

# Consciousness, the Laws of Physics, the Big Bang, and the Structure of the Universe

Jeffrey S. Keen

## ABSTRACT

In general, science accepts that both the structure of the universe and the laws of physics were created simultaneously at the beginning of the Big Bang, and have since remained constant throughout the observable universe. The experimental evidence detailed in this paper demonstrates that consciousness, in its widest sense, was also created at the time of the big bang, and together with the storage, communication and perception of information, is intimately connected to the structure of the universe and the laws of physics. The introduction of this concept of consciousness helps to explain the “weird” effects of quantum physics and hitherto other inexplicable phenomena including entanglement, dark energy, inflation theory, the universe’s expansion against gravity, and the possible connection between the essence of consciousness and the Higgs field. This paper augments existing knowledge with published findings from recent mind science experiments. Using noetics and without the use of physical equipment, equations are found with high correlation coefficients which include universal constants such as the Golden Ratio, 1.61803... ( $\phi$ ), Feigenbaum’s Constant, 4.6692... ( $\delta$ ), sine 1/3, and polyhedra angles. It is thus demonstrated that both consciousness and the structure of the universe are closely linked to concepts including: universal constants, geometry, chaos theory, numbers and mathematics, vortices, fractal geometry, interaction of mind and matter, multi-body interactions, entanglement and information. General acceptance of the above facts should lead to a monumental paradigm shift in mankind’s understanding of the cosmos and its incorporation of consciousness.

**Key Words:** mind, consciousness, spirals, torus, vorticity, chaos, Feigenbaum’s constant, golden ratio, gravity, electromagnetism, entanglement, cosmic and subtle energies, Planck level, Higgs field, structure of the universe

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## Introduction

This paper suggests a high level structure of the universe based on current knowledge from several disciplines. To achieve this ultimate objective in understanding space-time the following are some of the obstacles that must first be overcome.

a) After 100 years of observations, nobody claims to understand the weird effects of

quantum mechanics, including such phenomena as entanglement and why the act of observation affects scientific measurements.

b) As a result of recent findings in cosmology, conventional science accepts that after over 500 years of exploration, it only understands about 4% of the universe; the remainder being termed dark energy and dark matter which are euphemisms for a lack of explanation!

c) It is necessary to integrate quantum physics with cosmology and general relativity.

Corresponding author: Jeffrey S. Keen, BSc Hons ARCS MInstP CPhys England.

e-mail: jeffrey@jeffreykeen.co.uk

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Many researchers including the author believe that the solution to the above challenges lies not just in physics, but involves a better understanding of consciousness and cognitive neuroscience together with the nature of information (Rosenblum & Kuttner, 2007).

This heterodox article explores the possibilities of turning conventional explanations of the universe “on its head” by elevating the role of consciousness to see if this gives a better understanding of quantum physics and other observations of the universe. For example, if consciousness is a driving force in the universe, then such concepts as the anthropic principle; objects seeming to be in two places at the same time, and to possess the ability of anticipation; observers affecting the results of experiments; photons and the 2 slit interference problem; and other “mysteries” of quantum physics may be easier to explain without resorting to such devices as eleven dimensions or an infinite number of parallel universes.

Over the last few hundred years, mainstream scientific thought has considered that the Universe is a physical entity comprising matter, and that consciousness is only a consequence of a minor part of living matter. Figure 1 is a simplistic depiction.

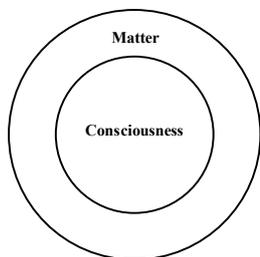


Figure 1. A Classical Understanding of Consciousness.

In some cases, more recent science, in attempting to interpret the quantum world, has tended to move towards ancient Eastern traditions, whereby matter may be a consequence of consciousness. This interpretation is supported by the quantitative findings in this paper and is depicted in Figure 2. The recent confirmation that mass emanates from the Higgs Field is consistent with this concept. In developing this approach, a key concept is that consciousness and matter involve information.

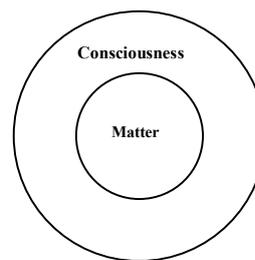


Figure 2. A Possible Quantum Interpretation of Consciousness.

Numerous documented experiments have proved that the mind is affected by local and astronomical forces on earth, including gravity, electromagnetism, and the earth’s spin (both on its axis as well as around the sun).

Our current level of understanding of consciousness and its connection to the cosmos is possibly where astronomy was about 600 years ago when it was “obvious that the Sun went round the Earth”, or before physics could “see” atoms and fundamental particles.

The above and other counter intuitive observations, accumulated in over 25 years of research by the author, are examined and show how they augment current views on the structure of the universe and the laws of physics. The following topics add to the vast amount of existing circumstantial and factual scientific evidence relating to the wider aspects of consciousness and its role in the structure of the universe.

## 1. Universal Constants and Universal Angles

### *Universal Constants*

Any theory of the structure of the universe must account for the presence of universal constants which also happen to be irrational numbers. Examples of two common universal constants and dimensionless ratios that are discovered in mind science experiments are the Golden Ratio, 1.61803... ( $\phi$ , which traditionally has been associated with the Fibonacci Series), and Feigenbaum’s Constant, 4.6692... ( $\delta$ , which is usually associated with turbulence and chaos theory).

### *Universal Angles*

A cursory internet search of academic papers, using Google Scholar, gives numerous examples of universal angles, such as



- $19.471^\circ$ ,  $11.537^\circ$ ,  $8.213^\circ$  etc, which are a series of angles whose sine's are  $1/3$ ,  $1/5$ ,  $1/7$ ,  $1/9$ ...
- $35.264^\circ$ ,  $54.735^\circ$ ,  $109.471^\circ$ . These are all connected to  $19.471^\circ$  in a right angle triangle.

Classical physics has found the above universal constants and angles. Does mind science find similar constants? In any scientific research, obtaining universal constants is the ultimate proof of a correct theory.

### *Examples of Evidence*

Appendix 1 contains a selection of relevant evidence from published mind science papers where quantitative experiments involving unaided perception produce results containing universal constants. Topics covered include Auras and  $\phi$ ; Multi-body interactions; 3-Body Alignments; Spirals and Conical Helices; Angkor Wat; the Tree of Life pattern; and subtle beam divergence angles. In all these cases the above universal angles and constants were discovered by the unaided mind. The following examples are particularly noteworthy.

### *Psi-lines*

Psi-lines have been well known since ancient times and are permanent subtle energy lines produced by the mind's intent that are easily detected or destroyed by other people. The relationship between the width and length of a psi-line (Keen, 2012a) is a simple formula involving the Golden Ratio,  $1.61803...$  ( $\phi$ ). This formula had a remarkable correlation coefficient of 0.99. The minimum width of a psi-line (Keen, 2012b) is a simple function of Feigenbaum's constant,  $4.6692...$  ( $\delta$ ). The perceived length of a standard yardstick (Keen, 2019c) is an exponential function of  $\phi$  and Newtonian gravitational force. These dimensionless ratios were discovered after analysing the results of mind science experiments weeks after the data were obtained, and therefore the results could not have occurred by chance or with pre-meditation.

Psi-lines are terminated at each end by a pair of 3-dimensional helical coaxial bicones each having different properties. The apex angle of one of these cones involves the Golden Ratio ( $\phi$ ), whilst the other involves sine  $1/3$ .

### *Tree of Life*

Two philosophical questions resulting from Tree of Life experiments (Keen, 2008) are:-

1. What is it about life forms that create a Tree of Life aura, when inanimate objects do not?
2. Why have animals a left-right symmetry, and 10 fingers and toes?

Darwin's theory of evolution and the survival of the fittest, does not explain questions like these, and possibly is therefore incomplete. The Tree of Life detected noetically from life forms, has left right symmetry, 10 vortices, and is identical to one produced geometrically by using vesica pices. By implication the structure of the universe is involved in consciousness and in guiding evolution of life forms.

### *Fine Structure Constant*

Subtle energy beams are not parallel but slightly divergent. Intriguingly, some of these beams have a divergence angle (Keen, 2010 a, 2011 g) involving the tangent of the inverse of the Fine Structure Constant (137), a fundamental constant in physics. This again links consciousness to the cosmos.

### *Conclusion to universal constants*

The important conclusion is that mind / abstract experiments produce identical universal constants as do physical experiments. This is good evidence that the mind has the ability to interact with the structure of space-time and the laws of physics.

The probability of finding universal constants by chance is virtually zero. None of the above quantitative mind science experiments use physical detection equipment. They all produce formulae involving universal constants or universal angles with no arbitrary constants.

It also suggests that these universal constants together with elements of consciousness are built into the structure of the universe at the Planck level.

How else does consciousness interact with the laws of physics, and what else can mind science discover about the structure of the universe?



## 2. Geometry

From ancient times there is much scientific literature linking geometry to the structure of the universe. For example, the ancient Greeks knew about polyhedra and their angles, and the same common angles have been found in many diverse branches of science. These commonalities cannot be coincidental. It would suggest that they reflect the structure of the universe.

Geometry is therefore a key factor in understanding the structure of the universe; be it the classical 4-dimensions of space-time, or the 5-dimensional hologram model, or the 11-dimensions of string theory. Likewise geometry appears to be a universal concept in most mind science applications (Keen, 2011g).

