heat or smoke damage done to the ceiling directly above the bed. Several small bone fragments were found on the dirt floor in the crawlspace below as a result of parts of his body burning through the mattress as they fell through the now deformed steel springs of the mattress, box spring, and wooden floor.

For reference, the recrystallization temperature for steel is typically between 400 and 700 °C (750 and 1,300 °F) for steel to be permanently deformed by heat. In contrast, the flash point of cotton fabric to self-ignite is approximately 400 °C and can sustain a flame at temperatures as low as 200 - 210 °C (390 - 410 °F). A logical question then is if the fire

were a true oxidation-reduction (redox) reaction of ordinary burning why did the entire bed or house not completely burn to ashes?

What if there was a strong enough force, resulting from an increase in the gravitational force, pulling George Mott's physical mass toward the floor and ground... and if that force exceeded the yield stress of the steel, could this cause the mattress springs to be permanently deformed without substantial heating?

Because fragments of bone had burned through the structures of the bed, wooden floor, and steel springs, now permanently deformed, without the combustible parts of the mattress and box spring being incinerated by the fire, then logically there had to be another agent at work.

The only other object that sustained significant damage in the bedroom, besides the bed, was the plastic cabinet of the television set on top of the chest of drawers. If heat rises and there was no heat or smoke damage done to the ceiling above the bed, why then was the plastic cabinet of the TV melted? The now distorted TV cabinet is a significant clue of neutron activation because most hard plastics have high hydrogen content which are excellent for shielding neutrons.



Figure 10 - Melted TV cabinet in George Mott's Bedroom

There were other anomalies of particular interest noted by the initial fire investigators of George Mott's house pointing to evidence of neutron activation. In addition to the plastic cabinet of the television in his bedroom, there were other items made of plastic that were also melted throughout the house. For example, the Dixie cup holder melted on to the vanity top in the bathroom although the paper cups were in near perfect condition. The plastic telephone housing hanging on the wall in the pantry had melted. The paper towel holder on the wall in the kitchen was now distorted like a melted candle on the kitchen counter even though the paper towels were completely intact. Found on top of the refrigerator, bananas were reported as being dehydrated. Lastly, water from the bowl of the toilet in the bathroom was also missing.

Most strange of all concerning George Mott's fire investigation, was the contents of his refrigerator/freezer. It was assumed that the refrigerator was operating during the time of the fire because it was functioning normally during the fire investigation. There was no evidence to suggest that the refrigerator was inoperable during the fire. Yet when the coroner examined the contents of the refrigerator and freezer, he noted that all of the food in the freezer had melted and refrozen. There was also an unopened package of hot dogs in the refrigerator that the coroner reported appeared as if the hot dogs were parboiled in the package. However, genuinely bizarre - not only had the butter melted but the plastic butter dish, still in the refrigerator, had melted as well.

Because a neutron does not carry a charge, most materials are transparent to neutrons except items that have high hydrogen content like water, fats, oils, and plastics. Knowing how neutrons interact with materials that have high hydrogen content, a reasonable explanation can be formulated for what was being observed in what appeared to be a house of horrors. Where once perplexing, now a plausible scientific explanation can be reasoned for the surreal evidence found throughout the homes left with cremated human remains.

Given the many years that have passed since the death of George Mott, the story of his shrunken skull is considered at best to be anecdotal because of the inexperience of the Essex County Coroner that had examined his remains. Also, my attempts to obtain photographs of the fire scene and shrunken skull through the Freedom of Information Law (FOIL) in New York State, to date have come to naught.

There is the similar case of Mary Reeser, who died on July 2, 1951, in St Petersburg, Florida. Her skull was found shrunken uniformly but disproportionally to a normal human skull - in this case to the size her skull was compared to that of a teacup. However, in this case, the skull was examined by Wilton M. Krogman, a Professor of Physical Anthropology at the University of Pennsylvania's Medical School. Dr. Krogman was on vacation in Florida when he heard about a mysterious fire with the shrunken skull. Clearly given his professional expertise, Professor Krogman would not have mistaken the size when examining the skull from a human adult female.

Documents that *are* available, suggest the skull was either procured or transferred to the Federal Bureau of Investigation along with what at the time were thought to be pieces of glass. These were found laying on the carpet next the chair where Mary Reeser had been sitting before the fire almost completely consumed her body. What were initially thought to be pieces of glass were later confirmed by the FBI Forensics Lab to be human teeth.

During his PowerPoint presentation at Redeemer University College during the Shroud Conference in 2019, Jose Carlos Espriella Godínez, demonstrated how the field emanating from the lifeless heart of Jesus would have propagated throughout the body. Of particular interest is how the field would have changed or become distorted below the knees. In many of the SHC events a very strange aspect is that the feet and legs below the knees remain. It is therefore proposed that the strength/intensity of this standing wave emanating from the heart was no longer able to sustain the disassembly of the atomic structure in what appears to be incineration of the of the human body.

A unique and interesting quality of the human heart is that it produces the greatest electromagnetic field in the body, even as much as 60 times more in amplitude than the human brain. It is proposed that the Holy Spirit was interacting via gamma radiation with the still heart of Jesus creating a standing wave of electromagnetic radiation. This propagated out from his heart, stimulating a resonance in the DNA and molecules throughout the rest of his body.

It also interesting to note that the flame that emerges during the celebration of the Holy Fire in the Tomb of the Holy Sepulcher during the Easter Vigil in the Orthodox Church has been described as a cold flame when compared to a normal flame. For approximate 20 minutes after the emergence of the Holy Fire the flame will not ignite extremely flammable material such human hair. The significance of this fact is that what appears to be the near complete incineration of George Mott's body there was no heat or smoke damage done to the ceiling directly over his bed where meniscal fragments of his body were found.

The fire investigators made a significant discovery that the wooden frame at the back of the chair, where they found the remains of her body, was broken; like George Mott, it appears there was a force pulling Mary Reeser's body down toward the ground.

In another suspected SHC event investigated by the local county sheriff's department, it was noted that the water was missing from the bowl of the toilet in Danny Vanzandt's home. His remains were found on February 18, 2013, in Muldrow, Oklahoma as the result of a similar, mysterious fire.

In nuclear power plants, thermal neutrons pass through solid uranium fuel rods via a fission reaction into the surrounding water bath of the reactor chamber thus striking the nuclei of the hydrogen atoms in water molecules. Just like passing through a solid uranium fuel rod, neutrons passed right through the framing and walls of the house, the ceramic toilet bowl, and the sheet metal walls of the refrigerator because most materials are transparent to neutrons. Excitation of the hydrogen nuclei with thermal neutrons causes molecules to vibrate faster thereby increasing the enthalpy (internal heat energy) of the water. This produces the steam and pressure required to drive a turbine converting the thermal energy into electro-mechanical work that is in a nuclear power plant. However, in this case, thermal neutrons were striking the hydrogen atoms in the water, oils and fats in the food, and plastic, causing everything to melt in the refrigerator and freezer. Neutron activation would also explain why the water evaporated from the bowl of the toilets in George Mott and Danny Vanzandt's homes.

Neutron activation possibly consumed George Mott's body causing a significant portion of his body mass to evaporate since the adult human body consists of 53% water. Most of the other charring and burning of the localized area was probably caused by the excitation of molecules by protons and more alpha particles, with larger mass, that travel only very short distances in air. Also, if the alpha particles were able to strip electrons from other atoms, they would form helium atoms. Being an inert gas, helium molecules would have displaced the reactive oxygen molecules preventing the combustion of nearby flammable materials. Because helium is lighter than air, it would also have collected near the ceiling and eventually dissipated by merely floating away undetected.

To understand how such an event is possible in the human body it is essential to scrutinize the shrunken skulls of George Mott and Mary Reeser. They provide paramount evidence. Taking a lesson well learned from my physics professor in college, Frederick P. Montana, Ph.D., "When you are stuck on a problem go back to the fundamentals and start

to work your way to a solution from there...” In this case, I went all the way back to what are *currently* understood as the four known fundamental forces of the universe, the strong nuclear force, the weak nuclear force, the electromagnetic force, and the gravitational force.

