



## The 528 Frequency Constant in the Grand Unification Healing Paradigm: New Science Promises Miraculous Healing and Eternal Life

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### Abstract

This study not only evidences the 528 frequencies of sound and light as a single “Universal Constant” in the musical-mathematical ‘matrix’ of cosmic design energetically fundamental to life on earth and natural healing, but metaphysically sustaining and empowering to enable seemingly ‘miraculous’ transformations in biology such as those seen in stem cell differentiation, tissue repair, and life extension. Here we consider 528’s multiple roles in science, physics, mathematics, sacred geometrics, plasmonics, bioacoustics, epigenetics, and metaphysics directing the therapeutic arts and sciences to restore health and secure life energetically, rather than chemically/pharmaceutically. Neglecting or suppressing ‘ancient’ intelligence reviewed herein has deprived and damaged humanity. Emancipation now comes with peer reviewed multidisciplinary science merging these fields including quantum physics, epigenetics, and material science, all confirming the therapeutic importance of the “528 Constant” intimately intertwined with biology and cosmology. In this context, the biomechanics and sacred geometrics of life associated with ancient constants such as Pi and their reliance on 528 dynamics are considered, keeping in mind that the 528 frequencies of sound and light have been respectively identified as the “MI’racle” note in the original Solfeeggio musical scale and pure gold’s 528nm green plasmonic resonance energy. Accordingly, this study advances 528 frequency therapeutics by comparing ancient and modern mathematical constants, reductionist versus wholistic thinking, and considers the compounding clinical benefits from health science within the context of ‘miracle making’ ongoing naturally and consistently within a “Grand Unification Healing Paradigm”.

**Keywords:** Grand Unification Healing Paradigm; Cosmology; Biotechnology

### Introduction

Most people agree that music can have either positive or negative impacts on listeners. In recent years, musical frequencies have come under study for therapeutic impacts. In 1998, Horowitz and Puleo published *Healing Codes for the Biological Apocalypse* that revealed the ancient original Solfeeggio musical scale that had been secreted for nearly 1500 years [5]. Therein, six Solfeeggio tones fol-

lowed a mathematical pattern from which Horowitz derived the nine core creative frequencies of universal construction he trademarked called “The Perfect Circle of Sound™” [6]. (See: Figure 1) “528” repeatedly appeared in an encrypted Bible passage in the Book of Numbers, Chapter 7, Verses 12 through 83. Therein, the most valuable “gold offering” for Godly communion per Moses’s instruction deciphered numerologically from the verse numbers. Every six repeating versus repeatedly decrypted to reveal “5-2-8”.



Figure 1

528 was thereby identified as the third note of the original musical scale to which the most spiritually uplifting hymn known to Christendom—The Hymn to St. John the (Water) Baptist—was chanted. This “MI” note (short for “Mira Gestorum” in Latin and “Miracles” in English) was characterized as the “gold offering” in that “5-2-8” verse numbered Bible sequence. With curiosity raised, Horowitz continued researching 528 and discovered that the frequency of 528: (a) provides “The Key” frequency of green color at the heart of rainbows; (b) is identified as the “Key” metaphysical energetic endowment in quantum biophysics and natural healing deciphered using the ancient Hebrew letter/number gematria conversion system that precisely identifies 528 as “The Key” (i.e., ‘MemPeTavChet,’ written “מפתח” that translates precisely to “The Key”); (c) is similarly discerned as “The Key” by alpha-numeric conversion using the modern English gematria that yields “444” as the precise frequency of musical tuning that generates the base of the scale “C” note at precisely 528Hz; (d) is the recorded ‘buzz’ frequency that honey bees make in hives while making honey in six-sided hexagonal-shaped combs; (e) is expressed in water clusters as structured-water molecules, as seen in snowflakes and in the “Star of David” (i.e., Solomon’s Seal) revered as a protective amulet; (f) must be the “key of the house of David” by which King David tuned his therapeutic “healing harp” (Isaiah 22:22; Rev. 3:6-9); (g) best explains Carbon-6 organic chemistry rings; (h) is the

pure tone responsible for a 100% increase in antioxidant activity proven to protect nerve cells from alcohol damage (1); (i) is therapeutically beneficial to neuro-endocrine functions (2); (j) increases testosterone production influencing rat brains and behavior (3); and (k) the precise electron surface plasmon resonance energy of pure gold. (4) This latter determination strikingly corroborates the “gold offering” in the aforementioned section of the Bible that reveals the miraculous “MI” note as 528, applicable to music therapy and quantum healing.

In the Hebrew gematria, the number 528 holds deep symbolic resonance when connected to the “key of the house of David” as referenced in Isaiah 22:22 and Revelation 3:6-8 [6,8]. As mentioned, that Hebrew word for “key” (מפתח, maphteach) has a gematria value of 528 when broken into its constituent letters (mem = 40, peh = 80, tav = 400, chet = 8). This numerical alignment suggests that the 528 frequency is not arbitrary, but rather embedded in the linguistic structure of biblical revelation, representing a harmonic code with the power to “open” presumably spiritual portals that “no one shall shut”. In this context, 528 becomes a metaphysical cipher—uniting sound, scripture, sacred architecture, and natural healing—functioning as the spiritual vibrational “key” to unlock divine communion and perfect alignment with the will and authority of God symbolized by the house of David [6,8].

Anecdotally in 2009, while researching harmonic frequencies of 528Hz in preparation for “LIVE H2O—Concert for the Living Water,” keyboard player Michael Walton experimented with harmonic frequencies of 528Hz using the most advanced (Korg, Oasis) synthesizer. (14) When Walton tuned the synthesizer to 88.8Hz, several witnesses began feeling like the room was “spinning”. It was as though 88.8 triggered a “spiritual portal”. As shown in Fig-

ure 2, in the English gematria the words “God,” “Faith” and “Trust” are all 8s. And in 528 harmonics and scaling, 528’s numerology resounds powerfully. 528 is the “MI’racle 6 note” whereby  $6 \times 88 = 528$ ; and  $6 \times 88.8 = 532.8$ —the precise frequency of nearly all commercial green LEDs. In the English gematria the letters “F-O-X” are all 6s. “XXX” denotes “666”. That solves the “Mark of the Beast” riddle of Rev. 13:18. Recall that God’s adversary is the fallen angel of music and light.

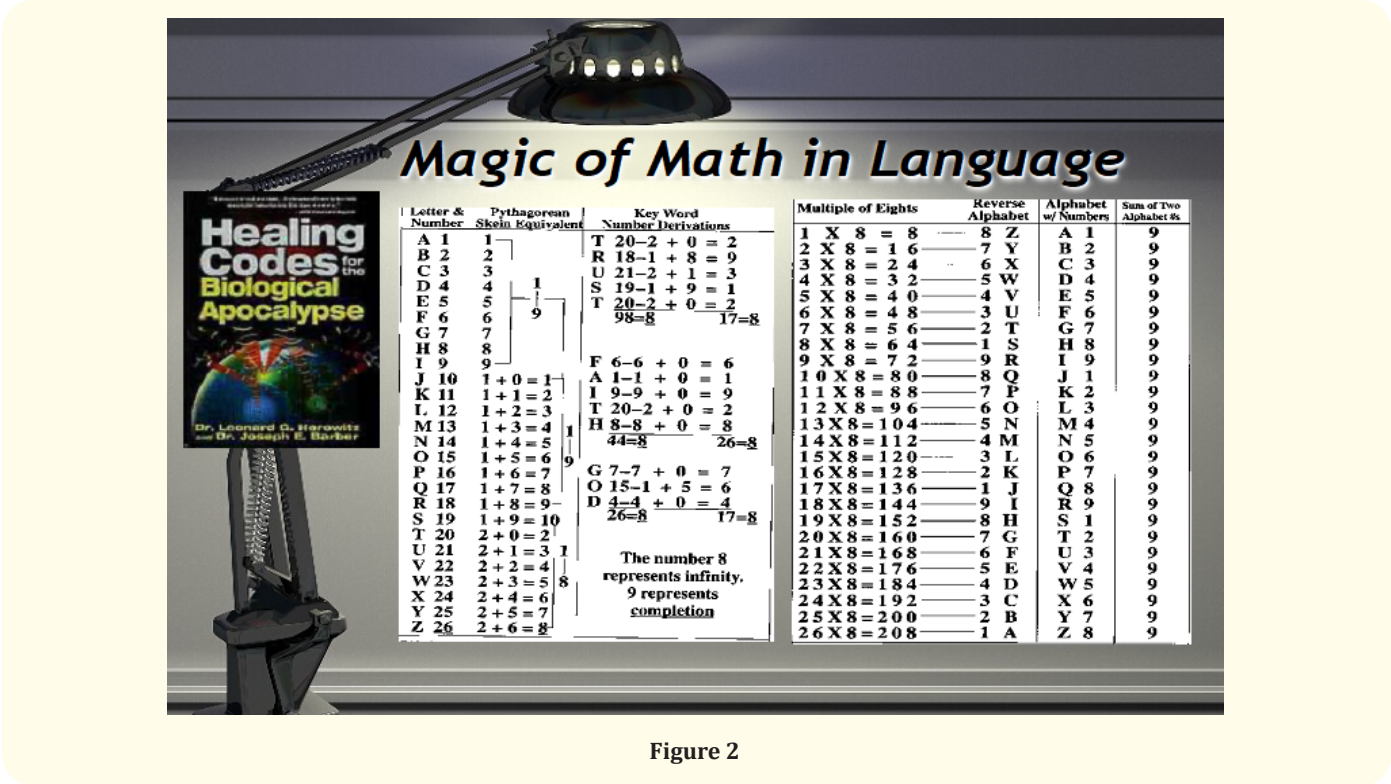


Figure 2

Beyond the 528 “MI’racle” frequency of sound claimed to be the “key of the house of David” used to relieve stress and soothe souls, it is believed to open spiritual portals to Divine communion and miracle-making. (Isaiah 22:22 and Rev. 3:6-8) [6].