Appendix 2 contains details of evidence supporting universal geometry in consciousness, and covers such topics as auras; rooms and chambers; as well as physical and abstract sources of geometry. A summary of some of the findings are given below.

### *The Equivalence of Physical and Abstract Geometries*

A solid version of a 2-dimensional geometrical shape usually produces an identical dowsed pattern as a non-physical abstract version of the same shape (such as drawn on paper or as an impression formed on a lawn). However, in a few cases, a mirror image is produced, with perceived flows in the opposite direction suggesting a left-hand rule for solids, but a right-hand rule for abstract geometry.

Auras have an additional characteristic. Appendix 2 gives examples of solid sources producing a 7-fold geometry but abstract objects with identical geometry producing 9-fold geometry.

### *Transformation of Dimensions*

Mind science experiments using simple abstract and solid sources of geometry become transformed into such universal geometric shapes as: Straight lines, cylinders, polyhedra, vesica pisces, spirals, vortices, torroids, and conical helices.

The simplest examples of this transformation process are that a 0-dimensional dot is perceived as a 1-dimensional line, whilst a 1-dimensional line is

perceived as 2-dimensional parallel lines (Keen, 2009c; 2011g).

### *The Equivalence of 3-dimensional Physical to 2-dimensional Abstract Geometry*

Surprisingly, a small simple 2-dimensional shape drawn on paper can produce identical observations as those obtained when on-site dowsing a large 3-dimensional structure. For example, the act of observing a small double peaked geometric curve or even 2 short parallel lines produces the identical complex pattern as the banks and ditches (Keen, 2011g) in a vast ancient site.

### *Conclusion to this section on Geometry*

The above examples provide clues regarding the effects on the laws of physics of observation and conscious intent, and how conceptual information is treated by the cosmos. Evidence of dimensional and geometric transformations support the theory that our perceived 4-dimensional world (i.e., 3 space dimensions + time) is really a hologram in a 5-dimensional universe.

## 3. Chaos Theory

There is much evidence of the connection between the mind, the structure of the universe, and hydrodynamics. Some subtle energies appear to behave like flowing water or wind. The findings are often similar to those involving physical turbulence, or viscosity and friction reducing the flow rate of a gas or fluid near boundaries.

A simple example is that mind created dowsable shapes are static on the ground, but floating ones drift in a westerly direction with increased velocity as their height above the ground is increased (Keen, 2003a). Equations with a logarithmic relationship describe this phenomenon (Keen, 2005).

A characteristic of hydrodynamics is the change from laminar to turbulent flow, with bifurcations and areas of stability in between. Standard Chaos Theory details this phenomenon, and involves Feigenbaum's Constant, 4.6692... ( $\delta$ ). Another mind science example that adheres to this theory are 2-body interactions as they produce a subtle energy beam that bifurcates (Keen, 2011b), forming the well-known bifurcation pattern with a decreasing series of lengths of the resulting



beams, and after a low number of bifurcations forms a final “wall”.

As quoted earlier, the ratio of the length of the smallest psi-line to its width is one quarter of Feigenbaum’s Constant (Keen, 2012b), whilst the equation for the relationship between gravity and the mind’s perceived measurement of length also involves Feigenbaum’s Constant (Keen, 2012c).

The numerous examples in this section support the conclusion that consciousness and the unaided mind is fundamentally linked to chaos theory, the laws of physics, and the structure of the universe.

#### 4. Numbers and Mathematics Formulae

Several simple formulae have been discovered that involve the mind linked to universal constants, with no arbitrary constants, a 2:1 ratio, and logarithmic or exponential equations. As these equations were discovered weeks after the data was obtained, these discoveries could not have been made by chance nor with pre-meditation. Random examples of these findings are summarised below:

- The separation distance, **d**, between a source line of physical length, **L**, and the perceived line (Keen, 2011, f) is  

$$\mathbf{d} = \mathbf{0.5} * \mathbf{L} \wedge \boldsymbol{\varphi} / \mathbf{2} \quad (\text{i})$$
- For a circle of radius, **r**, the radius of that circle’s core aura (Keen, 2011, f), **a<sub>c</sub>** is  

$$\mathbf{a}_c = \mathbf{2r} \quad (\text{ii})$$
- The radius of a perceived circle’s outer aura, **a<sub>o</sub>**, compared (Keen, 2011, f) to its physical radius, **r** is  

$$\mathbf{a}_o = \boldsymbol{\varphi} * \mathbf{r} \wedge \sqrt{\boldsymbol{\varphi}} \quad (\text{iii})$$
- The maximum separation distance, **S<sub>max</sub>**, between 2 bodies of radius **r**, to enable them to interact (Keen, 2011, f) is  

$$\mathbf{S}_{\max} = \mathbf{2} \cdot \mathbf{r} \wedge \boldsymbol{\varphi} \quad (\text{iv})$$
- 3 bodies (Keen, 2010, a), each of radius **r**, can interact if the separation distance between them **S<sub>min</sub>**, is greater than  

$$\mathbf{S}_{\min} = \mathbf{4(r + r} \wedge \boldsymbol{\varphi}) \quad (\text{v})$$
- The ratio of the length, **L**, of a psi-line to its width, **W** (Keen, 2012b) is  

$$\mathbf{L} = \mathbf{1/4} * \boldsymbol{\delta} * \mathbf{W} \quad (\text{vi})$$

- The apex half-angle, **α**, of a psi-line’s Type B conical helix (Keen, 2012b) is  

$$\boldsymbol{\varphi} * \mathbf{tan} \boldsymbol{\alpha} = \mathbf{1} \quad (\text{vii})$$
- The diameter, **D**, of the outer perceived cylinder generated by 2 banks and ditches, and the separation distance between the two peaks, **s**, is (Keen, 2009, a)  

$$\mathbf{D} = \mathbf{10} * \mathbf{s} \wedge \mathbf{1/\boldsymbol{\varphi}} \quad (\text{viii})$$
- The radius, **R**, of the core aura boundary to the centre of its source object of mass, **M**, (Keen, 2005) is  

$$\mathbf{R} = \mathbf{a} \cdot \mathbf{log} \mathbf{M} + \mathbf{b} \quad (\text{ix})$$

Where **a & b** are constants.
- The perceived measured length of a standard yardstick line, **L**, in a Newtonian gravitational force **F<sub>g</sub>** is (Keen, 2013a)  

$$\mathbf{L} = \mathbf{6E+105} * \mathbf{F}_g^{-\boldsymbol{\delta}} \quad (\text{x})$$

Where **δ** is the Feigenbaum’s Constant.

When 2 small parallel lines are gradually separated (Keen, 2002, b) in order to maximise the diameter of the perceived outer subtle energy cylinder, the optimum separation distance, **S<sub>o</sub>**, equals half of the maximum separation distance, **S<sub>max</sub>**. This is another example of a 2:1 ratio found in mind science.

#### The Number 7

Observations in mind science research frequently produce the number 7, which suggests that the interaction of the structure of the universe with consciousness has a preference for the perception of a universal 7-fold geometry. Examples include:

#### 7 Chakras

The ancient concept of the seven chakras is traditionally associated with humans, but seven chakras equally apply to other life forms (both animals, and plants), as well as to inanimate physical objects. Chakras are 7 noetic subtle energy points evenly spaced along physical sources, combined with 7 dowsable ovoids surrounding them (auras).

#### 7 Turn Spirals

As explained in the next section, most dowsable spirals comprise two components each with 3.5 turns, therefore totalling 7. The number 7 is a well-documented phenomenon in relation to megaliths. These are surrounded



by a dowsable helix of 7 turns or have 7 alternate “energy” bands. Many prehistoric sites are surrounded by banks and ditches which generate 7 parallel concentric cylinders (Keen, 2009a).

### *Music scale*

The number of notes in an octave (in the doh, re, me music scale) is the number 7. The implication is that the basic music scale and harmonics are fundamental to the universe, not just to music.

## **5. Spirals, Vortices, and Conical Helices**

### *Spin in the cosmos*

Rotation of objects in orbit, or the spin of objects around their axes seem to be an important property of the universe at whatever scale one chooses – be it rotating galaxies, planets revolving in solar systems, planets spinning on their own axes, electrons spinning around nuclei of atoms, or the spin associated with fundamental particles. The latter particles that carry the fundamental forces of nature, such as the photon and the gluon are bosons, which have integer spin, whilst the quarks and leptons that make up matter are fermions, which have half-integer spin ( $1/2$ ,  $3/2$  ...). This suggests that the structure of the Universe at its lowest Planck level has the property of spin fundamentally built in. How is this reflected in consciousness, and what is the evidence?

Appendix 3 contains details of vorticity in mind science and a brief summary is set out below.

### *Subtle energy spirals - locations*

Subtle energy spirals appear in numerous diverse places; in fact anywhere on, above, or under the Earth’s surface. Their origin can be either physical or mental. For example, the architecture of a domed enclosure can create a spiral. Experiments show that a spiral’s existence involves the structure of the universe and the mind, with the earth’s spin, magnetism, and gravity causing perturbations.

### *Subtle energy spirals - structure*

All spirals seem to have the same structure, whatever their source. On detailed examination the correct name for this phenomenon is not a 2-dimensional spiral, but a 3-dimensional conical helix, with  $3\frac{1}{2}$  turns.

A fundamental feature is that most “spirals” not only seem to comprise two coaxial vertically linked pairs to form a total of 7 turns, but 7 of these pairs are stacked vertically. The significance of the number 7 has been discussed previously, together with the findings that the conical helices have a tendency for apex half-angles of sine  $1/3$ ,  $1/5$ , etc.