Consider again the possibility for unpaired electrons spinning freely in any direction, to align, and at a distance on the nuclear scale, act as a single super strong magnet - a superparamagnet. What then would happen to the electrons and the nucleus of atoms surrounding the location of this developed force of superparamagnetism?

Superparamagnetism is the stronger and the more dominant force given an unpaired electron in materials when compared to elements that are diamagnetic. Material containing atoms that have a paired electron spin cause a zero net magnetic effect which also repels magnetic fields; the electron spin in diamagnetic compounds align perpendicular to the unpaired electron spin when subjected to materials nearby exhibiting properties of superparamagnetism.

For consideration following is the elemental composition of the average adult human body:

Oxygen (O) 65%, carbon (C) 18.5%, hydrogen (H) 9%, nitrogen (N) 3.2%, calcium (Ca) 1.5%, phosphorus (P) 1.0%, potassium (K) 0.4 %, sulfur (S) 0.3%, chlorine (Cl) 0.2%, magnesium (Mg) 0.1% and other trace elements in combination less than 1.0% are boron (B), chromium (Cr), cobalt (Co), copper (Cu), fluorine (F), iodine (I), iron (Fe), manganese (Mg), molybdenum (Mo), selenium (Se), silicon (Si), tin (Sn), vanadium (V) and zinc (Zn).

Note that both the carbon and oxygen atoms have an even number of electrons in their outer most electron shell and thus the paired electron spin cancels one another creating a net zero magnetic effect (diamagnetic). The hydrogen atoms have only one unpaired electron and can spin independently of the electrons of other atoms in any orientation.

Bone is an inorganic composition primarily formed from salts, also a *crystalline structure*, of calcium and phosphate and the primary salt being hydroxyapatite ($\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$).

Of the other elements in any significant quantity in the human body, the heaviest element is calcium at 1.5%. Some of the indicies of calcium are as follows: atomic number 20, composed of 20 protons and 20 neutrons; standard atomic weight 40.078 (A_t); electron configuration is $[\text{Ar}]s^2$, with 2 paired electrons in its outer most shell; atomic radius – empirical radius 197 picometers, covalent radius 176 ± 10 picometers; and a melting point $1,115^\circ$ Kelvin (842° Celsius, $1,548^\circ$ Fahrenheit).

It is also important to note, that with no unpaired electrons, 20 in total, **calcium** is a *diamagnetic material*.

Diamagnetism defined:

In a diamagnetic material, there are no unpaired electrons, so the intrinsic electron magnetic moments cannot produce any bulk effect. In these cases, the magnetization arises from the electrons' orbital motions, which can be understood classically as follows:

When a material is put in a magnetic field, the electrons circling the nucleus will experience, in addition to their *Coulomb* attraction to the nucleus, a *Lorentz force* from the magnetic field. Depending on which direction the electron is orbiting, this force may increase the *centripetal force* on the *electrons, pulling them in towards the nucleus*, or it may decrease the force, pulling them away from the nucleus. This effect systematically *increases* the *orbital magnetic moments* that were aligned opposite the field and decreases the ones aligned parallel to the field (by *Lenz's law*).¹¹

Therefore, if it were possible to create a magnetic field strong enough when considering the effective magnetic force at the atomic level, the centripetal force on the electrons could pull on the nucleus of the atom. With a force sufficient enough but of equal and opposite force on the protons and neutrons in the nucleus of an atom to overcome the strong nuclear force (as with superparamagnetism) - what then would happen to the atomic structure?

First, protons with like charges and at a distance within the nucleus of an atom would actively repel one another. Mostly, the weak nuclear force would cause protons to fly off carrying a single + charge. Neutrons and alpha particles with a 2+ charge would be carried along with the protons in the direction of the superparamagnetic force. Since protons (+ *e*) and alpha particles (+2 *e*) carry a charge, they would interact with nearby materials imparting their kinetic energy to the molecules causing them to vibrate faster with an increase in temperature causing materials to char in the absence of oxygen. Since alpha particles do not travel very far in the air, this could explain the local burning of the bedding and headboard in the immediate area of George Mott's body when lying on the bed.

Then, since a calcium atom has a much larger mass, its nucleus having 20 protons and 20 neutrons, the strong nuclear force would be much greater than the other principal elements in the body with lower atomic numbers. What if the magnetic force was not strong enough to overcome the strong nuclear force? What would be the effect on the much larger calcium atom in the bone/skull? An atom is composed of virtually a vacuum of space with a very dense nucleus, containing almost all of its mass, at the center. What if after the consumption of the body, the alignment of the electron spin remained? Could this be the reason the shrunken skulls were found at the fire scenes of both George Mott and Mary Reeser?

¹¹ (Diamagnetism)

Much like the Alcubierre Warp drive given a residual alignment of the electron spin, primarily the calcium atoms, in the outer most electron shells space-time was warped thus explaining how it is possible for George Mott and Mary Reeser skulls were found to be shrunken proportionately. The Alcubierre Warp drive also produces a levitating force as was the case in the resurrection of Jesus and adverse effect would increase the force of gravity as suggested in SHC phenomena of the victims being pulled toward the ground.

Other Supporting Evidence that a Human Body is Capable of Emitting Thermal Neutrons without Nuclear Fission:

In addition to evidence of neutron activation throughout George Mott's house, an item was recovered by Larry Arnold when performing his investigation, at an invitation by Tony Morret, of the fire scene. It was a book jacket from a book entitled, *Strange Stories, Amazing Facts*, published by Readers Digest in 1976. As Larry explained, he discovered the book on a shelf near a small passageway separating the living room from George Mott's bedroom. When thumbing through the book, Larry came across an article on pages 387-389 entitled "*Inner Fires*" detailing the strange phenomena of SHC. He procured the book jacket, and it was in his possession when we met in 1998.

As a demonstration that truth is stranger than fiction, another article that precedes "*Inner Fires*" on pages 379-381 is entitled "*Whose Image?*" detailing the Shroud of Turin and the mysterious superficial body image of Jesus on the linen cloth.

As a side note several days before George Mott died, he had a conversation with his son Kendall concerning an episode from the television program *In Search Of* detailing the mysterious fires of SHC. He commented to his son, something to the effect of, "Nothing like that ever happens to me..." So clearly the phenomena of SHC was on George Mott's mind shortly before he died. Possibly when collapsing on his bed in his last fleeting moments of consciousness pondering his mortality, he cried out "Jesus save me!" Could this be the cause of these mysterious fires - a visitation from God or Jesus?

¹¹ "I baptize you with water for repentance, but he who is coming after me is mightier than I, whose sandals I am not worthy to carry; he will baptize you with the Holy Spirit and with fire. Matthew 3:11

The significance of the book jacket, was the possible connection to George Mott's death given the other compelling evidence of neutron activation in the house. Comprised of paper, primarily composed of a variant of cellulose molecules like the Shroud of Turin, could the book jacket have evidence of neutron activation, hence radiative capture, as well?

A sample of the book jacket was sent to BETA ANALYTIC, in Miami, Florida and tested for radiocarbon 14 isotopes. See the Appendix for the reported results. The ¹⁴C age was found to contain 106.8 +/- 0.6% of a modern sample. With a measurement of ¹⁴C greater than 100%, the book jacket, like the Shroud of Turin, essentially contained more ¹⁴C than theoretically should be there.