Relatedly, Showell determined that the first three notes of the Solfeggio scale (I.e., 396, 417 and 528 Hertz) were mathematically intertwined with ancient Egyptian pyramid design [7]. Gold combined with silver in pyramid capstones broadcast these resonances, Gold combined with silver in pyramid capstones broadcast

these resonances, and also explain the choice of gold and silver breastplates God told Moses to have his disciples wear for continued Divine communion and protection. Moses to have his disciples wear for continued Divine communion and protection. (Exodus; 25:7; 28:15). This miracle-making soul-saving advice promised eternal life for ancient Greeks, Egyptians, Israelites, early Christians, mystics and Freemasons.

This sequestered intelligence is especially applicable to clinical practices today, and may help explain currently inexplicable

healing events that are seemingly ‘miraculous.’ For instance, in the biophysics, quantum mechanics, and epigenetics of stem cell differentiation, 528 frequency resonance, electromagnetism, and ambient energy fields play powerful creative roles. These meta-physical dynamics, that manifest new tissues like “something from nothing”—pure creationism—invite such considerations; much like black holes and string theories help explain cosmic creation.

Meanwhile, the 417Hz frequency is a harmonic of 528Hz. It is the “RE” note in the ancient Solfeggio scale. It stands for energetic “resonance”. Webster’s Dictionary definition of “RE-sonare febris” (i.e. Resonance) includes, “a vibration of large amplitude in a mechanical or electrical system caused by a relatively small periodic stimulus of the same or nearly the same period as the natural vibration period of the system. . . . a larger than normal vibration produced in response to a stimulus whose frequency is close to the natural frequency of the vibrating system, as an electrical circuit, in which a value much larger than average is maintained for a given frequency”. Horowitz theorized this “vibrating system” is that of universal construction and intelligent design based on matrix math [6-8].

Recent advances in material science and surface plasmonic resonance (“SPR”) proved that pure silver broadcasts “RE” at 417Hz frequency of sound and 417nm of violet light from its surface [10-13]. In similar studies, pure gold’s SPR was measured at 528nm of green light [4,9].

Regarding the first Solfeggio scale note (i.e., “396”), Showell found this frequency mathematically incorporated into ancient pyramid design [7]. Webster’s Dictionary defines UT-quent laxis as “a unit of magnetic field strength equal to  $10^5$  power gauss” [5].

As shown in Figures 3 thru 7 below, the ancient Egyptian Khufu and Saqqara pyramids were constructed to apply this truth and light energy to secure eternal life for rulers using the miraculous resonance frequency of gold (528) and harmonic silver (417).

Corroborating instruction for Divine communion and bodily

protection was given Moses in Exodus (25:7; 28:15). God advised Moses to use gold and silver in breastplates resonating in 528 and harmonic 417, respectively, to secure the hearts of faithful followers for Divine protection. According to Oriental medicine and acupuncture, those breastplates augmented the 528 green healing energy broadcasting from the heart ‘chakra’ fueling the bioenergy merid-ian system. Encouraging Divine communion in “truth and the light,” Moses was instructed by God to adorn high priests with ephods. Generations later, Jesus similarly addressed troubled hearts with soul-saving advice in John (14:6), revealing “I am the way, the truth, and the life. . .”.

For eternal life, Egyptian rulers built pyramids evidencing intel-ligent design based such substantial knowledge of physics, spiritual dynamics, cosmology, mathematics, sacred geometrics, and energy frequency intelligence [7,15]. These constructions promised physi-cal preservation and metaphysical/spiritual transformation. Elec-trically conductive pyramid capstones were comprised of electrum made of 528 resonating gold, silver, and secondarily brass (i.e., cop-per and zinc). The composite transmitted ambient energy through-out the system like a capacitor. The sarcophagi were likewise laden with gold and silver for divine association, resurrection, and eter-nal life. Quartzite was added to convey the “Ka” to the “Ba”—the spirit to the soul in the afterlife. Bright blue, red, violet, and green colors were used for their symbolic and energetic meanings, such as green for rebirth and gold for divine association.

Recently, pure gold’s surface plasmonic resonance (“SPR”) was quantified at or near 528nm of green light in the electromagnetic color spectrum<sup>1</sup> [8,9,11]. Silver’s purple resonance was recorded at or near the 528 harmonic of 417Hz/nm frequency [8,12]. These frequencies of musical-mathematics and their electromagnetic dy-namics resonating from gold and silver have proven to be especially therapeutic [16-19].

Summarily, the universe’s homeostatic balance is secured by musical mathematics, frequencies of sound giving rise to waves of light. Primordial sound and light frequencies must be transmitted by elements gold and silver by reason of ancient Greek pyramid de-

<sup>1</sup>Nobel metals gold and silver’s use in medicine is widely accepted (as in, chrysotherapy and aurotherapy) to improve immunity, destroy bacteria, disinfect, strengthen the body, treat rheumatoid arthritis and certain cancers, and surgically patch damaged blood vessels, nerves, bones and membranes.

sign, Hebrew gematria meanings, and modern day plasmonic science that quantifies SPRs.

Skeptics might consider this intelligence far-fetched. Yet, Webster's Dictionary defines the 528Hz "MI" note as "MI-ra gestorum" (i.e., the M<sup>I</sup>racle stimulus) "an extraordinary occurrence that surpasses all known human powers or natural forces and is ascribed to a divine or supernatural cause esp. to God" [5].

## Background

A study by Sharma V., *et al.* [9] confirmed the green 528 nm color of gold's surface plasmon resonance ("SPR"). These investigators found that gold's nanostructure emits plasmonic bands of 528 energy altered by physicochemical factors, such as the size and shape of the nano-gold examined, parameters such as temperature, and pH of the salt water used in the testing solutions including impurities therein [9].

The green color of 528 nm has been scientifically determined to be: (a) an extremely unique and therapeutically valuable frequency of light energy broadcasting at the center of the electromagnetic color spectrum (i.e., the heart of the rainbow) [6,16]; (b) the precise mathematical matrix resonance central to universal construction and ancient Pi ("aPi") and Phi constants [6,7]; (c) crucial to the determination of 5280 feet in the measured mile; (d) dominant in the 'sacred geometry' of circles; (e) the main energy used by chlorophyll to produce life-giving, anti-oxidating, free-radical savaging, oxygen [6,8]; (f) extremely and extraordinarily therapeutic when applied in clinical practices for the treatment of myriad illnesses [16,18]; and (g) theorized to be the "miraculous repair" frequency for damaged DNA based on the genetic, epi-genetic, and quantum influence (in biophysics) that involves DNA's resonance, structuring and light and sound signaling. These quantum dynamics cymatically influence, arguably determine, molecular structuring central to organic chemistry, biology and genetic expression [8].

Otomalo., *et al.* [20] studied optical and acoustic vibration modes of gold-silver core-shell nanoparticles. They explained the manner in which sound and light frequencies in the field of "opto-

acoustics" dynamically interact in and through the plasmonic domain. They wrote: "While continuous-wave spectroscopy probes the stationary optical properties of the nanoparticles ("NPs"), ultrashort and intense pulses of laser light can excite a series of energy exchange processes, each of them being characterized by a specific timescale. The light energy is initially absorbed by the electron gas, which is driven out of thermodynamical equilibrium. The energy is then redistributed within the electron gas and transferred to the lattice, through electron-electron and electron-phonon collisions, respectively, and the nanoparticle heats up. All these processes last for less than a few picoseconds. The thermal energy is further released into the surrounding medium through the interface. The steep initial warming up of the nanoparticle, which is homogeneous as the thermal energy is spread rapidly in the metal by electron transport, results in the sudden lattice expansion which launches a set of coherent acoustic vibration modes".

In simple terms, light photons hit the Au/Ag NPs and sound phonons pop out.

Naruse., *et al.* [21] studied such localized optical fields reflecting versus transmitting light frequencies from silver nanoparticles ("SNPs"). They found that the efficiency of wavelength frequency transmission and reflection of elemental silver nanoparticles was high for both randomly structured SNPs versus highly ordered SNPs. The "observed spectral properties of the fabricated device, . . . exhibit[ed] high reflectance for near-infrared light while maintaining a high transmittance in the visible" at or near 417 nm [8,21].

The idea of silver nanoparticles interacting with gold's 528 light and sound via photoacoustics (a.k.a, opto-acoustics) is now a well-established scientific principle [11-13] especially considering this local surface plasmon resonance (LSPR) wavelength being central to the ancient Solfeggio musical scale broadcasting the "MI" note at 528Hz [5-8].

As explained by Otomalo., *et al.* when SNPs are exposed to light (or sound), their conduction electrons oscillate collectively in response to the electric field. Sound broadcasts thereby; and this



interaction of light and sound wavelengths generate LSPRs depending, as mentioned, on the nanoparticle's size, shape, and surrounding environment. For silver, this wavelength is typically in the UV-visible range (e.g., 390–550 nm) [12]. This range includes the green 528 nm frequency of gold (and chlorophyll), and the purple 417 nm wavelength theoretically intertwined with the 417Hz frequency of the Solfeggio “RE” tone that plays adjacent to the 528 “MI’racle” note. The next lower note in this sacred ancient musical scale and scaled energy system resonates at 396Hz frequency. This too broadcasts within this special sacred spectrum and is a classic harmonic of 528Hz frequency. This 396 pure tone plays the “DOE” note (originally called “UT-quent laxis”) completing the first three Solfeggio tones in the scale, “DOE, RE, MI” [5-8].

## Methods

Presuming the precise resonance energy of ancient Egyptian pyramids to be especially therapeutic, including gold's 528 energy, a scientific literature review was conducted to: (1) determine the optimal composition of the electrum's resonant energy material (“REM”) that acts like a capacitor and energy conductor in Egyptian pyramid capstones; (2) advance and support the hypothesis that 528 frequency energy output by gold's SPR and ancient pyramid capstones is: (a) a “universal constant” in cosmic design; (b) a compelling factor and force justifying consideration of a “Grand Unification Healing Paradigm;” and (c) the “miracle” and metaphysical frequency, 528 may be functionally operating akin to black holes in string theory facilitating or conducting miraculous manifestations of healing from quantum dimensions as shown with plasmonic energy applicable to therapeutic devices and clinical practices; (3) consider 528 frequency sound and light waves role(s) in cell divisions giving rise to tissue repair and new life by energizing and activating genetic expression for stem cell differentiation consistent with primordially-active biological evolution; and (4) reconsider creationistic science and holy scriptural instruction to determine any energetic basis in physics and metaphysics by which God's instructions to Moses (in Exodus 25:7; 28:15) and Egyptian “eternal

life” pyramid constructions may be reconciled and therapeutically applied.