### *Tori and the structure of the universe*

How could the structure of the universe form these Conical Helices? The number 7 adds weight to the suggestion that rotating or vibrating tori are involved in the structure of the universe.

A property of a torus is that it can move in 7 different ways. As well as the usual 4 space-time dimensions, a torus can spin or rotate in 3 additional ways:

1. A fluid subtle energy field can roll in and out on itself. Analogies of this could be smoke rings, vortices in a tornado, or water flowing down a plughole.
2. It can rotate about a vertical axis, so it appears to remain in the same place.
3. It can rotate about a horizontal axis like a paddle wheel.

As shown in Appendix 3, nested rotating tori can produce cones with quantised half angles involving the sine’s of  $1/3$ ,  $1/5$ ,  $1/7$  etc. Although this is not a proof of part of the structure of the universe, it may be a good analogy and starting point, and reinforce the belief that vortices and spinning tori are involved.

### *String Theory or Tori?*

This section suggests that part of the structure of the universe, as well as a component of consciousness, is based on vorticity linked to the number 7. String Theory has long had problems in providing tangible scientific measurements, and explaining the structure of the universe. From the results of measurements (Keen, 2007a), the basic structure of the universe seems not like a “vibrating string theory”, but more like a “spinning bagel theory”! This suggests that a model involving toroidal vortices should be developed.



## 6. Fractal Geometry, Global Scaling, and Perception

### *Perception of Tori - Small to Large*

The previous section does not fully explain why conical helices that possibly originate at the quantum level are perceived in an observer's mind as being several metres tall? Analogies include a rainbow, a hologram, or self-replicating geometry. In these examples what appears as large objects result from the manifestation of very small phenomena. A possible inference (supported by other evidence detailed elsewhere in this paper) is that the conical helices being observed by the mind at the macro level, replicate the structure of the universe at the infinitesimally small Planck quantum level, as described above, where the basic units of information storage could involve vortices and rotating tori.

### *Large to Small*

An example of a "large to small" phenomenon occurs when attempting to delve deeper into mind produced observations, such as detailing the structure of psi-lines (Keen, 2012, a): perception becomes limited by repeating similar smaller structures inside larger ones ad infinitum. Another example is that the same results can be obtained for 3 large interacting cosmic bodies as for 3 micro objects.

### *Global Scaling Theory and Fractal Geometry*

The above are examples of Global Scaling Theory (GST) and Fractal geometry. Both of these concepts seem to apply to the structure of the universe which treats the largest objects in the same way as the smallest, but in a pro rata fashion. This is compatible with the laws of physics being the same across the universe. Not only do these concepts apply to the physical world, but they also apply to the structure of the universe interacting with consciousness. Experimentation has shown that consciousness could involve converting macro "life-sized" concepts to the micro/quantum level, and then back again (Keen, 2011e). The ability of the universe to handle fractal geometry could be part of this process and explains how information in general, stored at the Planck level, appears to the brain as macro information or large geometric shapes.

## 7. Interaction of Mind, Matter, and Forces

Qualitative and quantitative mind experiments are affected by forces such as gravity, electromagnetism, and spin. Once again this suggests that the structure of the universe interacts with consciousness. The evidence supporting mind – matter interaction and consciousness is detailed in Appendix 4, but the following summarises some of the findings.

### *Mass and the Higgs Field*

The "mass-wavelength relationship" (Keen, 2005)  $\lambda = a \cdot \log M$  (where  $a$  is a constant) and its high correlation coefficient suggest it would be beneficial to explore the interaction of consciousness and mass further, especially the particle/wave duality. Conceptually this is similar to String Theory whereby matter comprises vibrating loops of strings. However, length and mass dimensions on either side of an equation seems an obvious error. But, as the Higgs Field forms part of the structure of the universe and is the cause of mass, it suggests that consciousness and information are also connected to the Higgs Field.

A strong connection exists between the size of an inanimate objects aura and its mass. Experimental observations produce equations having a logarithmic relationship with high correlation coefficients (Keen, 2003c). This is an example of mind – matter interaction.

### *Gravity*

The mind perceives *longer* lines when there is a *lower* gravitational force. The reverse is also true. Lines are perceived *shorter* when there is *higher* gravity. This demonstrates that consciousness is affected by gravity – even if mass is absent from the source object or measuring yardstick. This begs the question as to how gravity can affect consciousness.

Due to the change in the earth-sun gravitational attraction, the mind can quantitatively track the earth's annual elliptical orbit around the sun. These measurements (Keen, 2011d; 2013a) have a remarkably high correlation coefficient to the inverse of the Newtonian gravitational force raised to the power of  $-8$ . This discovery explains similar but qualitative findings for the gravitational effects on an observer's mind caused by the sun, moon, aircraft height, and the location of an experiment up mountains.



Not only do these findings demonstrate that conscious perception can affect the laws of physics, but invites the question as to why does consciousness have a different Newton's law of gravity? Another fundamental question is whether there is any connection between weaker gravity causing elongated measurements, and the outer universe appearing to expand against gravity, i.e., dark energy and dark matter could be connected to the act of conscious observations.

### *Electromagnetism*

Photons and magnetism have an important effect on perception and consciousness. For example, a magnet placed near the brain significantly affects dowsing ability. Magnetism has also led to a convincing example of remote macro entanglement at the two ends of a long psi-line.

### *Vorticity*

From experiments involving spinning solid objects, the auras produced do not spin with their associated source object. For spun liquids, their auras do not return to their static states. This is further evidence that supports the theory that auras of physical objects are weakly attached to their source, and seem to be a result of matter interacting with the structure of the universe. Are Torsion Fields the link between vorticity, auras, and mind created subtle energy fields?

### *Peace Grids and Matter*

When superimposing small objects of matter on a mind-created peace grid (Keen, 2009d), 4 diagonals are created at 45° to the grid, as shown in Figure 3. These lines have an outward flow of information, but have different properties to psi-lines. More diagonals are created by larger objects.

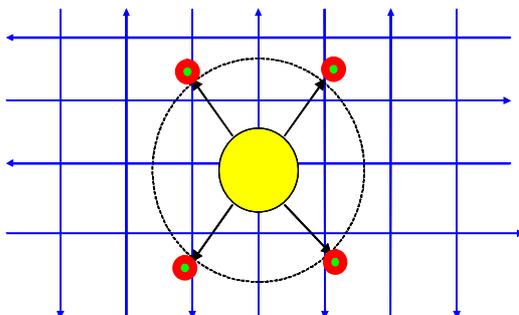


Figure 3. An Example of Mind and Matter Interaction.

These diagonals extend to the outer 7th shell of the object's aura, and end with a spiral. However, these spirals seem to have unusual properties including an extra 5<sup>th</sup> dimension, which requires further research to interpret. The pattern in Figure 3 conjures up visions of General Relativity where matter distorts the geometry of adjacent space. The conclusions from these experimental observations are that, in conjunction with the earth's spin, mind created subtle energy lines interact via the Higgs field, or equivalent, with matter and the latter's aura. Further research into this phenomenon could provide new evidence into the structure of the universe.

### *Conclusion to Mind Matter Interaction*

The above examples suggest that the structure of the universe includes a very strong component that not only produces matter, but also interacts with consciousness. This produces the perception of a mind/matter interaction.

## **8. Multi-body Interactions**

As the mind can detect interactions between two or more physical or abstract objects, quantitative measurements add new insights into the structure of the universe. As yet, physical equipment cannot detect these phenomena. Appendix 5 details the findings for multi-body interactions, but the following are summaries.

### *2-Body Interaction*

Provided their auras overlap, the interaction of 2-bodies (such as 2 pure abstract geometry circles drawn on paper, or 2 physical objects) generates a complex pattern that includes subtle energy with a very short variable length "laser beam". The length of this beam is a function of the separation distance between the 2 objects and the size of their radii (Keen, 2003b; 2011b). These beams terminate in spirals. The maximum separation distance between 2 objects of radius  $r$  is  $S_{max} = 2 \cdot r^\phi$ .

Analysis shows that if an object with a radius  $r$  communicates across space-time with waves having a half wavelength which equals  $2 \cdot r^\phi$ , a strong resonance effect is produced. This can be explained if the maximum separation distance between the two objects equals  $\frac{1}{2}$  the wavelength of the waves involved in the communication of information between the 2 objects. This suggests these waves are part of



the structure of space-time, and the geometry of physical or abstract objects determines the wavelength of these communicating waves.

The observed pattern created by 2 separating abstract bodies includes 6 null points and a total of 36 Cornu spirals, whilst 2 physical solid bodies of the same size only produce 4 null points and 28 Cornu spirals.

Once again, the structure of the universe has the ability to treat abstract sources similarly to physical objects but physicality produces less information than abstract thought. This is a counter intuitive property of the cosmos that requires an explanation.

### **3-Body Interaction** *3-Bodies in Alignment*

Geometric alignments of any three bodies (Keen, 2010, a), be they 3 pebbles, 3 circles drawn on paper, or 3 astronomical bodies, produce a subtle energy beam with very interesting properties. For example, the length of the slightly divergent beam produced by 3-body interaction tends to infinity. Also, this beam has a perceived flow (emanating outwards from the largest object), which affects measurements detectable by a standard mind science yardstick. This occurs provided the auras of the 3-bodies are not overlapping so there are no 2-body interactions. The precise requirement is that their minimum separation distance is  $S_{min} = 4(r + r \varphi)$ .