Sample Calculation for the Book Jacket, Half-life Equation for ^{14}C

$$\frac{A_t}{A_0} = e^{-\lambda t}$$

Half-life of ^{14}C $t_{1/2} = 5730 \pm 40$ years; Decay Constant, $\lambda = 1.209 \times 10^{-14}$ years $^{-1}$

Solving for t

$$\begin{aligned} \frac{A_t}{A_0} &= e^{-\lambda t} \\ \ln\left(\frac{A_t}{A_0}\right) &= \ln(e^{-\lambda t}) \\ \ln\left(\frac{A_t}{A_0}\right) &= -\lambda t \\ t &= \frac{\ln\left(\frac{A_t}{A_0}\right)}{-\lambda} \end{aligned}$$

The ratio of ^{14}C as measured by Beta Analytical in 1998 $\left(\frac{A_t}{A_0}\right) = 106.8 \%$

Therefore, without error analysis:

$$\begin{aligned} t &= \frac{\ln(1.068)}{-(1.209 \times 10^{-14} \text{ years}^{-1})} \\ t &= -544 \text{ years} \end{aligned}$$

Equivalent Age of Book Jacket from the year when tested

Age = 1998 – (-544)

Age = **2542 C.E.**

Obviously the book jacket is not from the future but was effected by whatever caused George Mott's physical body to burn up. Given the other evidence in the house, there are clues correlated to Christ's resurrection. Like the Shroud of Turin being composed of cellulose molecules, the paper in the book jacket, also composed of cellulose molecules, found near the bedroom could also have been affected by neutron flux.

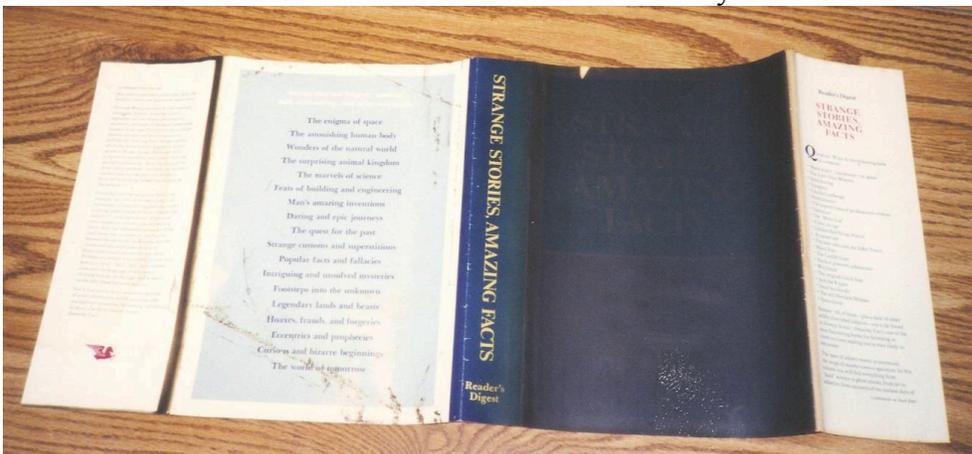


Figure 11 – Book jacket – “Strange Stories Amazing Facts”

When BETA ANALYTIC tested the book jacket, pictured above, in 1998, there could have been other contributing factors to its apparent age, such as the atmospheric radiocarbon ^{14}C which peaked in 1969 as a result of burning fossil fuels since the dawn of the industrial revolution. Moreover, open air/surface testing of atomic weapons which began on July 16, 1945, also contributed the spike of ^{14}C in the atmosphere. BETA ANALYTIC suggested that the paper manufactured to make the book jacket could have been from recycled paper sourced from around this period, when the wood pulp was harvested from trees grown during this spike in atmospheric ^{14}C production. This hypothesis could be tested if a similar book jacket were found from the same date of manufacture. This would be a futile exercise however because it is insignificant provided with other data more easily obtained from other sources.

A proper scientific investigation should not ignore the results of the radiocarbon measurement of the book jacket given the other anomalies observed in George Mott's house resulting from the strange circumstances of his death. The radiocarbon dating results of the book jacket were only a small part of the evidence taken from a house of horrors like a scene taken from "*The Twilight Zone*", which pointed the investigation of anomaly ^{14}C the Shroud of Turin like a compass needle in the direction toward neutron activation and radiative capture.

In the countryside where George Mott's house stands, the surrounding geology contains iron sands that are permanently magnetized. Also, the tailing piles from the Penfield Iron Works near George Mott's house in the hamlet of Ironville, New York also contain high concentrations of radioactive isotopes.

Of historical importance, Ironville New York is also the birthplace of the electric age where Joseph Henry, for whom units of inductance are named, provided the electromagnet that was used to separate the iron sands from the tailings at the Penfield Iron works. This electromagnet was the first useful application of electricity outside the laboratory for a practical industrial purpose. Subsequently, Thomas Davenport, a blacksmith, on route to purchase wrought iron from the foundry, acquired the electromagnet from the Penfield Iron Works for what he considered at the time to be an exorbitant sum of \$75. It was Thomas Davenport's experiments with this electromagnet that led to his development of the Direct Current (DC) electric motor.

A Possible Hypothesis of Why the Body Image is Not Visible at a Distance of Fewer than 12 Feet:

One of the more unusual properties of the Shroud of Turin not well known, except for avid sindonologists, is that the superficial body image on the cloth at a distance of fewer than 12 feet is not visible.

The first step in explaining this phenomenon is to understand the fundamental principles of visible light. The reason we can see the linen cloth is because ambient light is reflected

from the cloth's surface. Light is composed of photons that travel through space-time as an electromagnetic wave. An electromagnetic wave propagates even through a vacuum in space. The electric and magnetic fields are 90 degrees to one another.

There is also a duality to photons. At times they act as a wave and other times behave more like a particle. In Einstein's paper on the "*On a Heuristic Viewpoint Concerning the Production and Transformation of Light*", the photoelectric effect helped to propel the then-emerging concept of the wave-particle duality of light. Light simultaneously possesses the characteristics of both waves and particles, each being manifested according to the circumstance.

It is interesting to note that holograms are more complex applications of this phenomenon. Where the image of a hologram is produced within the plane of a film, it is the result of constructive and destructive interference of waves of light. The waveform of photons are either in phase or out of phase with one another causing the light and dark bands much like the screen in Thomas Young's Double Slit Experiment. If the photons are in phase, the amplitude of the wave is doubled causing a bright bands, and if out of phase they cancel one another causing a dark bands on a screen.

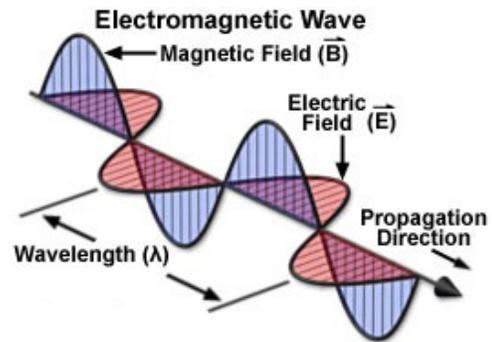


Figure 12 - Diagram of how a photon moves through space

Electrons orbit an atom at near the speed of light with an almost zero rest mass in orbital shells or energy levels. The net effect of the electron's magnetic spin, $+1/2$ or $-1/2$, of paired electrons, cancels one another. There is a curious and strange phenomenon involving paired electrons. If they were separated by a considerable distance and the spin of one of the electrons was reversed, the other electron instantaneously would reverse its spin. Einstein called this phenomenon, "*Spooky action at a distance.*" This phenomenon is also more commonly referred to as *quantum entanglement*.

When the electrons of an atom are stimulated by heat or an electric field, they jump up to the next highest corresponding energy level or shell. Subsequently, when an electron falls back down to the lower energy level, the atom emits a photon propagating through space as an electromagnetic wave. Therefore, depending on how far the electron will fall to the next energy level, a precise amount or *quanta* of energy will be released represented by a specific wavelength of light. If this light is in within the visible spectrum, a particular color of light is seen.

Red light has lower energy, and longer wavelengths where violet light is more energetic with shorter wavelengths within the visible spectrum. But all wavelengths of light travel at the same speed in a vacuum at 2.98×10^9 meters per second (186,000 miles per second) but at different frequencies.

There is a debate in quantum theory as to the existence of the electron when moving from one energy level to the next. Do electrons exist “in between” energy levels as they move from one to another or do, they “Quantum Leap” between energy levels without traversing the miniscule space between energy shells?

Also, remember unpaired electrons in atoms are *free to spin in any direction*.