In these contexts, whereas 528 frequencies of sound and light are theorized to be “universal constants” in the “Grand Unification Healing Paradigm” operating at the heart of cosmic design and materialism, we considered a musical-mathematical basis of reality applicable to the therapeutic arts and sciences.

Our inquiry generally reconsidered reality as formed from a musical-mathematical matrix of energetic frequencies in order to analyze and test our hypothesis that 528, at the heart of the original Solfeggio scale reputed to be spiritually-renewing and healing, modulates quantum dynamics and epigenetics much like zero-point energy is involved in the miraculous manifestation of cosmic creation.

## Results

Figures 3 through 7 provide a detailed analysis of the architecture of the ancient Egyptian Khufu and Saqqara pyramids with special interest in musical-mathematics and frequency influence. Evidenced here, inter alia, is the 528 frequency's predominance and harmonics within a cosmological and architectural matrix of pure math. Recognized within these results are the ancient original Solfeggio musical scale frequencies of 528 and its harmonic 396, intertwined with ancient Pi.

## Ancient Pi and Solfeggio 528 in grand masonic lodge architecture

Figure 8 provides Freemason art further evidencing the validity of the ancient arcana elucidated in this study. The central star image shows a 16-pointed star surrounded by 21 pyramids. The 16-pointed star has distinctly 56 total points. Aligned perfectly vertically in the image archway display of architectural coding are the numbers 16, 56 and 11. Thus, it is NO coincidence that: [16]/