### *Effect of Alignments on the Measurement of Length*

Apart from the above effects of flow, performing experiments in this subtle energy alignment beam have different effects on measurements. Depending on the location of the measurement, a maximum or minimum length is obtained at perfect alignment. Although 3-body alignments were discussed earlier in relation to gravity and consciousness, the phenomenon here is totally different. In this case mass or gravity is not a factor. It is the result of the geometry of the cosmos, and is similar to psi-lines “knowing” when they are in a straight line.

Although the cause is different, the effect is similar to that with gravity (e.g. lines become shortened near new moon because of stronger gravity), but in this case lines become shortened by the *location* of the observer in

the subtle energy beam, which is a totally different cause. The properties of the beam change around the middle object. Philosophically, is this a coincidence, or is there a connection between gravity and geometric alignment beams?

### *What are the Tolerances for Alignment Beams?*

The 3-bodies need not be in an exact straight line. Weaker beams are produced if the 3 bodies subtend angles between arcsines of  $1/4$  and  $1/5$  (Keen, 2010c). The above reasoning leads to the interesting problem for future research into all 3-body interactions. Using the new and full moon scenario, when does the moon’s orbit around the earth trigger the creation of the subtle energy beam? In other words how does the moon know it is about to align with the sun and earth, without it touching the subtle energy beam if this beam has not yet been created! This seems the same property of space-time discussed later in relation to entanglement and psi-lines “knowing” how long one of their sections is in a straight line.

### *Comparison between 2-body and 3-body Interaction*

There are substantial differences between 2 and 3-body interactions even though both reflect the structure of space-time. But as these findings equally apply to abstract drawn shapes, mass or gravity is irrelevant (Keen, 2011g). This suggests that the differences between 2-body and 3-body interactions involve information related to the geometric structure of the Higgs or complementary field.

### *Alignment beams and consciousness*

There are 2 different explanations for the above alignment beams. Possibly, the very act of conscious intent when looking at 3 aligned geometric shapes creates this beam. This explanation could account for the act of observation affecting results in, for example, quantum physics experiments. Alternatively, as there are an infinite number of 3-body alignments in the universe, there is an infinite number of the above subtle energy beams formed as a consequence of the structure of the universe. Awareness and observation of any 3 objects, coupled with the mind’s intent, just selects the associated subtle energy beam. As there is evidence for both explanations,



further experiments are required to resolve this conundrum.

### Multi-body Interactions - Conclusions

The above interaction equations depend only on the size of an object raised to the power of the golden ratio. Any 2 objects, be they abstract geometry or solid bodies, not only “know” where the other is but also are aware of their partner’s radius/size. In addition, an element of “consciousness” is present to enable the 2 objects to interact if their auras are sufficiently close. The two-body interaction can partially be explained in terms of the geometry of two objects resonating with the waves involved in the communication of information between them.

On the other hand 3-bodies only interact if their auras are sufficiently separated. As before, the structure of space-time not only enables each body to know exactly where the other two bodies are located, but has a built in

preference for arcsines of  $1/4$  and  $1/5$ . This is a new concept, but is required for entanglement.

### 9. Mind Generated Psi-lines

Mind generated psi-lines provide valuable insights into the universe and consciousness that physical equipment cannot yet provide. Figure 4 illustrates the 2-dimensional footprint of half a psi-line, the other half being a mirror image. In reality, psi-lines are 3-dimensional comprising a series of subtle energy tubes terminating in 2 coaxial spirals. One of the spiral’s entry point is along the psi-line’s axis which may be an arbitrary direction, whilst the other spiral has an entry point due north of its centre. This suggests that the earth’s spin on its axis is an important factor in psi-line creation. The arrows in Figure 4 show the directions of the flow of information. Appendix 6 provides more details of psi-lines, but a summary is set out below.

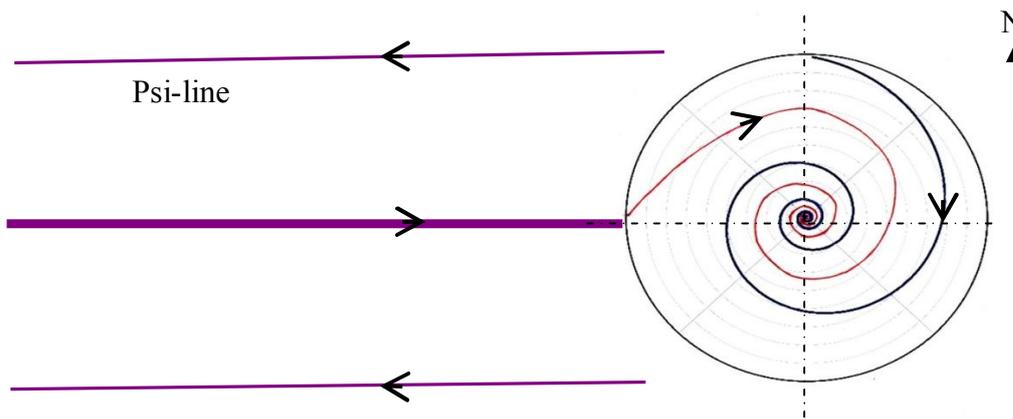


Figure 4. A Psi-line Footprint.

### Psi-lines and the Structure of the Universe

As mentioned elsewhere, Fractal Geometry prevents attempting to drill down to more 3-dimensional detail, as a smaller version of a similar tube is obtained ad infinitum. The fact that psi-lines involve the Golden Ratio ( $\phi$ ), Feigenbaum’s Constant ( $\delta$ ) and sine  $1/3$  is good evidence that studying psi-lines could help to understand the structure of the universe, and its link to consciousness.

An increase in the length of psi-lines by a factor of  $10^8$  only increases their width by a factor of 10 (Keen, 2012a; b). This suggests that intent and the mind specifies and controls the length of a psi-line, but a different mechanism, that forms part of the structure of space-time, determines the minimum width (Keen, 2012b).

### Psi-line nodes

Psi-line nodes seem an important concept in the structure of space time. The number of nodes in a psi-line is a function of its length and is defined by a power equation with a very high correlation coefficient. An important experimental observation is that there is always a minimum of 1 node even for the minimum allowed length of psi-lines which is about 1 metre. All measurements are reduced to zero at the nodes (Keen, 2013a; b). This suggests that nodes are analogous to black holes in sucking out information, and are a boundary condition between sections of psi-lines.



### *Psi-line nodes and subtle energy*

When mentally joining two separate non-aligned psi lines, the touching terminating spirals disappear and at the join where the newly formed line kinks, a node is formed. This suggests that there is a connection between spirals and nodes, and the same subtle energy has been detected in both.

### *Psi-line conclusions*

Philosophical questions result from the above observations. How does a psi-line know:-

1. how long it is,
2. whether it is in a straight line,
3. hence the number of nodes that should be created,
4. its minimum width for its specified length?
5. Similarly, how does a psi-line know when there is a kink in it?

It would seem that not only is space-time aware of straight lines, but is possibly composed of them and thus reflecting its flat Euclidian geometry. Nodes appear like “repeater stations” for information flow along the psi-line.

## **10. Communicating Information**

“Nothing can go faster than the speed of light” is probably the most quoted aspect of the structure of the universe. Does this fundamental limitation also apply to information flow, noetic measurements, and subtle energies?

### *Mind Perceived Laws of Physics differing from Classical Physics*

Perceived subtle energy beams and dowsable fields do not appear to obey either the inverse square law or the standard wave equation for propagation. They have sharp boundaries. Usually in physics, there is not a sudden change, but a gradual one, such as in gravitation or electromagnetic waves. This suggests that noetically detectable fields and beams are not propagated like gravity, light, or other “conventional” means but a quantum explanation at the Plank level may be required for the observations in mind science.

Pursuing the music analogy, standing waves in a box cut off suddenly when their wavelength becomes greater than the length of the box. The structure of the universe could

reflect this method of propagating information, and a mechanism involving standing waves is discussed later.

### *Communicating information instantaneously across the solar system*

By using a 3-body alignment beam it is possible to quantify the speed of communicating conscious information, as the 3-bodies go in and out of alignment. To improve accuracy, a very long base-line distance is required and hence the speed of communicating information across the solar system has been measured by utilizing natural 3-body alignments at new and full moons, and conjunctions of planets with the moon and earth.

Significant resonance peaks have been detected in the perceived length of a standard yardstick. These occurred *before* the published times in astronomical charts of new and full moons, as well as prior to the conjunction of planets, with the moon and earth. With remarkable accuracy, these time differences equal the time light from the sun or planet takes to reach the earth, i.e., resonance peaks occurred just as the light left the furthest astronomical body from the observer on earth, and just when the 3-bodies were in perfect alignment. This is an example of instantaneous communication of information.

Keen, 2010b details the findings for many different conjunctions, an example of which is illustrated in Figure 5 and shows the result of a Jupiter – Earth – Moon conjunction on 21st December 2009. The peak of the graph occurred 45.5 minutes before the predicted time of 12:10. At that time, Jupiter was 5.51 Astronomical Units (AU) from the earth. Assuming 1 AU = 93,000,000 miles, and light travels 670,616,629 mph in vacuum, the light from Jupiter took 45.85 minutes to reach an observer on earth. This is to a great accuracy with an error of only  $0.35/45.85 = 0.76\%$ . As this and similar analyses were done several days after conjunction, the researcher could not be aware of the time differences.