Suppose there was a residual alignment of the unpaired electrons caused by a very strong resonant magnetic field such as superparamagnetism and/or strongly ionizing alpha particles in those areas of the linen fibrils that now contain the body image caused by a *nuclear magnetic resonance* from the body of Christ just before the resurrection event. As with the photoelectric effect, it has been demonstrated that if light hitting a metal plate has enough energy, electrons are displaced and ejected from the metal surface.

What if in this case, a residual alignment of the electron spin were able to disturb the waveform of photons from reflected light so that within the 12-foot distance the body image is not visible because the photon is behaving more like a particle? At a distance greater than 12 feet, the disturbance caused by the interface of reflected light begins to attenuate the photons, almost like the diminished ringing of a bell. The waveform of the photon starts to propagate within the visible spectrum again able to be seen by the unaided eye.

As part of this investigation because of the similarities between the Shroud of Turin and the mysterious properties of the image of Our Lady of Guadalupe, this image was also examined. Like the Shroud of Turin, when viewed from a distance of fewer than 10 inches the image of the virgin also mysteriously disappears. At this distance only the rough surface of the tilma woven from the coarse fiber of the Agave plant, is visible. After an examination by NASA scientists, they too were perplexed as to why the image disappears like the superficial body image on the Shroud of Turin. An anomaly of particular interest is that the image of Our Lady of Guadalupe actually hovers above the surface of the cloth.



Figure 13- Image of Our Lady of Guadalupe, Mexico City, Mexico

The colors float above the surface of the tilma at a distance of *3/10th of a millimeter (1/100th of an inch)*, as determined when measured with a LASER, without touching it. When examined at a distance of fewer than 10 inches one can see the rough cactus cloth, but the colors and image entirely disappear. The image also seems to increase in size and change colors owing to an unknown property of the surface and substance of which it is made.

No explanation was offered by NASA scientists as to how or why the image could be hovering above the tilma, and like the Shroud of Turin, they concluded that there are no brush strokes or sketch marks that are responsible for the image.

Once again, we might be seeing evidence of a magnetic field levitating the pigment of the image above the surface of the cloth and interference of reflected photons at a distance of fewer than 10 inches. Like the Shroud of Turin, so is also the case with the image of Our Lady of Guadalupe. With both images, the resolution of the image seems to be greater than that of the weave of the cloth.

One of the experiments performed during STURPS investigation on the Shroud of Turin in 1978 was to view and photograph the linen cloth using reflected infrared light. There is an impressive result of that experiment. The body image was suspected to be a burn or scorch mark because it was similar in color to areas in the cloth that had physical burns from previous fires. Yet, the body image was not visible in those wavelengths of reflected infrared light. A logical question asked by Russ Breault in his excellent presentations on the Shroud of Turin, “When is a scorch not a scorch?”¹²

Like the ceiling above Gorge Mott’s bed it would seem that something other than heat was responsible for the burning of his bedding and the body image on the Shroud of Turin. As proposed, both are the result of strongly ionizing alpha particles.

Lastly, some researchers have suggested, when comparing photographs that have a considerable age difference, that the body image is becoming fainter over time. Therefore, if a residual alignment of the electron spin is in part or wholly responsible for the body image, like all magnetic storage of data, it will slowly be lost over time. It could be a simple matter of just moving the magnetic media from one place to another, through the earth’s magnetic field, that data is lost. The earth’s magnetic field changes over time as well. Several times in the earth’s history given evidence of iron deposits in lava flows on the ocean floor, it has been noted that not only do the north and south magnetic poles move but have also flipped, changing polarity.

Testing this Hypothesis of the Shroud of Turin with Nondestructive Experiments

When examining the data carefully, a strong case can be made that the radiocarbon dating of both the Shroud of Turin and Sudarium of Oviedo is the result of the radiative capture of neutrons. It is also evident that principles of the *inverse square law* were at play with both linen cloths in the tomb with Jesus during the resurrection. A logical conclusion can, therefore, be inferred that the mass of ¹⁴C varies throughout the Shroud of Turin as a function of the varying distance that the linen cloth was from the body also following the principles of the *inverse square law*.

¹² (Breault)

This would also mean that amounts of beta decay vary throughout the burial shroud, but at such low levels it would be difficult to measure using standard instrumentation. In 1994 in a letter to Cardinal Giovanni Saldrinni, I proposed an experiment to test this hypothesis, *non-destructively*, using x-ray films or phosphor plate technology. This is a way to measure the variation in the amount of beta decay throughout the entire Shroud as carbon 14 isotopes undergo transmutation back into nitrogen 14 atoms. The difference in the amount of beta decay throughout the linen cloth, although very small, may be detectable with a long enough exposure time using x-ray film. Therefore, further destruction of the Shroud of Turin using current radiocarbon dating methods would not be warranted, if the goal of the Holy See is to test the hypothesis.

All that would be needed to prove this hypothesis would be a *single fibril* from the Shroud containing the body image. A positive result, an image of the fibril on an x-ray slide, would provide proof and reason to perform this non-destructive test of the entire Shroud. It is known that some Shroud researchers have such fibrils in their safes or vaults.

In this passive experiment the exposure time is the only variable that needs to change if x-ray films or phosphor plates were placed very near the surface but without touching the linen cloth. It would not require any contact or additional destruction of the linen cloth. A suggested time period would be possibly several months. Also, this experiment can easily be performed to test the entire Shroud of Turin currently being conserved in Torino, Italy.

In the absence of any other sources of radiation or light, it would be the beta decay of ^{14}C atoms over time that would expose the film. This would record the variance in the number of carbon 14 atoms decaying into nitrogen 14 atoms throughout the linen cloth. Beta particles are essentially electrons being ejected by the nucleus of an atom when a neutron decays into a proton, electron, and anti-neutrino to stabilize the imbalance of neutrons in the nucleus of ^{14}C atom. Again going back to the fundamentals of scientific discovery, the experiment was conceived when considering how radioactivity was first discovered by Henri Becquerel in 1896, using photographic plates.

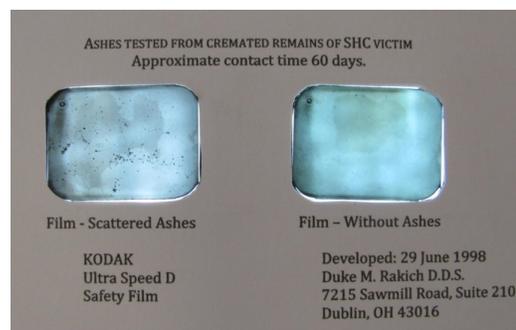


Figure 14 - A positive result produced on x-ray films when testing ashes from an SHC victim.

If the theory is correct, the experiment could result in a high resolution of how Jesus would have appeared in the tomb microseconds before the resurrection event.

Originally conceived to test the Shroud of Turin, a trial run of the experiment was done in 1998 with the cremated remains of a person that had died as a result of a suspected SHC event. Larry Arnold provided the cremated ashes from a suspected SHC victim, and a darkroom was set up in M. Sue Benford's basement bathroom. Kodak, Ultra Speed D, Safety Film - dental x-ray slides were used for the experiment. Two films were prepared

by removing the film and black paper from their protective vinyl covers of the dental x-rays. The films were then placed face up approximately 8 inches apart on an 8 1/2 x 11-inch black foam core poster board. The black papers covered the film as ashes from the cremated remains were scattered on the first film and nothing was placed on black paper of the second film. The films were then carefully placed in a lightproof plastic bag used for storing film; the opening flap was then folded over a taped shut. The completed assembly was then placed in a manila envelope and sealed. As a final step, I dated and signed my name across the opening tab to ensure the films inside were not compromised.

After approximately two months when returning to Ohio for other experiments, the procedure was reversed in a darkroom, the films were again secured within the two envelopes. The x-ray films were then taken to a dentist's office to be developed and processed.