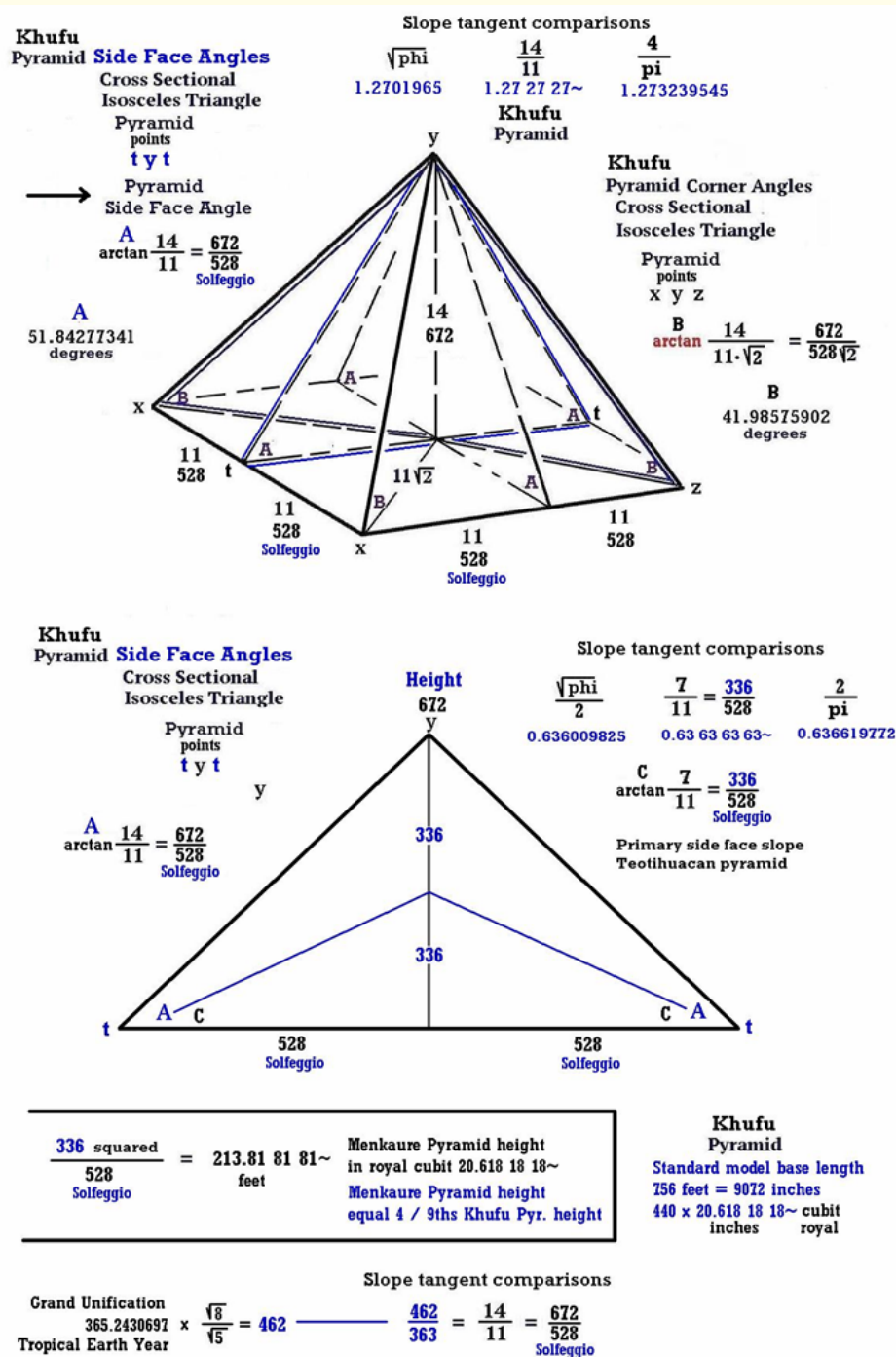


Figure 4



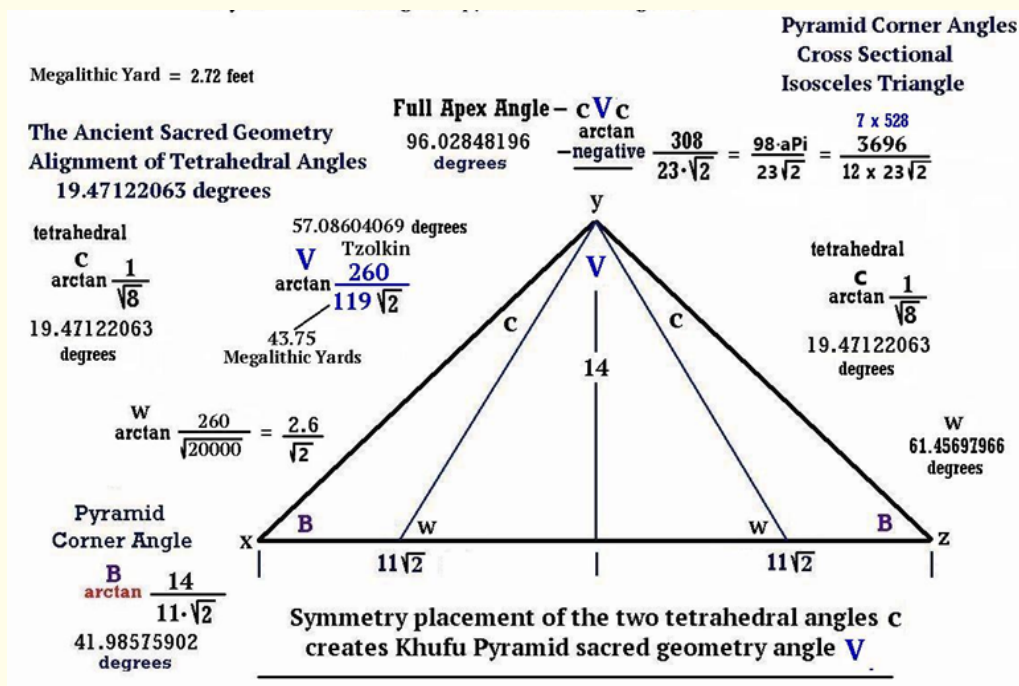


Figure 5

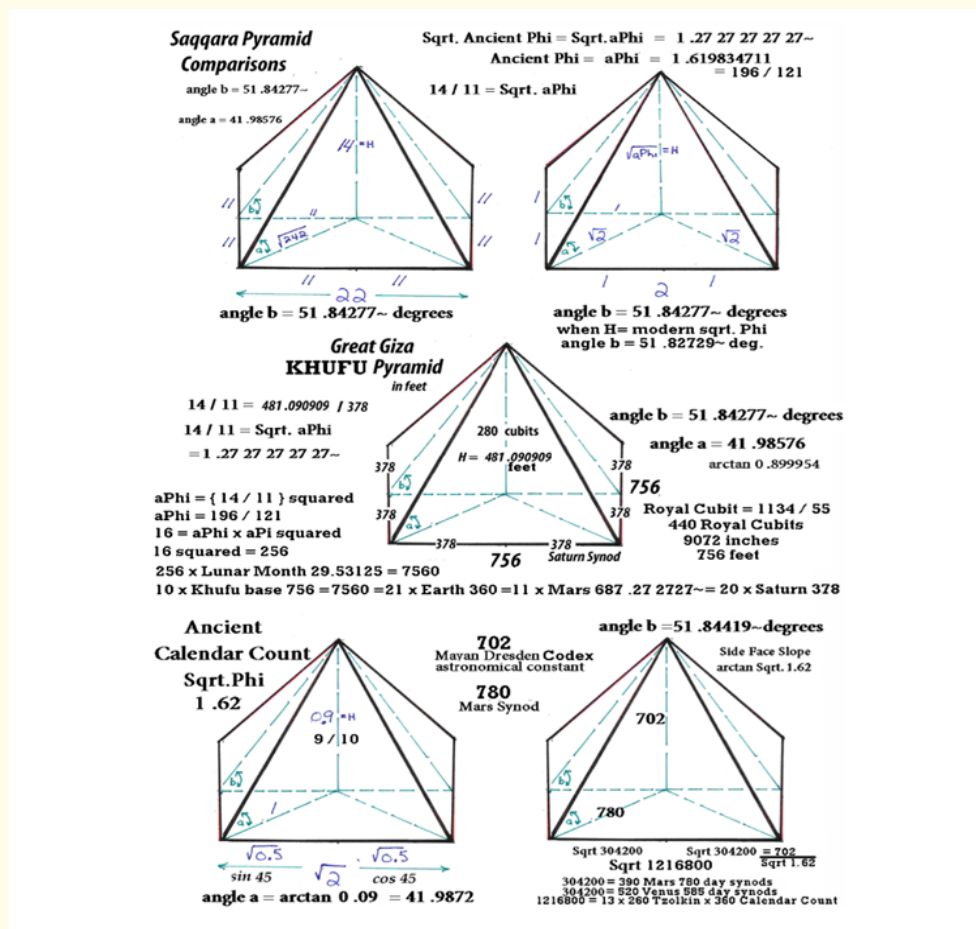
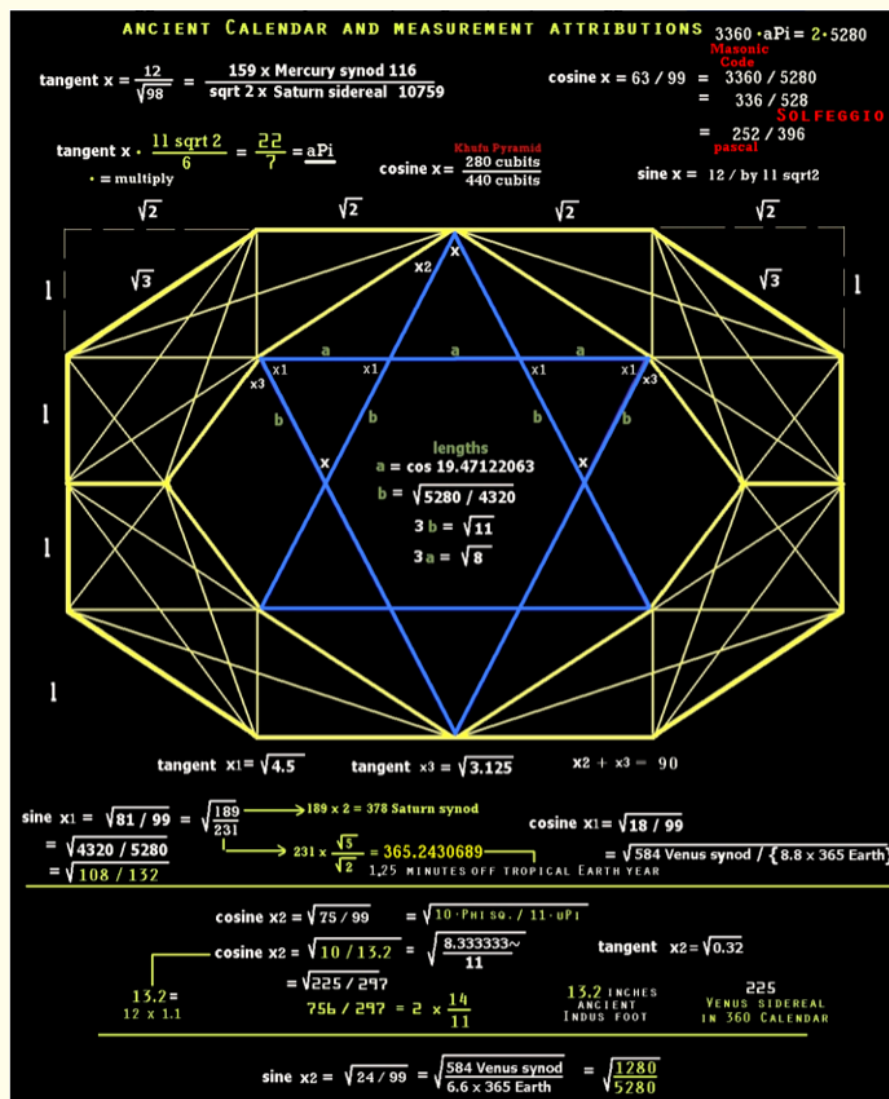


Figure 6



**Figure 7:** Tangent of angle  $x$  in a simple conversion with  $\text{sqrt. } 2$  reveals the ancient  $\pi$  value ( $22/7 = a\pi$ ) from which the Khufu pyramid slope determined from the standard pyramid slope formula:  $(4/a\pi) = \text{slope tangent} = 51.84277341$  degrees. This  $\pi$  value is cosmologic and not for volumes. Cosine  $x$  also displays functions of the mile 5280 feet, and two primary Solfeggio values 528 and 396. Note that Solfeggio  $396 \times \text{Khafre Pyramid slope tangent } (4/3) = \text{Solfeggio } 528$ . Note also in the sine  $x_1$  equations the denominator 231:  $8 \times 17 \times 231 = 31416$ . Sine  $x_1 = \text{sqrt.}$  Cos  $x_1 = \text{sqrt.}$  ( $314.18 \text{ } 18 \text{ } 18 \sim \text{by } 1728$ ). The Egyptian  $\pi$  values  $3.1416.18 = 3927/1250$ , and  $3.14 \text{ } 18 \text{ } 18 \sim = 1728/550$ . It is simple enough to find a great multitude of known “ancient  $\pi$ ” values in this math. These  $\pi$  values have cosmologic connotations and were not used for calculating volume.

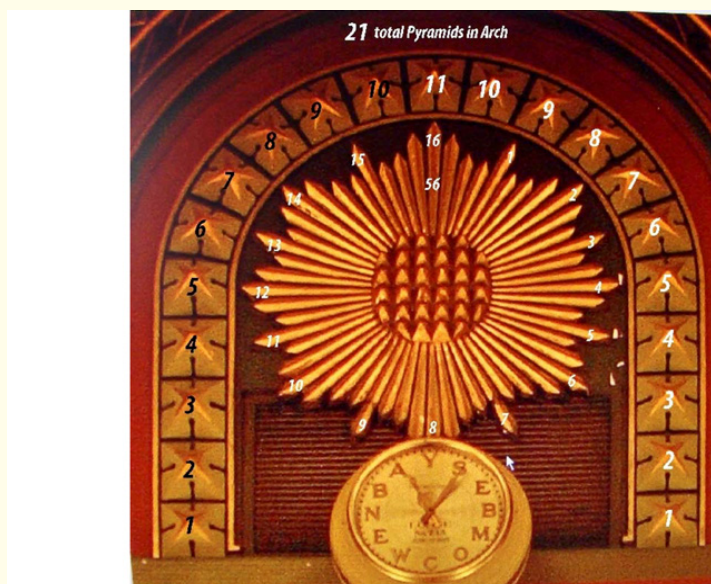


Figure 8

by  $[56] = [0.285714 \ 285714 \ 285714]$ , then  $[0.285714 \ 285714 \ 285714]$  times  $[11] =$  exactly ancient Pi ("aPi").

Multiplying the upper arch's  $[21]$  pyramids times the  $[16]$  pointed star =  $[336]$ ; and  $[336]$  times  $[aPi/2] =$  Solfeggio  $[528]$ .

Note the number  $[336]$ , as that is an E8 physics value. E8 is a mathematical structure with 248 dimensions used in theoretical physics, string theory, and supergravity research. Some investigators consider this configuration's role in regulating everything in the universe.

### The Solfeggio 528 Magic 9 Square

Figure 9 shows a "Solfeggio 528 Magic 9 Square" including all nine of the original Solfeggio frequencies within the blue box. This analysis evidences a direct link between this matrix math and Egyptian pyramid and capstone design, cosmology, and space-time measurements. This matrix math validates universal construction constants based on ancient Pi, that are energetically related to 528 frequency mathematics and quantum energy dynamics (i.e., metaphysics).

In assessing the impact of specific number values which are predominant here, as shown in Figures 3 through 9, these evidence a distinct "Harmonic Code" within sacred geometric structures, such as pyramids, incorporating mathematical constructs. There is no question that specific Solfeggio frequencies as numeric values resonate here fundamental to the sacred geometry, math constant influence, and universal construction. Near 528, the Figure 9 matrix cites each of the other Solfeggio frequency numbers designated with red dots.

### Cosmological Space/Time 528 Influence

Each of the Figure 9 matrix numbers have significance in universal construction. For example, starting at the top left of the figure, line 1, the 657 frequency =  $9 \times 73$ ; wherein the "73 primes" are most important since they repeatedly appear in the ancient Earth and Venus year calendar counts of  $5 \times 73 = 365$ , and  $8 \times 73 = 584$  days in the Venus synod to Earth of  $\{365/584\} = \{5/8\}$  that reveals the math underlying the Fibonacci series. In addition,  $4 \times 73 = 219$ , and  $6 \times 73 = 438$ , appear in square roots in the sine and cosine of the Khufu Pyramid corner angles.

The next number example in line 1 is 548. This expands awareness into the metaphysical/spiritual realm. 548 is  $4 \times$  Kabbalah

657	548	146	369	512	584	880
845	174	825	285	960	396	211
234	408	852	93	639	648	822
750	756	315	528	741	300	306
726	642	417	963	204	414	330
308	660	231	771	96	882	748
176	508	910	687	544	472	399

Figure 9

137. That number represents “the biggest mystery and most important number in all of science,” according to B. Phillips [24]. “137 refers to electrons and the odds of an electron absorbing a single photon. Or in simple Kabbalah language, it’s about Vessel and Light, or the physical body of man and his ability to ignite the Light from his soul and arouse the Light . . . so that it shines in our plain ordinary world” [24].

Final examples presented here in line 1 is  $146 = 2 \times 73$  -- another 73 prime multiple.  $1460 = 4 \times 365$  (i.e., the days in the modern calendar year);  $369 = \text{Leedskalnin's and Nicola Tesla's } 3\text{-}6\text{-}9$ ,  $369 = 3 \times 123$ ;  $512 = 16 \text{ squared} \times 2$ ;  $584 = 8 \times 73 = \text{the Venus synod } 584 \text{ calendar count to Earth in days}$ ; and  $880 = 10 \times 88 \text{ day Mercury sidereal \{solar orbit\}}$ , whereas  $6 \times 88 = \text{Solfeggio } 528$ .

Skipping the rest (not to belabor the point of this matrix characterizing universal construction), all lines, vertical, horizontal and diagonal add to  $7 \times 528 = 3696$ . That is “an old part” of Showell’s Grand Unification Earth Tropical Year analysis. Considering NASA’s 365.2422 calendar year; the Metonic cycle 365.2467711; and

Showell’s Grand Unification analysis that uses square root (“sqrt”) 2 and sqrt 5, considering  $231 \times \{\text{sqrt } 5/\text{sqrt } 2\} = 365.2430697$ . Thus,  $3696 = 16 \times 231 = 16 \times 365.2430697 \times \{\text{sqrt } 2/\text{sqrt } 5\}$  or  $7 \times 528$ .