### *Psi-line Model for Communication*

How can faster than light observations be explained? Physical matter is limited by the speed of light, but information is not physical. As we have seen, the standard wave equation, which is a function of velocity, does not apply. In this situation instantaneous communication



is possible as there is no “aether” or Higgs field that restricts the flow of information or subtle energies. Standing waves could be the mechanism, but are they Longitudinal, Torsional, or Compression?

At least 8 different types of subtle energies have been detected. Equipment based on Torsion Fields can detect 2 of these, and so dispel some of the scepticism of the theory over many years. So torsion waves coupled with psi-lines are a good possibility for communicating information, and research has suggested a node structure with a non-standard square root sine wave form (Keen 2013, b).

Conceptually, there are two types of psi- lines.

- A free standing psi-line can be created by the mind visualising/specifying the 2 remote locations that terminate the psi-line, together with their terminating

spirals (Keen, 2012a). Examples of this are ancient navigation systems.

- Alternatively, only 1 remote location is specified so the psi-line goes from the originator’s brain to the specified location. It is then possible to create a geometric pattern, or interrogate for specified information (Keen, 2012b).

Six or eight tubes of subtle energy join the terminating spirals. Information passes between the two terminating spirals along these tubes in the form of rotating threads around the tubes. It would seem that these subtle energies offer no resistance to information flow and in some instances can interface and access the universe’s stored information instantaneously.

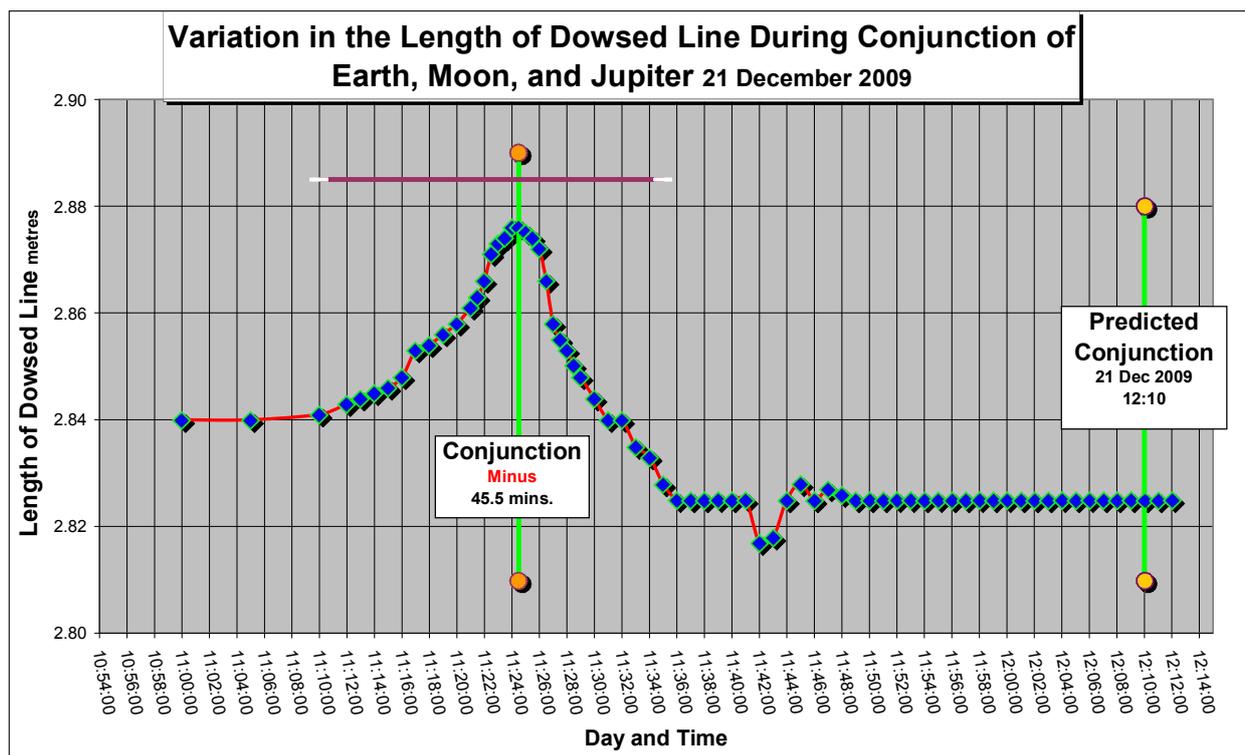


Figure 5. Measuring the Speed of Light from Jupiter.

### Conclusion to Communicating Information

Communicating noetic information can not only be faster than the speed of light, but can be instantaneous. Mind science experiments have highlighted three different ways of communicating information over very long distances:-

1. Alignment beams produced by 3-bodies,
2. Beams emanating from geometric shapes such as a cross, and
3. Psi-lines.

The above first two beams, alignment and geometric, have the disadvantage of being slightly divergent which would limit their



range. As psi-lines have a constant diameter, are self-organising, and remain parallel over vast distances they are more useful for long range communication. A postulation is that the psi-line model forms the basis for noetic, mind science, and telepathic communication. Torsion fields could exist along the constituent tubes, with the nodes forming part of the standing waves that communicate information along the psi-line.

Putting all the above concepts together, psi-lines provide a good model of how conscious intent, via the communication of this information, combines with the structure of the universe.

### **11. Entanglement**

Entanglement requires the transfer of information instantly across space-time, and the apparent “conscious” ability to react to that information. This seems part of the same property of space-time mentioned earlier that is responsible for linking any objects in the cosmos. Entanglement is usually associated with a pair of atomic particles separated from a common source. However, this limitation does not apply when consciousness is introduced to macro objects.

#### *Macro Entanglement*

Entanglement has now been created by linking two large objects (Keen, 2002). Recent convincing macro entanglement experiments using the mind have linked two large non quantum objects, such as 2 physical bodies or 2 abstract shapes. Naturally occurring entanglement of two non-quantum sized objects from a common source has been demonstrated by tearing a leaf in two, or dividing a quartz crystal into two pieces. A type of psi-line is automatically formed linking the “twins”. Entanglement has also been demonstrated between two objects with dissimilar origins such as two random pebbles or 2 glasses of water, by placing them on subtle energy line nodes, or linking them by mind created psi-lines. Transmitted physical properties include magnetism, pressures, and vorticity, with their effects on auras being measured.

#### *Psi-line Demonstration of Entanglement*

The effect of magnetism on mind produced psi-lines has led to a convincing example of remote macro entanglement. Terminal spirals

have natural entry points due north of their central axis (as a result of the earth’s spin on its axis and its magnetic north pole). By use of powerful local artificial magnets it is possible to change the magnetic field near the centre of one of the psi-line spirals, so that the artificial magnetic field’s North Pole is now orientated south. This immediately changes the orientation of the spiral’s entry point so it is also south. The other psi-line’s terminating spiral, which can be kilometres away and therefore not physically affected by the remote magnet, will instantly change its orientation of its entry from the north to the south, so it is exactly the same as its remote psi-line terminating partner.

To obtain this result, entanglement information must be passing along psi-lines to communicate between the 2 remote spirals. This invites the question “is a similar mechanism responsible for linking any 2 objects in the cosmos including the classical quantum entanglement at the micro level?”

#### *Photographic entanglement*

Dowsing photographs defies “common-sense”. That photographs produce the same dowsable effect as if the observer is on-site, strongly suggests the analogy of the perceived universe being a combination of geometry, holograms, the storage and retrieval of information and entanglement. This would imply that consciousness and intent triggers a link between the photograph, phase interference images which form part of the structure of the universe, and the actual object that was photographed. There would seem to be no other explanation other than the geometry of a photograph is able to connect via the mind to the actual location in space-time.

### **12. Information, Coding, and Storage**

#### *Unique Coding for Objects, Information, and Intent*

Previous sections of this paper have shown that the universe is so structured that the mind’s intent can not only interact with any tangible or intangible object, but also there is a built-in element of selectivity. The fact that one can dowse literally for anything, and that it is possible to dowse a single leaf on a tree, or a grain of sand on a beach, gives credence to exploring this model. This means that information regarding every object is uniquely



coded to enable the mind to tune into it. This information can be both qualitative and quantitative, and may be achieved by resonances, interference fringes, and a holographic universe.

### *Storage, Capacity, and Timescales*

Mind science research (Keen, 2009b) suggests that the structure of the Universe has the ability to store vast amount of information. This is more than Akashic information (a concept originating several thousand years ago) which is a complete and faithful record of history. As it is possible to dowse back in time, there must be great stability in the universe's method for storing information, to enable a complete history of any object to be maintained and interrogated. The stored information may be many years' old, so the holographic or other storage mechanism must be self-organising and highly stable.

### *Pro-Active Information*

In conjunction with consciousness, intent, and remote connectivity, the universe's storage seems to possess a pro-active ability or future information, and thus can influence the evolution of history. As a mundane example, there is much anecdotal evidence, witnessed on many occasions by the author and colleagues, of car parking predictions to a high percentage probability not only of location but also the colour of an adjacent car.

### *Time and Sequential organisation*

Some theories of physics consider "time" to be an illusion to avoid the simultaneity of the past, present and the future. Accordingly, when accessing stored information, it is necessary to relate the relevant information to "now" or other known events, and a property of the space-time storage mechanism is that it can handle sequential organisation. For example, the concentric ripples on a pond's surface will not occur until a stone has been thrown into it.

### *Floating rectangles, Information, Fractal Geometry*

The floating rectangle experiment (Keen, 2003a), which has been verified by many people, gives further clues that the universe stores information in a way so that mind generated geometric shapes are kept constant. The expected theoretical shearing distortion of

perceived large subtle energy patterns in a moving fluid with a gradient does not occur. The implication is that information regarding geometric shapes is stored sub-microscopically.