On the first film that had the ashes, dark spots were seen. The second film was blank. At the time Sue Benford was commissioned to do grant writing for researchers in Nuclear Medicine at the Department of Radiology at the Ohio State Medical School. An opinion from one of the professors from the Department of Radiology, who requested anonymity because of the nature of the experiment performed, was incredulous when retorting, "Bullshit! Human ashes do not emit high energy particles that expose x-ray films!" However, upon a closer examination, he did say the exposure of the film looked more like the absorption of high energy particles rather than an emission reaction. The images on the film were distinct dots rather than fuzzy blurs. This was the rationale for the film exposure being the adsorption of particles on the surface of the paper rather than the emission of ionizing particles.

The result of the experiment was also a bit of surprise given our expected outcome. But it provided a positive result for the tested ashes. We just needed to dig deeper to extract an explanation for this unexpected result.

Without a research budget or laboratory facilities, additional trials of the experiment were performed with x-ray films, developer, and fixer obtained from a dentist in New Jersey. Cremated ashes were attained by rendering pork chops down in a charcoal barbecue grill in the backyard. Following the same methodology as stated above the results from these trial experiments failed to produce the same results as from the ashes obtained from an SHC victim. The x-ray films remained blank with no exposure.

The results of the x-ray experiment using ashes from an SHC casualty was another breakthrough "Eureka" moment in the investigation!

If there was a residual alignment of the electron spin causing superparamagnetism at the atomic level left in the bone of the shrunken skulls, was it then possible for the electron spin of bone fragments and carbon ashes to align as well? Was this also the result of alignment with the earth's magnetic field acting in the direction of the gravitational force as the ashes fell on the x-ray slides producing the polarization of beta particles?

Like the body image on the Shroud of Turin, the exposing energy was emitting in an up and down directionality, making a clear, rather than fuzzy image on the x-ray film. again, it is hypothesized that superparamagnetism was responsible for the polarization of the energy released during the resurrection of Christ.

Another possible hypothesis of why the exposure was polarized is if there was an alignment of electrons of the calcium and carbon atoms in the ashes, this could be attracting *free neutrons* from the atmosphere. Over several months time neutrons could collect on the ashes and then decay. Emitting beta particles would then be responsible for exposing the film with a specific directionality in the direction of the gravitational force; again making a clear, rather than a fuzzy image on the film.

Like gamma rays, there are background free neutrons caused by cosmic ray showers which are always present in the earth's atmosphere and our immediate surroundings. A free neutron is one that is not bound to the nucleus of an atom. Free neutrons are also unstable and have a mean lifetime of approximately of 881.5 ± 1.5 seconds or approximately fourteen and a half minutes.

Russian scientists when conducting weather experiments discovered that even though a lightning strike would occur several kilometers away, the background free neutron count would spike at staged neutron detectors from approximately 6 to over 600 neutron counts per minute.

One of the observations about the Shroud of Turin is that for a linen cloth that is almost 2,000 years old it is well preserved. It has been determined that although mold spores have been found on the cloth, mold itself does not grow on the cloth accounting for its exceptionally good condition considering its age. Could it also be an alignment of the electron spin that is locking the covalent chemical bonds preventing the normal deterioration that would normally be expected from a linen cloth over 2,000 years?

Reasons for Studying the Shroud of Turin

During my in-depth study and scientific investigation of the Shroud of Turin, many other disciplines in science were explored in an attempt to better understand a possible mechanism that could have resulted in the formation of the body image on the cloth. It would appear that strongest evidence is not with a naturally occurring physical or chemical process, but the answers may lie in nuclear physics and quantum theory.

One of the greatest reasons for studying the Shroud of Turin is not just to prove the linen clothes true age, but to make groundbreaking discoveries in cosmology and other disciplines of science such as medicine that may ultimately answer what our physical bodies are on the quantum level – *Light/Energy!*

Part of this research included investigating the function of the DNA molecule, specifically the mitochondrial DNA, from a perspective of quantum theory which is the driving force behind the hypothesis presented herein. Because to raise a person from the

dead, to start with the DNA molecule, which makes all life possible in the universe, makes perfect sense. Like a silicon transistor (developed from principals in quantum theory), the DNA molecule is a billion times more complex. Hence, the function of the DNA molecule may depend upon not only the probability of where an electron is at any one time within the covalent bonds of the molecule but more importantly the orientation and alignment in which the electrons are spinning relative to the structure of the molecule and possibly even its location/quatum address within interdimensional space-time.

Mature, fully developed red blood cells have both Fe^{2+} and Fe^{3+} irons ions but do not contain either nuclear or mitochondrial DNA within the cell. Therefore, iron in the blood would have a different response in the presence of magnetic fields, in addition to alpha particles, which could also account for why the blood on the Shroud of Turin and Sudarium of Oviedo have a pinkish hue. Another significant aspect of the blood on these linen cloths, is that it does not fluoresce under ultraviolet light, which is atypical of normal human blood. Also, because the red blood cells are *void* of DNA molecules is possibly why it remained on the linen cloths and was not caught up in the resurrection event.

Although not completely recognizing or understanding the significances in 1998, this theory was derived from experiments I participated in as proposed by M. Sue Benford when measuring levels of background cosmic gamma radiation during prayer and Reiki sessions. Experiments have shown that some people during meditation have the ability to change the magnetic field around their hands. Measurements were made during experiments with practitioners that were trained in prayer and Reiki therapies and other volunteers with no training at all.

Although results are preliminary and much more work is needed with tighter controls and rigor of scientific experiments, the initial tests had some very interesting findings. For people who had received training in the practice of prayer and Reiki therapies, there was a measurable decrease as much as 15% of background gamma-ray radiation surrounding the practitioner and people volunteering to be patients. A decrease in the number of hits measured is a curious result because gamma rays are highly energetic electromagnetic waves that should be passing through the human body without any interaction or loss.

Our understanding, or a possible reason, why there is a decrease in background radiation is that through our prayer and/or intent it was possible to tune the DNA molecule to a specific resonant frequency. It would be analogous of using a radio tuner to electronically change an antenna to a specific length causing a multiple of an electromagnetic frequency emitted from the radio station to attenuate a current/signal in the wire.

A simple example of how the DNA molecule functions would be an antenna wire of a crystal radio. Typically, a crystal radio has a long antenna made of wire approximately 100 feet in length, with insulators at each end, suspended in the air between two objects. A dipole is then created by dropping a wire from the center of the antenna and connecting it to a coil of enameled magnetic wire wrapped around a cardboard tube. Removing a section of the enamel coating from the surface of the coil a shorting bar can then slide

along its length thus changing the length of the antenna and its resonant frequency. The circuit is completed by connecting the coil of wire to a grounding rod or device.

When conducting the experiments, a 3-inch diameter sodium iodide crystal, with a photomultiplier tube attached, was used to detect and then count gamma ray hits. Cosmic gamma-ray radiation would interact with the sodium iodide crystal and emit a photon of light. The photomultiplier tube was connected to a power supply and gate where 100 cycle counts were used to measure gamma ray hits. Coaxial cables were implemented to eliminate any extraneous interference from the power supply and gate to and from the gamma-ray detecting apparatus used for the experiment.

Like the sodium iodide crystal, the DNA molecule is a highly organized structure and has been described as a liquid crystal by biomedical researchers. The DNA molecule also vibrates, like all molecules, with regular frequencies. The human DNA molecule is approximately six microns across and two meters in length. Only 1.2% of the human DNA molecule accounts for the human genome, and the remaining 98.8% are non-coding DNA, described as junk DNA. Although not yet understood, the remainder of the DNA molecule must provide some essential function.

In an AM radio, which stands for Amplitude Modulation, unlike an FM (Frequency Modulation) antenna, an AM antenna is usually a long wire coiled up inside a radio much like the DNA and mtDNA molecules in a cell. The electromagnetic energy of an AM radio signal travels through the atmosphere as a transverse wave where the signal/information is modulated perpendicular to the propagation of the radio wave.

A hypothesis of the purpose of the noncoding portion of the DNA molecule is that it has the ability, when tuned with our intent or prayer, to interact with gamma radiation accounting for the decrease in gamma-ray hits observed during multiple runs of the experiment.