Not to forget, similarly, Solfeggio  $528 \times 10$  makes the mile 5280.

## Discussion

These results help explain, and more importantly may be used to produce, miraculous healings. To do so, DNA must be programmed or reprogrammed to energetically and epigenetically upregulate cell and tissue architecture, repair, sustainability, and even “eternal life” in the quantum dimension [25]. That was the main purpose for designing and constructing the Egyptian pyramids [15].

Western science and theology largely sources from Egyptian scholars contemplating Greek science advanced by Aristotle. Aristotle was a polymath who wrote the first science book titled *Physics*. Aristotle’s title sourced from the root word “Philos,” meaning LOVE.

Subsequently, related to this eclectic and esoteric investigation, in the 11<sup>th</sup>-century, Ibn al-Haytham (AD 965-1040) published the *Book of Optics*, that engaged quantum physics and elemental particle science and energetics. al-Haytham's text is often cited alongside Newton's *Principia* as one of the most influential books in physics. Al-Haytham made contributions to astronomy, mathematics, engineering, medicine, psychology, and physical optics addressing human perception of reality while contemplating the Divine. Al-Haytham considered holy spiritual sustenance, and monotheism honoring communion with the one God of the universe as the foundation of existence and transcendent meaning in life. While incarcerated as a heretic, Al-Haytham experimented with candles and copper and concluded that the "form" of physical objects, reflected by light, not only sources from the sun as a godly eternal energy source, but also from the elements comprising the physical object.

Modern advances in plasmonic science now corroborate al-Haytham's thesis, especially considering the 528nm of green light determined to resonate uniquely from pure gold [9,20]. Another example is silver, similarly determined to maintain a surface plasmonic resonance ("SPR") at or near the 417 frequency of photoacoustics outputting purple light [21]. As introduced, more corroboration is revealed in the Bible's Book of Numbers (7:12-83) in which the Solfeggio frequencies for gold and silver were found to be harmonics 528 and 417, respectively [5-8].

Similar to the ancient Egyptian knowhow used to secure "eternal life" by way of divine communion and spiritual/energetic sustenance for the soul's reported involvement (per e.g., B. Phillips. [24]), this corresponds to similar messages espoused by Moses and Jesus. Their missions featured saving lives and souls by communing with God. They encouraged harmonic coherence to laws intertwined with eternal spiritual forces recognized in Egyptian theology, Western religions, and Eastern philosophies. Their common condition of elevated consciousness in righteous existence implied a state of spiritual awareness, transcendence, and harmonic resonance, in communion with the Divine.

Horowitz [6] has called this the "Zone of Bliss" in which peace

(a.k.a., shalom) prevails. There is no suffering, no distress, nor even disease in this realm. There is "nothing missing or broken" in this quantum dimension of universal balance and omnipotent coherence called the "Kingdom of Heaven" by Western religions. Eastern theologies similarly designate this humble abode of infinite enlightenment as pure nirvana. Herein there is no delusion or craving. Presumably, this quantum state of consciousness and blissful co-existence with the Divine is achievable and available to humans, perhaps even therapeutically using the intelligence and tools encouraged herein. Humans who seek sovereign emancipation and absolute freedom from distress, disease, and even spiritual death through knowing and choosing the "truth and the light" as the Bible details repeatedly, are encouraged by the results of this study.

Years after the pyramids were built, this same message was given to oppressed Israelites exiting from slavery in corrupt Egypt. Those seeking the 'promised land' were advised by God and Moses to make a heart-felt choice in faithful commitment to God and God's "judgment". (Exodus 25:7; 28:15). Much like preparing the pyramid capstones' composite materials that included gold and silver, preparation to meet God and commune Divinely forever began with the making of a "breastplate" featuring the electrum elements gold and silver. These noble metals and colors were to be worn over the heart. The "heart chakra," mind you designates the green energy chakra or (528 = 6 x 88) vortex celebrated by Oriental physicians and acupuncturists for more than 5,000 years.

This breastplate inspired "heart chakra" represents the seat of love, faith, joy and bravery. It is instrumental to inspiring peace, protection, sustainability, and longevity. Heartfelt coherence to this loving commitment or Contract provided by God encourages Divine communion and eternal salvation according to the religious world.

This invitation to commune with God eternally in "truth and the light," and manufacturing instruments, tools or devices, to accomplish this feat, was accepted by high priests adorned with their ephods. According to Moses, their precise instructions required that gold, silver, and brass be used to accept this Divine communion and secure eternal life. The colors purple, blue, and scarlet were added to this prescription for salvation. Addressing troubled hearts with



soul-saving advice in John (14:6), Jesus similarly revealed, “I am the way, the truth, and the life: no man cometh unto the Father, but by me [because I]f ye had known me, ye should have known my Father also. . .”

### Pyramid and capstone resonance, and therapeutic gold and silver

Scholars now debates whether or not an ancient city existed beneath the Giza Pyramid Plateau, based on 3D radar tomographic

recordings [15]. As shown in Figure 10, eight vertical columns were evidenced on which spiraled structures appear to have conducted energy down to the ancient city from presumably the gold and silver laden pyramid capstones. Energy to power the city was presumably conducted down from the gold and silver electrom through multiple resonance chambers. The most probable electrom ratios of gold, silver, copper, and trace elements constituting this ancient Egyptian power plant are currently debated.

It is believed that the electrom composite material acted like a

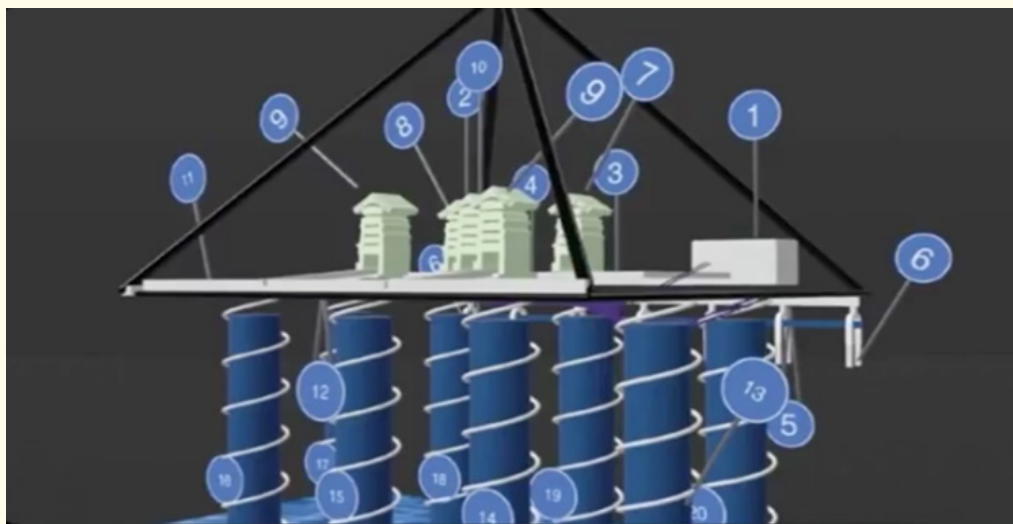


Figure 10

“conductive resonance capacitor” (“CRC”) layer outputting the visible and acoustic wavelengths of 528 nanometers of green light and 528 Hertz frequency of sound. As previously mentioned, both of these frequencies of light and sound have been determined to be exceptionally therapeutic.

The name electrom sources from the Greek word ἤλεκτρον (ἑλεκτρον), mentioned in the Odyssey, referring to a metallic substance consisting of gold alloyed with silver. The same word was

also used for the substance amber, that is fossilized tree resin. Amber gemstones have been used from antiquity in jewelry and as a healing agent in natural medicine. It is from amber’s electrostatic properties that the English words electron and electricity are derived.

In compiling these facts and researching electrum composites for therapeutic applications and recommendations, our core challenge was determining the mathematics, sacred geometrics, and percentage composition of electrum ingredients needed to optimize therapeutic benefits derived from plasmonics, quantum resonance, opto-acoustics, metaphysical/spiritual dynamics, and durability measures. These attributes depend on the main components (i.e., gold, silver and copper along with trace amounts of zinc<sup>2</sup>). This functional alloy's research and future developments require navigating sparse archaeological data, limited metallurgic analyses of ancient electrum artifacts, and the complex quantum physics of surface plasmon resonance at macro scale [26].

Despite these obstacles, the insights presented here are compelling—and may ultimately: (a) reshape our understanding of the technical precision and metaphysical intent embedded in ancient sacred architecture and pyramid design and function; (b) evolve the natural healing arts and sciences to be most beneficial to public health and safety; (c) serve to “green” medicine and nanotechnology to compete more effectively against risky chemical/pharmaceutical approaches to disease control; and (d) extend life, intelligence, and “higher consciousness” to secure spiritual fulfillment in Divine communion.

### Solfeggio 528, Ancient Pi in Pyramid Design and Divine Cosmology

The Great Pyramid of Giza is often revered for its “resonance geometry”. What better “resonance” could be imparted other than the acoustic beauty and harmony of the Solfeggio 528 frequency? This resonance is the most highly evidenced numeric Solfeggio value in the sacred pyramid geometry mathematics as shown in Figures 3 through 9. 528's place therein evidences a key harmonic cycle of numeric values fundamental to cosmic construction and space/time analyses.

The Egyptian pyramids employ the value of Ancient Pi (“aPi”) as [22/7]. This is not a three-dimensional sphere Pi as defined in modern mathematics. It is “Pyramid Pi,” and then it is also “Hypercube Pi”, of which the Tesseract Hypercube is formed as a fourth-dimensional mathematical construct as further considered below. By virtually converting the rational number of aPi into the irrational number of modern Pi, and disappearing the significance and utility of aPi in modern mathematics and energetic pyramid design, unfathomable dissonance, ignorance, and damage may have been caused.