### *Holographic Universe and Storage-Summary*

Experimental evidence suggests that the concept of waves and in particular, standing waves and nodes are an important feature in information storage. A useful hypothesis is that information is stored at the Planck level in the form of quantum phase interference patterns/fringes, which in turn leads to the holographic universe analogy. This explains a more general concept of connectivity, whereby information is connected in the same way that a small piece of a larger physical hologram still contains the entire image. Due to fractal geometry, the perceived image appears to the brain as a large geometric shape, even though the information's origin is at the quantum level.

## **13. Auras**

### *Properties of Auras*

Objects may be perceived to emit auras and dowsable fields. However, this simplistic view does not explain the experimental findings. Some people can see auras, others can only feel them, whilst others can dowse for them, but in all cases, measurements and research of auras would seem to indicate that they are a consequence of an object's interaction with the cosmos.

"Conventional" science cannot explain the well documented auras of inanimate and animate objects. Interaction with the cosmos at the quantum level would seem a preferable explanation of the seven or nine ellipsoids comprising an aura, together with the outer sequence of spirals apparently going to infinity. Similarly, rotating an inanimate object through 360 degrees has no appreciable effect on its perceived aura (Keen, 2003c; 2011a). Once again, this suggests a non-physical connection via an interaction between the source object and a universal field.

Some people have the gift of seeing colours in auras, and the fact that different people can see the same colours is interesting, especially as photons do not seem to be present. The colours of an aura produced by an object kept in a lightproof container can be



dowsed. The same colours will be found by a dowser who believes he cannot "physically" see these colours, as a person who cannot dowse but who can "see" auras. This again suggests an interaction with a universal field.

The fact that the outer spirals of auras appear to extend to infinity defies conventional logic and would seem to breach the conservation of energy. This again suggests quantum level information and the perceived effects of fractal geometry; not that conventional energy is involved.

### *Auras and Consciousness*

Animals in general, and humans, dolphins and plants in particular, can significantly alter the size of their auras in response to different situations. For example, an introvert mood or stress can shrink auras, but beneficial environments or extrovert performances swell auras.

The auras of plants expand significantly when water is brought close to the plant. This phenomenon is not due to the plant physically detecting water molecules as the water can be in a darkened sealed container. It would seem that the plant is able to obtain remotely the information regarding the proximity of water. Similarly, the aura of a plant will shrink significantly if a person attempts to harm it, by, for example, attempting to cut off a leaf. The plant seems to be able to react to intent. Both of these plant phenomena suggest an interaction between the consciousness of the plant and the human observer, working through the structure of the universe as the intermediary.

The above implies that consciousness involves the detection of auras and changes in the local structure of the universe. The latter enables the communication of both physical and imminent intent information and this forms part of consciousness. Physical objects and forces are a result of changes in the local universe.

### **Conclusions and Resulting Postulations**

In brief summary, the structure of space-time comprises at least a 5-dimension, holographic, quantum universe that is based on information, geometry, fractals, ratios including harmonics, universal constants of irrational numbers such as phi ( $\phi$ ), chaos theory, and yin-yang properties (e.g.,

abstract/physical, matter/anti-matter, positive/negative, male/female, dipoles, bosons/fermions, etc.). The physical constants and constraints in the universe seem to be fine-tuned for life.

But this is only half the story, as this model seems to reflect a predictable mechanistic universe, which we know it is not. What is missing is the interaction of the mind with the structure of the universe, and the effect of observations. This mix, together with an element of free-will and intent contributes towards consciousness. The overwhelming evidence in this paper demonstrates that there is a strong connection between consciousness and the structure of the universe.

It is hoped that this paper will encourage other researchers to use the evidence presented here to take forward these concepts, and solve other cosmological properties requiring explanations. These include: the expanding fabric of space-time but not the matter in it; having a flat Euclidian geometry; inflation theory; dark matter; and "dark energy" accelerating the expansion of the universe by seeming to overcome the effects of gravity.

How does consciousness, in its widest sense, add to our knowledge of the structure of the universe, the laws of physics, and explain the mechanism for this interaction?

### *Universal constants and angles*

Many different mind experiments (not involving conventional measuring instruments) produce to a high level of accuracy, universal constants, such as Feigenbaum's Constant ( $\delta$ ), 4.6692....; the Golden Ratio ( $\phi$ ), 1.61803...; and the inverse of the Fine Structure Constant (137).

Similarly, examples of universal angles resulting from mind science experiments include tetrahedral geometry angles, the tangent of the Golden Ratio ( $\phi$ ), arcsine  $1/3$ ,  $1/4$  and  $1/5$ , and  $19.471^\circ$ ,  $35.264^\circ$ , and  $109.5^\circ$ .

An obvious philosophical question is "what is the connection between the two seemingly unconnected concepts of universal constants and irrational numbers?"

### *Geometry*

Measurements in mind science observations strongly suggest that the geometry of the structure of the Universe is not only a major



concept but seems closely connected to polyhedra, vesica pisces, spirals, vortices and psi-lines. There appears to be a physical and abstract equivalence of geometry in the structure of the cosmos, so that sometimes the concepts of consciousness and geometry take precedence over matter. Geometry is therefore paramount in understanding the structure of the universe and consciousness. This suggests that basic geometric shapes exist at the Planck level, and become globally scaled to form the flat universe. As elaborated later, the geometric nature of the universe enables connectivity information to flow between constituent objects with consciousness being the link.

Mind science observations on both physical and abstract geometrical shapes reveal complex 3-dimensional patterns, even when the source geometry is a simple 2-dimensional shape. A mathematical transformation process seems to take place at the quantum level and in the mind which changes the physical source geometry into a different set of co-ordinates giving complex perceived patterns of subtle energy. By studying these patterns obtained by consciousness observations it may contribute to determine the structure of the universe. This is similar to adopting an analogy of using x-ray crystallography to find the structure of, say, DNA.

Further research is required to establish why 7-fold geometry applies to physical objects, but 9-fold geometry applies to abstract geometry. And how this effect is achieved by consciousness interacting with the structure of the universe.

### *Chaos Theory*

The findings support that chaos theory is not only built into the physical world and the laws of physics, but is also built into consciousness and the structure of the universe. The components of the zero point field, the Higgs field, or their equivalence at the Planck level are postulated to behave in a chaotic manner.

### *Numbers and Mathematics*

Numerous mind science observations confirm that the cosmos has a preference for irrational numbers, the number 7, and 2:1 ratios (which relate to octaves and harmonics). Consciousness has a preference for logarithmic or exponential equations. It is postulated that

all of these characteristics are built into the geometry of the fabric of the universe at the Planck level.

### *Spirals, Vortices, and Conical Helices*

Spin is a fundamental property of the universe at all scales from galaxies to fundamental particles. Mind science observations suggest that a model involving torroidal vortices at the quantum level should be developed to describe the universe.

### *Fractal Geometry, Global Scaling and Perception*

It is generally accepted that the laws of physics apply equally over the entire observable universe. Mind science experimental findings also support Global Scaling Theory whereby the same laws equally apply to both very large and very small abstract or solid objects.

Fractal geometry seems to be built into the structure of the universe at the Planck level for both abstract and physical objects. This enables consciousness to convert macro concepts to the quantum level and back again. For example, the perceived conical helix of subtle energy of a mind created psi-line may be several metres in height but its origins are a small part of a brain.

### *Interaction of Mind, Matter, and Forces*

Gravity, electromagnetism and vorticity strongly interact with consciousness via the structure of the universe. For example, stronger gravity reduces perceived length, whilst weaker gravity increases perceived length. However, this is not the same as mass and general relativity changing the fabric of local space-time. This relationship is the *inverse* of the Newtonian gravitational equation raised to the power of Feigenbaum's Constant. This discovery could be relevant in explaining dark energy that initially manifests itself towards to edges of the observable universe.

Dark energy is everywhere and expands with the universe which is growing at an ever faster rate. As the amount of matter and dark matter remain constant in the universe, they are continually becoming a smaller percentage of the universe, therefore reducing the influence of gravity, whilst "emptiness" and dark energy become a greater percentage. What is the connection between



consciousness and dark energy? Is dark energy a perceived effect due to less gravity increasing measured lengths?

Of note is that gravity can interact with pure geometrical shapes that do not involve mass. The equivalence between pure geometry and matter was demonstrated in this paper.

The “mass (M) - wavelength ( $\lambda$ ) relationship”  $\lambda = a \cdot \log M$  (where  $a$  is a constant) discovered in mind science experiments (Keen 2005), suggests that mass is connected to wavelength and consciousness, as well as the Higgs Field. This model may form part of the structure of the universe, possibly involving standing waves around torroids.

As it has been demonstrated that consciousness is linked to mass and the structure of the universe, this conceptually explains why observations can affect quantum experiments.

### *Multi-body Interactions*

Without any equipment, the mind can detect 2-body interactions and 3-body alignments. Although both seem to be a consequence of the structure of the universe, their significantly different properties are a useful tool for researching the structure of the cosmos. 2 and 3-bodies interact if their separation distance is in a range specified by a function of their size and  $\phi$ . They then instantaneously produce a complex geometric pattern including a linking subtle energy beam. The fact that 2 separating abstract objects create 6 very sharp null points, but 2 separating solid bodies only create 4 very sharp null points, reinforces the theory that communication between objects is via standing waves with the null points due to negative resonances or interference fringes. This also gives a clue about the type of waves (e.g. *not* sine waves) and the different treatment by the cosmos between physical and abstract objects.