Jesus being the author of life, would certainly have understand the physiology and biologic processes involved; could this be what he taught the apostles? However, somewhere along the timeline of almost 2000 years of Christianity, this knowledge has been lost to humanity and the church.

As demonstrated by Nikola Tesla, magnetic resonance can be an important part of the function of many dynamic systems. The genetic code or blueprint is the same contained in the DNA and mtDNA molecules of the cells throughout the entire human body to include, heart tissue, liver tissue, hair, and bone. Then what causes cells to produce heart or liver tissue in one instance and then bone or hair in another? Although an oversimplification of the biologic process involved, a simple explanation is that the cell receives a signal at the surface of a developing cell. As a result, the genes are stimulated to synthesize specific proteins necessary for the function of that particular tissue type. Is it through this method that the Holy Spirit created the diversity of life found on earth through stimulation of DNA molecules with gamma radiation changing its coding sequence when creating new species?

As incredible as this claim may be, in 2007 Dr. Peter Gariaev, a Russian Biophysicist, stimulated a fertilized frog egg with LASER radiation imprinted with the resonance of a developing salamander changing the frequencies at which the DNA molecules were vibrating. Where the biophysicist started with a zygote from a frog the end product produced a salamander. It would seem that the frequency at which the embryo vibrating during its development is more important than the genetic code.

Possibly that signal is received as a magnetic resonance at the quantum level changing the frequency at which the DNA molecule is vibrating during the development of the particular tissue type is the switch that causes the cells to replicate; not only a switch to turn it off in a particular cell but also in the case of a cancer cell is it causing the cellular reproduction to malfunction?

Therefore, if it were possible to manipulate the frequency of the DNA molecule on the atomic level through prayer or a magnetic resonance, can this be the key to not only discovering a cure for cancer but also many other diseases that have plagued humanity through the millennia?

Conclusion:

Quite possibly, as proposed herein, it is the magnetic resonance within the nucleus of atoms and the ability to change the frequency at which molecules vibrate along with the alignment of the electron spin within the molecular structure, especially pertaining to the DNA molecule that is the foundation of life. Because if Jesus were to be resurrected from the dead, logically the resurrection event most likely would have involved some type of stimulation of the DNA molecule. Possibly it is an alignment of the electron spin and magnetic resonance of the DNA molecule that are the true keys to the Kingdom of God...! Could this be the source of life on earth and elsewhere in this universe?

When Leonardo of Pisa was observing the procreation of breeding pairs of rabbits he possibly rediscovered the Fibonacci sequence of numbers, 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144. When examining this sequence of numbers, it lead to the rediscovery of the Golden Spiral, by recognizing the number of times in nature this pattern occurs, Leonardo felt he had found the fingerprint of God! As examples: the spiral of the seeds on a sunflower, the spirals of sea shells, and the curve of waves; it is equally interesting to note that many of these structures also follow the right hand rule much like the magnetic curl. Could the alignment of the electron spin be the reason these structures take their form in nature as well?

As evidenced by the information contained within the Shroud of Turin, God's fingerprints are all over the linen cloth. Even with the best technology available today, in the best laboratories of the world, human hands still cannot replicate the body image of Christ as found on the Shroud of Turin. Possibly it is time for a brave new world and to start a revolution for Christ! Using the scientific evidence from the Shroud of Turin left in the empty tomb as a testament to the truth of Jesus' life, passion, crucifixion, death, we

can demonstrate that the radiocarbon dating of the linen cloth was the *Glory of God* that resurrected *Jesus from the dead!*

For now, some of the principals explaining levitation and the mechanics of the universe stumbled upon as part of this research will remain proprietary until such time other scholars disclose this information. However, having completed an in-depth study of the accomplished works of Nikola Tesla, Albert Einstein, James Clerk Maxwell, Edward Leedskalnin, John Hutchinson and other notable scientists the journey has been most enlightening.

Given this research and experiments with electromagnetism and quantum entanglement, I wrote a letter to the Department of the Air Force on February 1, 2006. In the letter, I proposed that it is not as much an error in the equations but rather a flawed number system being used to model the universe is why our current understanding of gravity, hence quantum entanglement, is incomplete. With an imperfect model/number system, it will be very difficult to derive a proper set of equations that accurately describe gravity and its counterpart antigravity. Given this research on the Shroud of Turin, and with this understanding in the letter, it was also hinted how it might be possible to open an Einstein-Rosen Bridge intentionally. An Einstein-Rosen Bridge, more commonly known as a wormhole in the fabric of space-time, makes it possible to travel to distant galaxies and stars light years away in a matter of minutes.



Figure 15 – The Pregnant Woman, pictured above, is largest known quarried megalithic stone of the ancient world in Baalbek, Lebanon. If you cannot move it then why bother carving the stone in the first place?

The possibilities in construction engineering alone are staggering. Imagine moving massive blocks of stone as if they were weightless, almost as if they were children's play blocks. Evidence of this ancient technology can be found in the numerous megalithic structures found around the world from antiquity. (See Figure 16)

It might quite possibly be that many of the same forces that were used to create the universe were at work in the tomb on Easter morning, April 5, 33 A.D., resulting in the glorified body of the resurrected Christ. It is the resurrection of Jesus, which is what the Shroud of Turin and Sudarium of Oviedo are giving testament to through the results of the radiocarbon dating. The Shroud of Turin, in conjunction with the Sudarium of Oviedo and Eucharistic Miracles, is providing credible scientific evidence that Jesus is truly the begotten son of the living God as told in the Judeo-Christian texts and recorded in the texts of the Holy Bible.

Much of this work as it relates to the functions of the DNA molecule from a perspective of quantum theory was started in Ohio in 1998. Subsequent experiments are in preliminary stages and have only been limited by the lack of financial resources to further

this research. Without quantitative data, it will be very difficult to convince doctors given their professional experience and formal medical training at universities that their cancers patients might not be terminal after all. However, if pursued with intent and purpose, the benefits of this research could be staggering as it relates to medicine. This research might possibly find not only a cure for cancer, but also many other genetic diseases that have plagued humanity throughout the history of the world.

Because the diversity of life on earth originated somewhere, it either started here on this planet or perhaps simultaneously somewhere else in the universe. With the advancement of more recent scientific research, objectively examining Darwin's theory of evolution, his hypothesis is falling apart rapidly. My research could provide a provable mechanism for our rich variety of life.

Perhaps the answer lies with a very simple and non-destructive test, which would simultaneously test the entire Shroud of Turin. Also by testing the linen using x-ray slides, it could verify that the mass of carbon-14 varies throughout the body image on the cloth as a function of the *inverse square law* and is, in fact, scientific evidence of Christ's resurrection!

Quod Erat Demonstrandum!

ADDEDUM

Additional Support for Levitation and Gravity involving DNA Molecule

When investigating this hypothesis for possible clues in electromagnetism, the trail led to Edward Leedskalnin, who single-handedly constructed the famed Coral Castle formerly in Leisure City, Florida. Knowing nothing about electromagnetism, he conducted his own experiments in electricity and magnetism. Free from the bias of conventional scientific theory being taught at universities at the time, Edward Leedskalnin postulated that there are only three fundamental forces of nature because both magnetism and gravity are interconnected. Although never wholly explaining the rationale for his theory, he said he discovered the secrets of the ancient pyramids of Egypt. This is how he was able to construct Coral Castle by carving and moving (levitating) large stones weighing as much as thirty tons – by himself.

Edward Leedskalnin's writings and scientific explanations are obscure at best. Given only a fourth-grade formal education or possibly even an attempt to conceal his secret, Leedskalnin left hints at Coral Castle for only the most tenacious to decipherer. The one clue he did leave is that antigravity is created by aligning the magnetic curl of cosmic north and south monopoles entering the ends/poles of a magnet. This is how levitation in materials such as limestone are produced. As simplistic as this concept may seem, there is a more to the theory to consider. And, as proof of his claim, he left us Coral Castle and enough other clues at the site, if you have the patience to find them, as testament of his understating of the interconnection/entanglement between magnetism and gravity.