Similarly, the ancient Solfeggio frequencies had been secreted for millennia for what end? Certainly not modern “progress”. 528 and 396 have been hidden along with aPi in the ancient and modern pyramid numerologies [7,27]. Nevertheless, Solfeggio frequency values remain an integral part of natural pyramid design, and are now being increasingly valued as “Life Force” energies within cosmological dynamics.

The entire pyramid apparatus certainly appears to be an energy amplifier, conductor, and transducer, evidencing the basis of cosmological homeostasis and harmonic administration. Thus, one might define these numerologies as “Codices”.

Additional proof for this claim is provided by the inevitability of the numbers invariably evolving into the Hypercube Polytope number system. This math defines the expanded geometries that evolve from the Hypercube into forms defined as the hepteract, the octeract, and the enneract, etc.

In this context of extending Solfeggio frequency energetics and dynamics into cosmogenesis, we think of the cold fusion plasma induced Stargate Project, and the Einstein Rosen bridge creation,

<sup>2</sup>Electrum's color ranges from pale to bright yellow, depending on the proportions of gold and silver. One notable amalgamation is “green gold.” This alloy of silver and gold develops a greenish cast with increasing silver content. Green gold's color ranges from green-yellow (for proportions of silver between 14% and 29%) to pale green-yellow (for proportions of silver between 29% and 50%). The capstones of some Egyptian pyramids were known to be painted with thin layers of such electrum to instill the composite resin material's frequency resonance capacitance. The four-sided Great Pyramid of Giza features a slope angle of 51.5 degrees, as detailed above. Based on these dimensions, the presumed composition of the electrum (neglecting copper and zinc subordinate elements) includes 84% gold and 16% silver by weight. This specific ratio was determined using spectroscopic analysis to exhibit surface plasmon resonance near 528 nanometers. This electrum alloy was applied by the Egyptians as a superconductive plating to the capstone surface, presumably to optimize cost-effectiveness while maintaining full 528 resonance properties.

connecting to star systems theorizing two way travel. In this energy administration system water plays a key role. In Giza, water was directed through the subterranean passages under the pyramids. The flow likely went through the entire substructure, producing a giant cold fusion plasma energy complex. Considering these facts and findings, it is most reasonable to presume ancient Egyptian rulers and alchemists applied this knowledge in hydro-engineering, including manufacturing structured water formulas for health and longevity as is increasingly being done today despite substantial early skepticism and disparagement.

Helping to elucidate the beneficial influence of Solfeggio 528 resonance, its therapeutic function, and rejuvenative potential, in 2009 Showell published a monograph containing 528 mathematical analyses titled, "The Universal Harmonic Codes; Ancient Pi; Ancient Phi; Modern Pi and Phi; Universal Harmonic Pi; Grand Unification of Modern and Ancient Mathematics; Mathematic Harmonic Convergence Dynamics and Applications in Ancient Numerologies and Cosmologies Unified" [27]. Later Showell documented "how ancient Egyptian and MesoAmerican pyramid geometries and mathematics follow the universal constants of Pi, Phi and square root two in particular which generates tetrahedral geometry.

Extracting from Showell's pivotal works, aside from the demonstrated 528 "MI'racle" Solfeggio frequency impact on pyramid design, the data revealed crucial space/time measurements in cosmology. Ancient calendars associated with mathematical constants were revealed. Ancient Pi was determined to dovetail with the 528 frequency in the construction tetrahedron structures quintessential to the chief royal burial site—the Saqqara Pyramid. Comparing this with the Great Giza Khufu Pyramid, each analysis revealed universal constants tied to sequestered Freemasonry architectural arcana.

Comparing these pyramids, they each expressed 528 at their bases generating the same precise arctan angle (i.e., central stabilizing dimension) of 51.84 degrees. (See Figures 3, 4 and 6.) Showell also noted the Solfeggio "DOE" note, the 396 frequency

harmonic of 528, multiplied by the Khafre Pyramid Slope tangent ( $4/3$ ) = Solfeggio 528.

Showell considered the number 336 used in measuring the height of the pyramids, and realized this provided an "E8 physics value" [27]. Doubling that produced 672. That is the heptertact polytope value from charting the hypercube polytope as done using the Hypercube Tesseract. Thus, the height 672 divided by base line 528 =  $[1.272727\ 2727\sim]$  that (unlike modern Pi) is a rational number that equals the square root of ancient Phi. Showell proved that Ancient Pi is not the irrational modern Pi of 3.14159, but the ancient Pi is the rational number 3.142857 . . . to Infinity.

Showell's use of 528 to gain the Great Giza Khufu Pyramid slope derives from Solfeggio 528 as a number value most comprehensively connected harmonically and coherently with the other Solfeggio numeric values. This knowledge integrates well into the ancient Giza geometries. Note in the pyramids graphed that the height of  $672 = 2 \times 336$ . This is the heptertact polytope value emerging from a seven-dimensional hypercube. A nine-dimensional model of reality has been advanced by mathematicians Vernon Neppe and Edward Close [28]. Here, 672 is numerologically  $6+7+2=15=6$ ; as it is with 528. Energetically, this is considered to have a miraculous metaphysical immortal influence.

Showell thus corroborated the thesis advanced in 2007 by Antony Garrett Lisi [23] referencing the "E8 Theory" proposing a basis for a unified field theory which attempts to describe all known fundamental interactions in physics, and to stand as a possible "theory of everything". Lisi's goal was to describe how the combined structure and dynamics of all gravitational and Standard Model particle fields are algebraically coordinated. This conclusion is consistent with the 9-dimensional model discerned by Neppe and Close [28], and is complementary to the "Grand Unification Healing Paradigm" advanced and evidenced here.

In the "Magic Square" presented in Figure 9, each vertical and horizontal line, including the diagonal lines of numbers, all add up to the same number—3696!

Not coincidentally, Strong's Lexicon identifies the number 3696 as "an instrument or weapon corresponding to a 'hoplon' " for which the New Testament directs attention to the necessity of spiritual preparedness and defense. Furthermore, the 3696 hoplon is an instrument that "underlines that God always gives all the resources we need to prevail in every form of spiritual warfare – as we live in faith". ("His inbirthed persuasion", 2 Cor 6:7, 10:4).

Solfeggio 528 is similarly situated as a spiritual defense "weapon". This powerful good vibration is this Magic Square's Central Number. In Figure 9, the central 3 x 3 square is outlined in blue, and has nine total spaces. The primary numeric axis of symmetry seen is: 417 - 528 - 639, in the diagonal line from bottom left to upper right. Each number is separated by 111. When you add Solfeggio:  $417 + 528 + 639 = 1584 = 528 \times 3$ . So each line in the 3 x 3 square adds up to 1584, horizontal, vertical and diagonal lines. (Again, red dots have been added to the spaces with the Solfeggio frequencies).

In a 5 x 5 square there are 25 total spaces. Using Solfeggio 528 as the central number, each line adds up to  $5 \times 528 = 2640$ . In a 7 x 7 square, there are 49 total spaces. Using Solfeggio 528 as the central number, each line adds up to  $7 \times 528 = 3696$ .

Thus, the Magic 7 Square is three magic squares in one. The central square is 3 x 3 and the most important. In this central Solfeggio 528 magic three square, an amazing six of the nine available spaces are "Perfect Circle of Sound™" Solfeggio frequency numbers. That nine number is the most that can possibly fit into a 3 x 3 square.

The magic square numbers are meant to complement each other in each stage of expansion from the 3 x 3 to the 5 x 5, and then to the 7 x 7 square. Considering beyond ancient Pi and pyramid design, important numbers here reflect planetary calendar count timelines, the megalithic yard, Kabbalah 137, and ancient cubits. For instance, in the 5 x 5 square section the number 756 is seen. That is the Khufu Pyramid standard model base length in feet.

At the top of the 5 x 5 square selection, the remaining 9 Solfeggio frequencies are found: 174, 285, 396. They are seen in perfect progression from left to right. The 7 x 7 square is then filled out with the same synergistic number placement and intent.

### 528's Role in quantum physics, zero point energy and string theory

In this study we advance the hypothesis, high probability, and fact-based presumption/conclusion that 528 is a key constant in universal design, administration and cosmic accounting.

Because our hypothesis potentially provides a unified description of gravity and particle physics, like string theory does, and like Antony Lisi's E8 Theory does, our 528 Constant Grand Unification Healing Paradigm hypothesis challenges, arguably supersedes, the "theory of everything" advanced by Lisi and string theorists [23]. Our theory too provides a self-contained mathematical model that describes all fundamental forces forming all matter, including cells and tissues.

String theory evolved to incorporate quantum field theory, albeit not without limitations and objections. Given its reductionistic orientation towards particle physics, string theory neglects the wholistic dynamics advanced with our 528 Universal Constant musical-mathematical resonance model unifying reality.

In considering how something, such as the universe or a single atom or stem cell might manifest and/or differentiate from seemingly nothing other than quantum energy potential, zero-point energy (ZPE) might be considered relevant in this context. ZPE is the lowest possible energy that a quantum mechanical system may have [25,29-33]. Unlike in classical mechanics, quantum systems constantly fluctuate in their lowest energy state as described by the Heisenberg uncertainty principle. Therefore, even at absolute zero, atoms and molecules retain some energy in vibrational motion.

Apart from atoms and molecules, the empty vacuum space also shares these properties. According to quantum field theory, the universe can be thought of as fluctuating fields. In these fields, quanta are fermions (i.e., leptons and quarks) and/or bosons (e.g., photons and gluons). All of these fields have zero-point energy [34]. These fluctuating zero-point fields involve the physics and biophysics of that can be detected as energy in some studies. However, this aether cannot be thought of as a physical medium to satisfy the Lorentz invariant, such that there is no contradiction with Albert Einstein's theory of special relativity.

Like 528 energy that may be the key to zero-point energy, the notion of zero-point energy is important in cosmology and astrophysics. In this context, our findings may help remedy the discrepancy between theorized and observed vacuum energy in the universe that has been a source of major contention. Physics has lacked a full theoretical basis for understanding zero-point energy in this context that the 528 Universal Constant premise supplements. Accordingly, Einstein's theory of general relativity suggests such energy would gravitate and be exceptionally weak. That's not to say it would be impotent. To the contrary, as in homeopathy, "less is more". The weaker the solution (i.e., higher dilutions) the stronger the therapeutic dose and energetic impact. 528 influence might work similarly.