The consequences of these discoveries are far reaching. Analysis shows that the communication across space-time involves waves with a half wavelength that equals  $2 \cdot r \cdot \phi$ . The presence of  $\phi$  not only suggests that these waves are part of the structure of space-time, but the “conscious” part of space-time creates wave-lengths proportional to the size of the interacting objects.

Consequently, the structure of space-time enables multiple bodies to know instantly

1. exactly where other bodies are located, and
2. their radii/size, and
3. when they can interact, and
4. when they are in perfect alignment, and
5. when they subtend angles with arcsines less than  $1/4$  or  $1/5$ .

Our flat Euclidian universe extended down to the Planck level could be involved in point 4 above. These are new concepts, but are required for entanglement. It also implies that the structure of the universe can give the impression of a built in intelligence.

### *Mind Generated Psi-lines*

The facts that mind generated psi-lines involve the Golden Ratio ( $\phi$ ), Feigenbaum’s Constant ( $\delta$ ) and sine  $1/3$  is good evidence that mind created psi-lines are closely linked to both the structure of the universe, chaos theory, and consciousness. This conclusion is further reinforced as an increase in the length of psi-lines by a factor of  $10^8$  only increases their width by a factor of 10. A consequent postulation is that the mind specifies and controls the length of a psi-line, but a different mechanism, that forms part of the structure of space-time, determines and controls the minimum width.

Similar to the above multi-body examples of an “apparent conscious universe” are that mind generated psi-lines are aware of how long they are, and when they are in a perfect straight line. If kinks are put in a straight psi-line, the number of nodes immediately increases so that each straight part of the psi-line satisfies the node/length equation. As with multi-body interactions and alignments, the same reason that produces our Euclidian flat universe could result in these observations.

### *Communicating Information*

Information not only communicates faster than the speed of light, but communication can be instantaneous. One of many examples of instantaneous communication is that the mind can detect an astronomical alignment such as between Jupiter or Saturn, the moon, and earth before precise astronomical predictions (based on when light from the event reaches the earth); the pre-time is the



exact time that light takes to reach the earth from Jupiter or Saturn. Torsion waves along psi-lines could be a model worth developing to explain instantaneously communicating information across the cosmos.

The structure of the universe therefore appears to have a two tier system. The information or components that form physical bodies are slowed down by the “viscosity” of the Higgs field not only to form the basis of mass, but to limit speeds to that of light. On the other hand, “pure” information, abstract or non-physical concepts are not so restricted by the Higgs field or equivalent, and therefore do not possess mass and can travel faster than light. This postulation could be relevant when explaining inflation theory at the time of the Big Bang, before the creation of a significant quantity of matter.

### *Entanglement*

A postulation is that consciousness and entanglement are complementary. As discussed above in relation with multi-body interaction, the structure of the universe, from the Planck level to galaxies, enables information flows so that objects can be “aware” of the existence of any other. Entities not only “know” where associated objects are precisely located but are then able to communicate with them, ascertain their properties, determine if there is any scope for mutual interaction, and react accordingly. The part(s) of the structure of the universe that deals with universal consciousness enables both abstract and physical macro bodies to become entangled – not just quantum micro objects.

Phenomena resulting from the above properties are common in mind science experiments and give an impression of an intelligent universe. The psi-line model satisfies these requirements. These concepts are compatible with the holographic universe analogy which explains a more general concept of connectivity, whereby most information is connected, in the same way that a small piece of a larger physical hologram still contains the entire image.

### *Information, Coding, and Storage*

Current physics considers universal information being stored as quantum phase interference fringes/patterns at the Planck level to form a 5-dimensional hologram; for

example, when considering gravity and black holes. Mind studies come to a similar conclusion; for example, when dowsing the auras of objects, or mind generated floating fields, or the Tree of Life aura patterns for plants and animals.

Further evidence for this 5<sup>th</sup> dimensional hologram model is supported by mind science experiments that have found several unexplained examples of a 5-dimension perception. These include dowsing half sine waves, the points of bifurcation at the entry point of conical helices, the points of bifurcation of 2-body interaction beams, and the interaction of matter with a peace grid.

Using possible analogies to explain the unique coding for any object, intent selects the appropriate “channel”, “frequency”, or “password” that allows access to the vast data base of universal information. In conjunction with fractal geometry this information is converted to and from the quantum level. This aspect of consciousness would seem to involve the mind interfacing with the data base provided by the structure of the universe.

### *Auras*

Mind science findings suggest that objects have 7 chakras which create auras. Auras are not physically linked to their source, but seem to be a consequence of the interaction of physical and abstract objects with the cosmos. This means that auras reflect both an objects presence, and the change it causes in the local structure of the universe. The mind can detect these changes either as a disturbance to, or as additional information, to the basic or empty intergalactic universe. The aura detection part of the brain has been shown as at forehead height towards the rear of the skull (Keen 2001b).

The auras from physical bodies tend to have 7-fold geometry, but abstract objects have a 9-fold geometry (such as comprising 9 concentric ovoids). This geometry is compatible with findings elsewhere in this paper in relation to other topics. In addition, all living plants and animals have a 10-fold Tree of Life pattern linked to their chakras, similar to multiple vesica pices. Conscious intent, sickness, or environmental stresses can affect the size of life auras and their structure. An instructive research project would be to ascertain the essence of life that creates a Tree of Life pattern of subtle energy.



## Consciousness

What is consciousness? As is apparent, this is a vague term, which this article has avoided defining. It is suggested that only after all the concepts presented here are better understood, can a robust definition of consciousness be produced.

When did consciousness arrive in the universe? From the evidence provided here, it cannot have been after the evolution of Homo sapiens, mammals, more primitive life forms, or plants. Nor can it be parochial to the earth. It would seem that consciousness was built into the big bang, together with the structure of the universe and the laws of physics. None of these seem to have evolved or changed in time, and appear to be the same everywhere in the universe. This is unlike most other aspects in the universe, be they evolving galaxies, solar systems, suns, planets or life forms.

Where is the mind? The brain determines intent, but the mind and consciousness is more than a brain in a skull – it also involves external factors. Many authorities refer to different parts of the brain, such as the hippocampus, pituitary, pineal, or thalamus glands as the “transmitter” that can communicate with the cosmos. For example, a part of the brain can form one end of a psi-line that communicates information along itself to a specified end point. However, this model is incomplete as mind science experiments demonstrate that plants show consciousness in reaction to external stimuli, threats, and praise. Therefore consciousness is not due to one organ in animals, but it is also at the smallest part of plants. Possibly consciousness is also at the molecular or Plank level.

## Big Bang

We are only aware of one “Big Bang”, as another one has not obliterated our universe! Either Big Bangs in our universe have a very low probability of less than 1 in 13.8 billion years, or the structure of our observable universe adheres to an extension of the Exclusion Principle so that the latter applies to the entire universe as well as to fundamental particles. One of many examples of the Exclusion Principle is that electrons can only exist in one quantum state in the atom’s outer shell, thus leading to an explanation of chemistry. Can global scaling theory apply to the Exclusion Principle for the entire universe as well as to one atom?

## Planck Level

Most of the above concepts would seem to occur at the quantum Planck level, and need to be melded into a consistent testable mathematical theory. This paper should provide a useful starting point for other researchers to confirm the experimental findings, and develop them into a comprehensive mathematical treatment.

## Epilogue

A philosophical summary of the conclusions of this paper is that our universe is in a state of dynamic equilibrium between a fixed predictable structure represented by the Golden Ratio, phi ( $\phi$ ), and a random element comprising organized chaos and probability, together with conscious intent represented by Feigenbaum’s Constant ( $\delta$ ).

## Appendix 1 - Universal Constants and Universal Angles

### Universal Angles

A cursory internet search of academic papers, using Google Scholar, gives numerous examples of universal angles, such as;

- $19.471^\circ$ ,  $11.537^\circ$ ,  $8.213^\circ$  etc, which are a series of angles whose sine’s are  $1/3$ ,  $1/5$ ,  $1/7$ ,  $1/9$ ...
- $35.264^\circ = (90^\circ - 19.471^\circ)/2$
- $54.735^\circ = (90^\circ + 19.471^\circ)/2$ .
- $109.471^\circ = (90^\circ + 19.471^\circ)$

These angles relate to such diverse topics ranging from:- vortices, tornados, and whirlpools; cosmology; Ampere and dipole force laws and null-points; static and dynamic studies of polyhedral structures; astronomical events on the surfaces of Jupiter and Saturn; statistical analysis of the size of birds; flight dynamics; chemistry and molecular structures such as the carbon bond angle in protein molecules; fluid dynamics, including bow waves, the half angle of the wake of a boat, and the Kelvin Wedge; climate studies; aging bone studies; cognitive behaviour; quantum mechanics for spin  $1/2$  particles in a magnetic field; etc.

### Auras and $\phi$

Auras are the mind’s interpretation of solid bodies and geometrical patterns (Keen, 2011f). Numerous studies of them have produced



several formulae involving the Golden Ratio, 1.61803... ( $\phi$ ) to a high degree of accuracy.

### Multi-body interactions

Mind studies of the interactions of 2 and 3 bodies or abstract circles drawn on paper (Keen 2011 f) produced several equations where the optimum separation distances were a simple function of  $\phi$ .