It is also interesting to note when modeling the curl of the north and south poles working in harmony, as mentioned in Edward Leedskalnin's theory, it very closely resembles the ladder rails of the double-helix structure of the DNA molecule.

Another example of Edward Leedskalnin's stated hypothesis and an example of quantum entanglement between the magnetic force and gravity, essentially what causes levitation, can possibly be found in Crooked Forest outside Nowe Czarnowo, West Pomerania, Poland. Interestingly, in the Crooked Forest, the bases of pines trees are bent at almost a 90-degree angle as they grow out from the ground, forming a bow in the tree trunks pointing toward the magnetic north pole. Possibly an explanation of this phenomena is the result of the tree's DNA molecules, given their magnetic properties, responding to quantum entanglement between the earth's magnetic field and gravity. (See Figure A-1)



Figure A-1 - The Crooked Forrest, West Pomerania, Poland

Tree roots contain a hormone capable of detecting gravity. This is why a tree grows straight up in direct opposition to gravity rather than toward the direction of sunlight. There may just be a gravitational anomaly resulting from the earth's magnetic field in the Crooked Forrest that accounts for this strange formation in the tree growth. It is important to note that the inflection point where the tree bends back to grow straight up, occurs at nearly the same height in all the trees.

It is said that Nazi Scientists were conducting experiments with levitation and possibly even space-time travel with their deemed Die Glocke Wunderwaffe, translated as "The Bell Miracle Weapon" in the southwestern part of Poland. This research was being conducted right up until the very surrender of Germany's forces during WWII as Adolf Hitler's last-ditch effort of winning the war. It is said the general in charge, along with the German scientists working on the project, disappeared along with The Bell Miracle Weapon, never to be heard of again, just before the German forces surrendered to the allied forces in Poland.

Additional evidence can possibly be found by investigating crop circles. Records can be found going back hundreds of years of circles appearing in cereal crops. Currently, some crop circles are being hoaxed by pranksters, but these are easily distinguished from more credible designs when examining the stalks of the plants.

If crop circles are made by warping space-time with balls of light, as reported by witnesses, to create very strong magnetic fields to increase the gravitational force causing the plants to lie over, this hypothesis can possibly be validated by testing for radiocarbon isotopes by measuring the cellulose of the plant fiber in the surrounding

field. By starting at the center of the circle and moving further out into the field, a variation in the magnetic field would also cause neutron spikes and the cellulose of the plant material to have elevated ^{14}C levels. Given that magnetic fields follow the *inverse square law*, it would be logical for a higher concentration of ^{14}C to be measured

at the center of the circle and then taper off exponentially as measurements are made further from the center of the circle moving out into the standing cereal crops. In other cases of more



Figure A-2 - A crop circle showing evidence of a right-handed magnetic curl as if a levitating force were directed upward.



Figure A-3 - A typical exploded cavity of a node found when crop circles occur in young wheat, oats & barley. These exploded nodes are not always present in crop circles but when formed usually occurs in the 2nd or 3rd nodes of the plant stalk down from the seed-head.

credible crop circles, the nodes of the stalks of the grain have been elongated and distorted.

Other Supporting Mysteries and Miracles

Another way of testing this hypothesis without physically examining the Shroud of Turin could be accomplished by examining the remains of several Catholic Saints.

For example, in 1858 on 18 different occasions while in a state of ecstasy St. Bernadette had an apparition where Mary, the mother of Jesus, appeared to her. During the 17th apparition that occurred on July 16th St. Bernadette stated Mary appeared to her in the light of the resurrection, which she described as bluish-green in color.

A possible explanation for the two different colors, bluish-green, was because there were two different wavelengths of light/energy being emitted during the resurrection of Jesus. This could explain why both flesh and bone are seen simultaneously on the body image. A perfect example is that of the metacarpal bones in the palm of the hands are visible in a negative image of the Shroud of Turin. Flesh, being less dense than bone, was composed primarily of the blue wavelengths of light and bone being denser produced green wavelengths of light. The green light is less energetic than blue light; this is where the mass difference of the various body features played a significant role in the wavelength of energy being emitted.

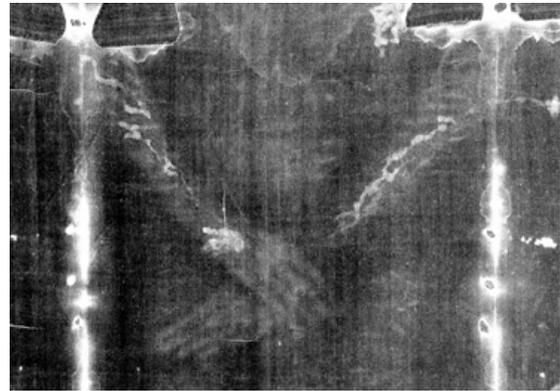


Figure A-3 - Metacarpal bones are seen in the hands of the image on the Shroud of Turin

One of the facts determined about the man on the shroud medical professionals have suggested that the corpse wrapped in the linen shroud is free from any signs of decay or rigor mortis. This is not typical of what one would expect from a corpse that has been in a tomb for three days, or dead for at least 36 hours.

A possible explanation of this phenomenon can be discovered by examining the remains of St. Bernadette. Even though St. Bernadette died April 16, 1879, when her body was last examined by medical professionals her body was found to be incorrupt and free from any decay even to today. Perhaps it could be an alignment of the electron spin locking the chemical bonding of the



Figure A-4 - The incorrupt remains of St. Bernadette

molecules in her body preventing the natural decay process.

After all, Mary appeared to St. Bernadette eighteen times in Lourdes. In the next to the last apparition, she appeared to Bernadette in the light of the resurrection. Could this be why St. Bernadette's corpse remains incorrupt? Most interesting of all, as it relates to the resurrection of Christ, when an ovum is fertilized by spermatozoon creating new life the cell gives off a flash of blue light! Could St. Bernadette have witnessed the same Holy Fire, the fire that gives us immortal life, when Mary appeared to her during the seventeenth apparition in the light of the resurrection?

Another example of an incorruptible body is that of St. Cecilia martyred on November 22, 230 C.E. in Sicily, Italy. Several times her body has been exhumed before finally being placed in a crypt of a church dedicated to her in Rome, Italy. In 1599, her body was said to be incorrupt and free from any signs of decay or decomposition. In June of 2015 when at the crypt, I carefully encircled the outer perimeter walls the tomb with a compass being vigilant to keep the compass base in the same orientation relative to the church. During several trials, a slight anomalous swing of the compass needle was observed at one end of the stone structure.

Curiosuly, other Catholic saints such as St. Don Bosco (August 16, 1815 – January 31, 1888) and St. Giuseppe di Cupertino (June 17, 1603 – September 18, 1663) are said to have levitated especially during the prayers of transubstantiation during the consecration of the Holy Eucharist in a catholic mass.

Rather than considering these miracles to be impossible, they are sources to be examined more closely scientifically, to advance our understanding of the mechanics of the physical universe especially if we now have a clue of where to look.