This is one of the greatest unsolved mysteries in physics. Many physicists believe that "the vacuum holds the key to a full understanding of nature" [35]. We agree, and suggest integrating the aforementioned homeopathic medicine orientation. Nevertheless, neglecting this "less is more" theory in quantum physics, with such weak energy fluctuations and the potential for zero-point cancellations, this discrepancy is known as the "cosmological constant problem" [35].

Our 528 Universal Constant considerations may also help resolve this "cosmological constant problem" by considering the musical mathematics of creationism and the string theory in physics. These intertwined theories provide a theoretical framework within which physical reality and natural healing may be best explained and energetically influenced. In string theory, point-like particles in particle physics, like undifferentiated stem cells in biology, are replaced by one-dimensional objects called strings [36]. As

in music, string theory integrates scales, and describes how strings of matter propagate through space and interact with each other—in harmony or dissonance, as in music and Solfeggio frequency science and mathematics (per Figure 9).

In string theory, concerning distance scales larger than the string, the string may act like a particle or even cell, with its mass, charge, and other properties determined by the vibrational state of the string. In this theory, one of the many vibrational states of the string corresponds to subatomic particles and the quantum mechanical forces upon them, such as gravitational force. This is akin to the 'gravitational force' of resonance coherence in music, and likely depends on the string's vibrational frequency resonating in sync in harmony or dissonance with the overriding force of nature and the 528 Constant.

Pleomorphism in microbiology appears to be similarly situated and energetically influenced [37].

### Resonance prompting stem cell differentiation and tissue repair

One practical application of our Grand Unification Healing Paradigm accommodates stem cell differentiation for tissue repair featuring epigenetics and 528 frequency resonance.

To date, differentiation of pluripotent mesenchymal stem cells into desired tissues is not well understood. "Chromatin modifiers" have been cited as crucial in this therapeutic process but inadequately explain the totality of stem cell differentiation. Energetic, epigenetic, and quantum processes are now known to influence chromatin modifiers and regulate the entire differentiation process.

Chen and Dent [38] explained that "[m]any adult tissues harbor multipotent stem cells, which have the ability for life-long self-renewal and the ability to differentiate into a number of tissue-specific cell types". Crucial in this process of tissue regeneration and maintenance is the hydrated parenchyma that conducts piezoelectric, electromagnetic, and quantum communications.

Heavily suppressed and recklessly disparaged by Big Pharma's leading yellow science journal, *Nature* [39], assailed lead author



Jacque Benveniste to secure the petrochemical/pharmaceutical paradigm and damage Benveniste's legacy [40]. In 1988, thirteen investigators published Benveniste's peer reviewed science. They recorded human basophils responding energetically, not chemically, to very dilute antiserum against IgE [40]. Their results evidenced electromagnetic transmission of biochemical information through water. Later investigators concluded that such subtle electromagnetic information "can be stored in the electric dipole moments of water in close analogy to the manner in which magnetic moments store information on a computer disk" (25; *Italic added*). Electromagnetic transmissions enabled in-vivo transmissions of specific information between two functional bio-molecules. [25]

Such homeopathic-like messaging occurs through the well-hydrated parenchyma [39,40]. In the case of stem cell differentiation, factual evidence compounded to date validates the presumption that bioenergetic and quantum messaging occurs through water in coherence with tissues influencing stem cell differentiation by way of epigenetics and sound and light signaling. This is how biology maintains energetic integrity throughout the system [41-43].

Cruciani and Garroni, *et al.* [42] reviewed stem cell literature regarding differentiation and regeneration, extending Alexander Gurvitsch's pioneering work [43]. In 1922, Gurvitsch discovered that "living cells separated by quartz glass were able to communicate vital cell information". Subsequent investigators proposed this electromagnetic and/or quantum energy stimulus was transmitted by invisible light frequencies (such as 528nm) that passed through quartz but was stopped by window glass. For the wave energy explanation, Gurvitsch coined the phrases "mitotic wave" and "mitogenic induction". He noted this was observed during enzymatic reactions and mitosis. Gurvitsch determined that muscle tissue, cornea, blood and nerves all transmitted this mitotic wave energy. His pioneering work first documented evidence of "biophotons"—coherent light energy emitted by cells later studied by Fritz-Albert Popp, extending this field to designing bioelectromagnetic therapy devices [30,43].

Burr and Northrop studied the role of bioelectric signals in embryonic development and tissue regeneration [44]. In 1935 they observed a bioelectrical field that they called "L-field". Robert

Becker advanced this field further while studying the "electric potential around the wounds, finding very small currents (2-3  $\mu$ A), for some days first negative, and then positive [32]. Blocking these currents stop[ed] the regeneration of the tissue" [42].

Becker recorded that after a fracture or a wound, two electric currents are produced by the organism, one coming from the injured tissue (bone or muscle), and the other from affected nerves [32]. Combined, bio-batteries were established for wound healing operating like "living electrodes". In this way, "the organism makes his own diagnosis, like X Rays, and leads the regrowth. At this point an incredible phenomenon takes place: specialized cells like erythrocytes are able to de-differentiate" [42].

Levin and colleagues showed that patterns of bioelectric signaling constitute "...an autonomous layer of control not reducible to a biochemical or genetic account of cell state" [45]. Becker popularized these and other advances in our understanding of the role of electric and electromagnetic fields in healing and regeneration in several books including, *The Body Electric and Cross Currents* [32].

Regarding stem cell differentiation and cell line growth and development, given these electromagnetic wave impulses conducted through water and the quantum biofield, the embryonal cells 'miraculously' transform into any kind of cell needed to regain homeostasis and health.

More recently, the clinical applications of this intelligence were reviewed by Safavi, *et al.* [46]. They concluded that "EMFs are an easy-to-apply and practical way in cell therapy and tissue engineering when regulation of stem cells is required. Studies have shown that EMFs have positive effects on stem cell differentiation, accelerating its process regardless of the parameters and type of stem cells. However, the exact amplitude, frequency, duration of the electrical field, and application method remain elusive and need more study in future work" [46]. To this end, the 528 frequency and its Solfeggio scale harmonics, are recommended to facilitate bioenergy and bioelectromagnetic dynamics in future studies and clinical practices.

Our recommendation is especially wise considering Nikola Tesla's so-called "obsession" with 3, 6 and 9 matrix math fundamental to energy, cosmology, and the ancient Solfeggio musical scale whose frequencies each decipher numerologically to 3s, 6s and 9s [5-7].

Accordingly, genetic expression and phenotype differentiation of stem cells is influenced by frequencies—presumably most powerfully by 528 "Life Force" frequency (i.e., "pure tone LOVE"). Global chromatin remodeling occurs in favor of natural healing under this influence and during this process of cell differentiation resulting in more condensed DNA with histone and nonhistone proteins. "It is well established that DNA is a semiconductor" [25]. "Charge transfer takes place in the DNA core via the overlapping  $\pi$ -electron system of stacked base pairs (25; Polesskaya, *et al.* cite Odom, *et al.* 2000). Both positive and negative charges, which are electron holes

and excess electrons, respectively, could be transported through the DNA chain (Polesskaya, *et al.* cite Odom, *et al.* 2000 and Fujitsuka and Majima, 2012). Depending on the DNA sequence, charge transfer occurs via multistep hopping or coherent superexchange (tunneling) mechanisms (Polesskaya, *et al.* cite Giese, *et al.* 2001) aside from quantum field biodynamics [25].

Thereby, biophysics and epigenetic (i.e., electrogenetic) expression substantially dictates the establishment and maintenance of biology and differentiated cells. Differentiated stem cells complete the process by adapting to electromagnetic, photoacoustic, and quantum epigenetic field messaging. These ambient environmental mitogenic forces are crucial for maintaining health, tissue integrity, homeostasis, and life sustaining cell differentiation. Much like a school of fish is observed instantly changing direction through electro-messaging through superconductive water, bioelectromagnetic frequency entrainment and energy coherence regulates stem

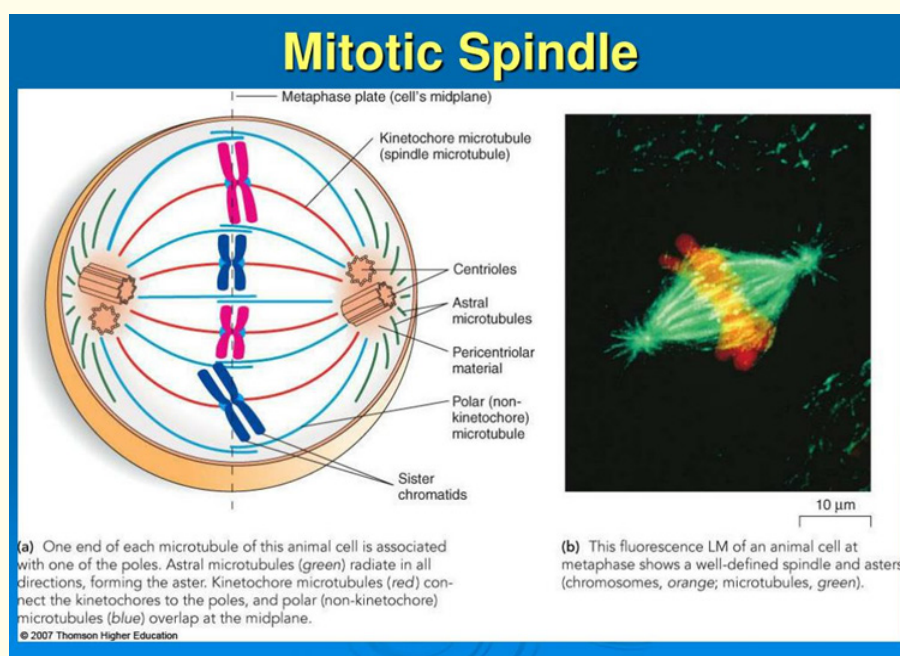


Figure 11

ferentiate into specific phenotypes for tissue integrity by musical/mathematical harmony. The organism's longevity is miraculously driven and secured. This bioelectronic/biospiritual influence, driven especially by the 528 Solfeggio matrix math, operates much like

the force of gravity.

In this context of sequestered 528 matrix math, it is remarkable and indicative of gross negligence, reckless bias, and mental

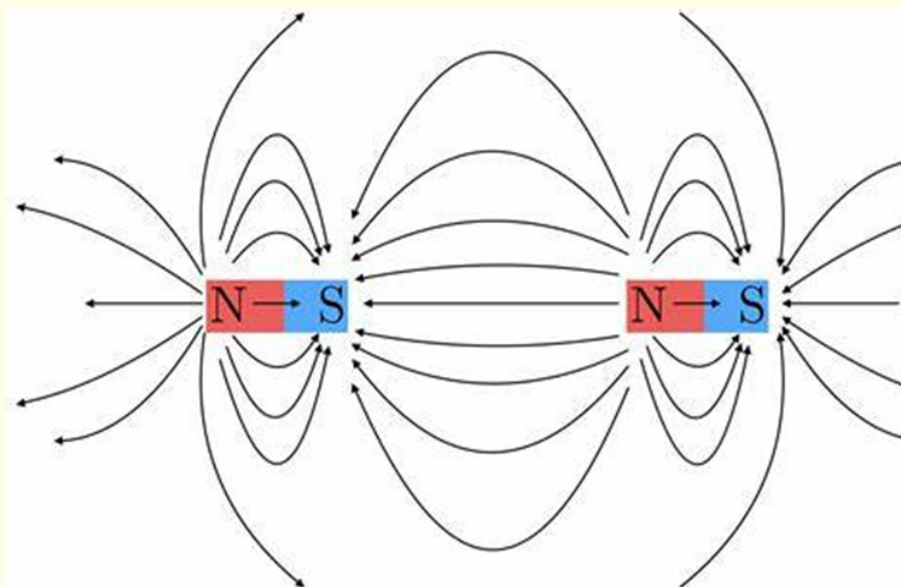


Figure 12

illness in the bioscience community that obvious similarities between magnetic and mitotic fields of energy have gone neglected or falsely discredited for so long (See Mitotic Spindle Figure 11). Everything about the miracle of cell division smacks of electromagnetic energy influence and quantum dynamics. For instance, the opening of condensed chromatin during the early stages of mitosis characterized by positive and negative charges and charge transfers along the genome evidences quantum biodynamics [25].

Further detailing this biodynamic energetic process, RNA synthesis is related to histone acetylation. The lysine amino acid attached to the end of the histones is positively charged. It attracts negatively charged electrons and acetylation. The acetylation of these tails make the chromatin ends neutral. This permits more electromagnetic and quantum field access to the DNA, greater genetic expression, and more resonance energy to impact the “transcriptional bursting” resulting in stem cell differentiation.

The fuel for such 528 inspired cell differentiation is provided by glucose, fatty acids, and amino acids’ metabolism. Glycolysis is the main source of ATP energy in this well hydrated superconductive system [44-47]. Specifically, RNA polymerase and transcriptional proteins have been shown to congregate into droplets via phase separation, and recent studies have suggested that 10 nm chromatin demonstrates liquid-like behavior increasing the targetability of genomic DNA. The interactions between linker histones and disordered tail regions act as an electrostatic glue organizing large-scale chromatin into a dynamic, liquid-like or water-like superconductive domain [47,48].

Accessing and repairing damaged stem cell DNA occurs during cell differentiation. The genome condenses into chromatin and repair occurs through modifying the histone residues under the influence of electromagnetic and bioacoustic frequency resonance entrainment. DNA is thereby energetically repaired by restructuring the damaged bases [44-47].

Stem cell differentiation and reproduction involving microtubules is completely energy dependent [44,48]. Microtubules are the largest structures in the cytoskeleton at about 24 nanometers thick. They have roles in cell movement, cell division, and transporting materials within cells. These “hollow cylinders” act like energy conducting and insulating conduits. They are comprised of repeating proteins, specifically dimers of alpha and beta tubulin (also referred to in writing as  $\alpha$ -tubulin and  $\beta$ -tubulin). Consistent with an electro-energized system, the alpha and beta tubulin are polarized molecules. Their positively charged ends grows relatively fast and their negatively charged ends grow relatively slow. The positively charged ends attract more electron energy, thus grow faster. Protofilaments arrange themselves electromechanically to parallel each other in each microtubule as though following the flow of an electromagnetic field formed from two bar magnets (As shown in Figure 12). Thus, the positive end of the microtubule always has beta subunits exposed, while the negative end has alpha subunits exposed. Such polarities dictate development of microtubules and stem cell differentiation.

Neglecting these energy dependent epigenetic stem cell dynamics has failed to produce desired benefits Polesskava, *et al.* [25] critically commented: “In spite of extensive research, gene regulation is still not fully understood. Although all major transcription factors, gene promoter sequences and regulatory elements have been thoroughly characterized, our ability to predict transcription levels of genes is very limited. Even Genomatix (Citing: Patel, *et al.* 2012), the leader in gene promoter analysis for the last 16 years, still has limited ability to predict the transcription of genes based on their regulatory sequences and the presence of transcription factors. It is hypothesized by us and others that this uncertainty regarding gene transcription is caused not by the complexity of gene regulation but by an incomplete understanding of the mechanisms of gene regulation”.

In other words, the neglected gene promoters are electromagnetic and bioacoustics resonance frequencies—“undeciphered sig-

nals which are regulated neither by transcription factors nor by any other chemical means but via another principle”—musical mathematics. . . . “In this way, the cell may be understood as a factory powered by electricity. In this respect, we find it most promising to focus on DNA conductivity, since it may be directly involved in gene regulation” [25].

Accordingly, DNA functions as an oscillator to engage functionally important resonance [25]. “The double helical DNA is wrapped on nucleosomes, forming the ‘beads on a string structure’. The nucleosomal structure of DNA is very dynamic, and its movements simulate oscillators that consist of a capacitor and an induction coil. Such oscillators are used in radios, computers and nearly every electronic device. Among possible candidates for resonating structures in DNA, we suggest that adjacent pairs of nucleosomes could possibly work as natural electronic oscillators. In this model, oscillation occurs by alternation of charges between the two nucleosomes,” producing a “united  $\pi$ -orbital electron cloud” [25].

EM resonators in cells also include polarized membranes, the nucleus and organelles. These can serve as generators and receivers of electromagnetic field frequencies. Aside from highly polarized chromatin, many proteins, such as hemoglobin that is structurally similar to green 528 frequency resonating chlorophyll, and cytochrome oxidase C, can “serve as chromophores for capturing visible and infrared light” with high specificity [25].

Although the molecular structure of a nucleosome is known, estimation of the frequency of di- and poly-nucleosomal oscillators is not trivial because quantum physics and traditional electrodynamics potentiate the capacitance and inductance of di- and polynucleosomal models enabling natural frequency oscillation. “Although very little experimental data is published on DNA or chromatin oscillations, the electromagnetic oscillations have been detected in microtubules and other cellular components, reviewed by Polesskava, *et al.* (25; referencing Cifra, 2015). Possibly, the natural frequency of nucleosomes could be measured, and quantify 528 resonance as was established for gold plasmonics [8-11].

## Conclusions

The mathematics presented with supportive science in this report solidly evidences 528 frequencies of sound and light resonating as a “universal constant” at the heart of materialism, electromagnetism, and quantum energy dynamics sustaining and rejuvenating life. This intelligence may be crucial to determining the answers to some of the most controversial and perplexing questions confronting science and medicine, such as how “‘Miraculous” healings might be made to occur, as well as how physical rejuvenation manifests naturally and energetically from or through aether and body water.

Approaching these concepts in multidisciplinary science, miraculous healings raise eclectic specters in biophysics including black holes, zero-point energy, the “cosmological constant problem,” and other issues such as string theory. Here we consider such energetic influences prompting differentiation of mesenchymal (stem) cells for tissue regeneration. 528’s primordial role in cosmology and timekeeping, planetary synods (e.g., Earth-Venus), ancient calendar counts, and solar-lunar harmonics, are considered herein, with proven alignments of multipliers of 528 or with structures that encode 73 primes ( $528 = 6 \times 88$ ,  $584 = 8 \times 73$ , etc.). This math impacting sacred geometry and universal design supports our claim that 528 is not arbitrary but instead embedded as a constant in universal construction and cosmic time cycles.

Further considering 528’s influence in bioenergetics and natural healing, our universal constant theory extends into quantum biology and epigenetics, asserting that the force of 528 vibrations imposes genetic repair and cellular regeneration. This aligns with zero-point energy field theories that bridge vibrational physics and medical therapeutics. Electromagnetic and quantum field wave coherence at 528nm/Hz may be used most powerfully to repair damaged cells and tissues. This “good vibration” is presumed to do with all biology what it may be doing in microtubules favoring gene expression. This 528 stimulus harmonically facilitates stem cell differentiation, tissue repair, and natural healing accommodating electromagnetic frequency resonance coherence. In this way, 528 frequencies of sound and light may act as a ‘biological tuning fork’ for optimal bio-spiritual energy flow and DNA function. This

epigenetics merges ancient wisdom with modern theoretical biophysics.

It’s important to note that the interpretation of 528 as a “universal constant” is a synthesis of symbolic, harmonic, and cutting-edge science rather than the contemporary consensus of mainstream biophysics. Showell’s Magic Square analysis features 528 as the central value of a 3x3 Solfeggio matrix (Figure 9). Every row, column, and diagonal adds to 1584, which is  $3 \times 528$ , and larger configurations (5x5 and 7x7) scale harmonically (e.g.,  $5 \times 528 = 2640$ ,  $7 \times 528 = 3696$ ). This convincingly evidences a harmonic fractality—a recurring pattern based on 528, affirming its centrality in physical reality, sacred geometry, and sacred number placement. These patterns and coherence across geometry, music, cosmology, and biology are presented here with rigor, science and mathematical justification. Practical applications of this information are encouraged with many under development.

Although more studies are needed to determine the optimal composition of gold, silver and copper in electrum, or alternatively 528 therapeutic resonators, capacitors, and energy conductors enabling the most therapeutic methods, materials, and outcomes, the potential implications of this intelligence are vast, impacting health science and civilization at large. 528 bioelectronic resonance may be leveraged in many industries, including medicine and genetic research. This knowledge may be quintessential to the future of healthcare, healthy human development, species sustainability, and cancer control.

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