BIBLIOGRAPHY

- 2012: Magnetic Pole Reversal Happens All The (Geologic) Time.* (2011, November 30). Retrieved July 2014, from NASA: <https://www.nasa.gov/topics/earth/features/2012-poleReversal.html>
- A Summary of STURP's Conclusions.* (1981, October). Retrieved from Shroud.com.
- Alpha Particle.* (2018, March 6). Retrieved August 6, 2014, from Wikipedia: https://en.wikipedia.org/wiki/Alpha_particle
- Antonacci, M. (2015). *Test the Shroud.* LE Press, LLC.
- Arnold, L. E. (1995). *Ablaze.* Lanham, Maryland: M. Evans & Company.
- Austin, S. A. (2010, October 1). *Greatest Earthquakes of the Bible.* Retrieved 2014, from Institute for Creation Research: <http://www.icr.org/article/greatest-earthquakes-bible/>
- Bernard Haisch, P. (2018, March 18). *Is the Universe a Vast Consciousness-Created Simulation and How Does This Affect Proofs of God.* Retrieved from Foundation for Mind-Being research: <https://fmbr.org/>
- Breault, R. (2011, April 17). *Shroud Encounter.* (R. Breault, Performer) Joylan Theater, Springville.
- Carbon - 14.* (2018, March 15). Retrieved July 10, 2014, from Wikipedia: <https://en.wikipedia.org/wiki/Carbon-14>
- Casiday, R., & Frey, R. (2016). *Hemoglobin and the Heme Group: Metal Complexes in the Blood for Oxygen Transport.* Retrieved from <http://www.chemistry.wustl.edu>: <http://www.chemistry.wustl.edu/~edudev/LabTutorials/Hemoglobin/MetalComplexinBlood.html>
- Cawthorne, N. (2014). Tesla. In N. Cawthorne, *Tesla* (pp. 46, 52). New York: Chartwell Books.
- Charles, R. H. (1906). *The Book of Enoch: Translated from the Ethiopian by R;H. Charles.* Floyd, Virginia: SaltHeart Publishers, LLC.
- Cherenkov radiation.* (2018, March 12). Retrieved August 2014, from Wikipedia: https://en.wikipedia.org/wiki/Cherenkov_radiation
- Chromosome Structure Proteins.* (n.d.). Retrieved February 2018, from Creative BioMart: https://www.creativebiomart.net/researcharea-chromosome-structure-proteins_407.htm
- Cutler, J. M. (2001). The Significant Health Benefits of Nuclear Radiation. *21st Century Science & Technology*, 14 (3), 48-57.

- Diamagnetism*. (2018, February 18). Retrieved from Wikipedia.
- DNA*. (2018, March 9). Retrieved June 2014, from Wikipedia:
<https://en.wikipedia.org/wiki/DNA>
- Emery, M. (2005- 2018). *Double Helical Magnetic Interaction*. Retrieved August 2014, from <http://www.leedskalnin.com/>
- Giulio F. *Is the "Holy Fire" Related to the Turin Shroud?*. *Glob J Arch & Anthropol*. 2019 10(2): 555782. DOI: 10.19080/GJAA.2019.10.555782
- Gardiner, P. (2007). *The Ark, the Shroud, and Mary: Gateway into the Quantum World*. Reality Entertainment.
- Gardiner, P. (2007). *The Ark, the Shroud, and Mary: The Untold Truths About the Relics of the Bible*. Career Press.
- Godínez, Jose Carlos Espriella. *Strange Quark Matter in the Image of the Shroud of Turin*. August 2019. Redeemer University, Ancaster, Canada.
- Hawksley, R. (2015, February 16). *Britain's Roswell: the truth behind the Rendlesham Forest UFO incident*. Retrieved December 2015, from The Telegraph:
<https://www.telegraph.co.uk/culture/film/film-news/11415831/Rendlesham-Forest-UFO-incident-truth-conspiracies.html>
- Heller, J. H. (1983). *Report on the Shroud of Turin*. Boston: Houghton Mifflin Company.
- How Linen is Made*. (n.d.). Retrieved from DeckTowel.com:
<https://www.decktowel.com/pages/how-linen-is-made-from-flax-to-fabric>
- Inverse Square Law*. (2018, February 16). Retrieved 2011, from en.wikipedia.org:
https://en.wikipedia.org/wiki/Inverse-square_law
- Khroul, V. (2016, May 2). *"Meet the Russian priest investigating the 'miraculous' Holy Fire of Jerusalem*. Retrieved 2017, from Catholic Herald:
<http://www.catholicherald.co.uk/commentandblogs/2016/05/02/meet-the-russian-priest-investigating-the-miraculous-holy-fire-of-jerusalem/>
- KingAtlas. (2009, September 12). *Frog embryo changed into a salamander?* Retrieved 2017, from Above Top Secret: <http://www.abovetopsecret.com/forum/thread500711/pg1>
- Leedskainin, E. (1945). *Mineral, Vegetable, and Animal Life: Perpetual Motion Holder*. Homestead, Florida: Edward Leedskainin.
- Leedskalnin, E. (1945). *Magnetic Current. Pamphlet*. Homestead, Florida: Edward Leedskalnin.

Levengood, W. (n.d.). *PLANT ABNORMALITIES*. Retrieved 2017, from BLT Reasearch Team, Inc.

Lindeburg, M. R. (1990). *Engineer- in - Training Reference Manual* (8th Edition ed.). Belmont, California: Professional Publications, Inc.

Magnetism. (2018, March 6). Retrieved July 2014, from Wikiped:
<https://en.wikipedia.org/wiki/Magnetism>

Meier, J. (Writer), & Priest, D. (Director). (2007). *The Fabric of Time* [Motion Picture].

Neutron. (2018, Feburary 2017). Retrieved June 2014, from Wikipedia:
<https://en.wikipedia.org/wiki/Neutron>

P. E. Damon, D. J. (1989). Radiocarbon Dating of the Shroud of Turin. *Nature* , 337 (6208), 611 - 615.

Piotrowski, M. (2008, November). *The Eucharistic Miracle of Lanciano and the Shroud of Turin*. Retrieved 2018, from Love One Another!:
http://www.loamagazine.org/nr/science_and_faith/the_eucharistic_miracle_of.html

Quantum Theory Demonstrated: Observation Affects Reality. (1998, February 27). Retrieved 2014, from Science Daily:
<https://www.sciencedaily.com/releases/1998/02/980227055013.htm>

Rucker, R. A. (2014). MCNP Analysis of Neutrons Released from Jesus' Body in the Resurrection. St. Louis.

Shan, A. (n.d.). *The Emerald Tablets - A 38,000 Year Old Alchemist's Guidebook Shrouded in Mystery*. Retrieved 2015, from Ancient Explores:
<https://ancientexplorers.com/blogs/news/the-emerald-tablets-a-38-000-year-old-alchemist-s-guidebook-shrouded-in-mystery>

Solenoid (DNA). (2018, March 9). Retrieved June 2014, from Wikipedia:
[https://en.wikipedia.org/wiki/Solenoid_\(DNA\)](https://en.wikipedia.org/wiki/Solenoid_(DNA))

Strange Stories, Amazing Facts. (1976). Pleasantville, New York: The Readers Digest Association.

Superparamagnetism. (2017, December 5). Retrieved July 2014, from Wikipedia:
<https://en.wikipedia.org/wiki/Superparamagnetism>

Surdhar, C. (2016, August 19). *Frequencies, Frogs, and DNA*. Retrieved 2017, from GeneOM:
<https://charansurdhar.com/frequencies-frogs-dna/>

Tellingner, M. (2017, November 2). *200,000 Year Old Ancient Levitation Technology That Defies the Laws of Physics*. (M. Tellingner, Performer)

Tesoriero, R. *Reason to Believe: a Personal Story*. Ron Tesoriero, 2007.

Tesoriero, R., & Han, L. (2013). *Unseen: New Evidence, the Origin of Life Under the Microscope*. Kincumber, New South Wales, Australia: Ron Tesoriero.

Tesoriero, R. & Willesee, M. *Science Tests Faith - Following the Trail of the Blood of Christ* [Motion Picture].

The Theory of Evolution REFUTED. (2017, May 30). Retrieved from YouTube:
<https://www.youtube.com/watch?v=4wCxBnm3ow>

Vind, C. (2017). *DNA Resonance (123) -- Vibrational*. Retrieved from west.net:
[http://www.west.net/~simon/DNA---RESONANCE\(123\).html](http://www.west.net/~simon/DNA---RESONANCE(123).html)

Walecka, J. D. (2008). *Introduction to Modern Physics, Theoretical Foundations*. Toh Tuck Link, Singapore: World Scientific Publishing Co. Pte. Ltd.

Zugibe, F. T. (2005). *The Crucifixion of Jesus*. New York: M. Evans and Company, Inc.

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