### 3-Body Alignments

Using Noetics, it was discovered (Keen, 2010c) that any 3-bodies in alignment, produce a very long powerful subtle energy beam. Dependent on the point of observation in relation to the perfect straight line alignment, this beam is perceived if the 3 objects subtend angles less than arcsine 1/5 if the observer is near the centre object (i.e., a full moon simulation), but arcsine 1/4 if the observer is near one of the outer objects (i.e., a new moon simulation).

### Spirals and Conical Helices

Mind science observations on 22 different sources of subtle energy conical helices produced the universal angles, 19.471°, 11.537°, 8.213° etc. The probability of measuring these angles by chance is virtually impossible.

### Angkor Wat

Mind science findings at Angkor Wat in Cambodia (Keen, 2007b) produced four universal constants, 19.471°, 11.537°, 35.264°, and 54.735°.

### The Tree of Life

The Tree of Life pattern (Keen, 2008), originating over 1,000 years ago with Kabala, can be detected by dowsing the aura of any living plant or animal which is caused by the physical presence of an object. All objects (animate or inanimate) have seven chakras, with associated ellipsoidal auras. The chakras of living bodies also manifest themselves as a Tree of Life pattern of subtle energies.

Figure 6 is an accurate photograph of the Tree of Life of an eighteen-month-old female child where disc markers were placed on the ground indicating the central vertical axis of the associated spirals: the camera being vertically above at ceiling height. A Tree of Life only has 10 spirals. (The large circle in the top centre is where the person was standing. It is

not part of the Tree of Life. In Kabbalah, this is referred to as *Da'at*).



Figure 6. The Tree of Life Pattern.

On joining up the dots, and within experimental error, the following important universal angles are found.

- 19.5°. This is a good approximation to **19.471°**,
- 35°. This is a good approximation to **35.264°**,
- 55°. This is a good approximation to **54.735°**
- 109.5°. This is a good approximation to **109.471°**

As is apparent, all these values have a relationship with above universal angles and are based on 19.471° and sine 1/3.

The above angles are in the horizontal plane. When one dowses in the *vertical* plane, and plots the boundaries of the conical envelopes, the following universal angles are found: 19.471° 11.537° 8.213°..... Once again, the series of angles whose sine's are 1/n, where n is an odd number indicates that the mind and consciousness is connected to the fundamentals of the universe.

### FSC

Subtle energy beams are not parallel but slightly divergent. Intriguingly, some of these beams have a divergence angle involving the inverse of the Fine Structure Constant (137), a fundamental constant in physics. An example is that the angle of the beam on exit equals



$\arctan 0.000137$ . Although requiring independent confirmation, this is the 4th time the author has found the reciprocal of the Fine Structure Constant (FSC) when dowsing geometric shapes (Keen 2011 f, g). This invites the question as to why, and suggests yet another example of consciousness closely connected to the structure of the universe.

## Appendix 2 - Geometry

### *Auras – Shape and Size*

One of the easiest repeatable experiments that illustrate the importance of geometry is to measure the core aura of objects (Keen, 2001a). The radius of the aura where an irregular shaped source object has a sharp point is significantly greater than where the same object has a round surface, which in turn is greater than the radius of the aura measured from a flat part of the object. As auras are the mind's interpretation of objects interfacing with the cosmos, this is an example of mind-matter interaction.

### *Rooms and Chambers*

The geometry of buildings (Keen, 2003b), objects (Keen, 2003c; 2011 a), or ancient sites (Keen, 2007b) produces a plethora of dowsable fields (Keen, 2010d) that seem to “resonate” with the geometric structure of the universe and mind science reveals universal patterns and angles.

A simple example is that a domed room or chamber generates a central dowsable spiral (Keen, 2007a), unlike a rectangular shaped room. More complex dowsable patterns are produced by the geometry of banks and ditches (Keen, 2009a), as evidenced in numerous ancient sites.

### *Physical and Abstract Sources*

Most surprising is that a small simple 2-dimensional double peaked geometric curve, such as drawn on paper, can produce identical effects as those obtained when on-site dowsing a large 3-dimensional structure comprising banks and ditches (Keen, 2011g).

A solid version of a 2-dimensional geometrical shape usually produces an identical dowsed pattern as the same source shape but drawn on paper as a pure abstract geometry source. However, sometimes the subtle energy is a mirror image, with perceived flows in the opposite direction (Keen, 2011c).

This finding is significant in studying how abstract and physical concepts interact with the structure of the universe but the reason for this lack of symmetry is currently unknown. It would seem that there may be a left hand rule for dowsing solids, but a right hand rule for abstracts, with the three possible variables being subtle energy, gravity, and the earth's spin. These are exciting findings as studying chirality and symmetry often leads to major findings in physics.

### *7 or 9-Fold Geometry*

The above findings are slightly modified when observing auras. Abstract drawn circles produce 9 aura rings extending outwards from the core aura, but solid discs (both 3-dimensional and 2-dimensional) only produce 7 rings (Keen, 2011a). This seems counterintuitive, as a solid disc would seem to have more information than an abstract circle drawn on paper, and, for example, a 3-dimensional metal source has even more information than a 2-dimensional paper cut-out. However, having more information does not produce more rings!

This is another example of the interaction between solid and abstract objects with the cosmos that give insights into the structure of the universe. Intent and the act of observation of the source geometry then determine the number of perceived layers of a source object's aura.

### *X-ray Crystallography Analogy*

Mind science observations on geometrical shapes, both physical and abstract, can reveal complex 3-dimensional patterns, even when the source geometry is a simple 2-dimensional shape. A mathematical transformation process seems to take place at the quantum level and in the mind which changes the physical source geometry into a different set of co-ordinates giving complex perceived patterns of subtle energy.

To investigate the structure of the universe, developing a good analogy to the patterns produced in X-ray crystallography and diffraction gratings may prove useful to decipher the above mind science phenomenon (Keen, 2011g). The analogy is to Crick and Watson discovering the structure of DNA by using Rosalind Franklin's diffraction images. Instead of X-rays or other electro-magnetic waves, we are here using consciousness and



measuring the effects on dowsed geometric patterns to ascertain if mathematical transformations exist between the physical source geometry and the perceived mind's observations.

Confidence in this approach is justified for several reasons. Some of the patterns observed when dowsing seem similar to those produced by diffraction gratings or x-ray crystallography. But in particular, as a result of numerous experimental observations, we know that waves are involved in dowsing. This should help demonstrate how dowsing, the universe, and consciousness are connected, and the mechanisms involved.

### 5-Dimensional Holographic Universe

Extending many of the above conclusions could support a hologram theory of the universe. For example, the multi-dimensional and connectivity findings are consistent with all parts of a hologram containing the "total" image. If the perceived observation of a 2-dimensional source object is a transformation into a 3-dimensional pattern (Keen, 2011g), is our perceived 4-dimensional world (i.e., 3 space dimensions + time), really a hologram in a 5-dimensional universe?

Explaining how consciousness achieves these dimensional transformations could help unlock the structure of space-time and consciousness. Several unexplained examples of a 5-dimensional dowsing perception have so far been found, including the points of bifurcation of conical helices, the points of bifurcation of 2-body interaction beams, and the interaction of matter with a peace grid.

### Appendix 3

#### Spirals, Vortices, and Conical Helices

Set out below are some examples of where spirals are found, and 22 different spirals were analysed, all giving the same findings (Keen, 2007a).

1. Ancient sites and burial mounds.
2. Within the auras of solid bodies.
3. Over geological features, including underground intersecting watercourses.
4. Inside substantial buildings.
5. Inside underground caves.

6. The mind can generate spirals anywhere.
7. The intersection of two dowsable lines produces a spiral.
8. Spirals terminate dowsable lines found in earth energy studies.
9. Spirals terminate psi-lines.

#### Subtle energy spirals - structure

All spirals seem to have the same structure, whatever their source. Elevations, plans, and cross-sections in the following diagrams, give a general indication of the geometry involved.

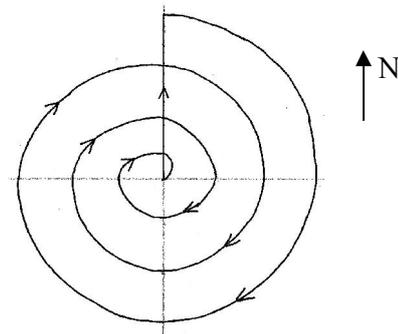


Figure 7. Plan View of a Clockwise Spiral.

An observer tracing a spiral on the ground will initially perceive a pattern similar to figure 7. There is a perceived flow existing in either a clockwise or anti-clockwise direction, with an entry point due north, and detailed measurements lead to a good approximation to an Archimedean spiral.

After further investigation observers realise that the "spiral" is not just a 2-dimensional footprint, but is 3-dimensional. Figure 8 is a typical side elevation view; vortices/spirals are perceived to possess an outer conical envelope with a flow loop. Hence, the correct name for this phenomenon is not a 2-D spiral, but a 3-D conical helix, with  $3\frac{1}{2}$  turns.

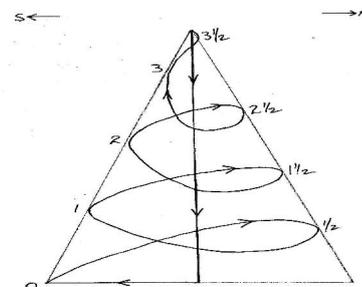


Figure 8. Side Elevation View of a Clockwise Spiral.



A fundamental feature is that most “spirals” not only seem to comprise two linked conical envelopes as in Figure 9 to form a total of 7 turns, but 7 pairs are stacked vertically as in Figure 10. This example of the number 7 was discussed previously, together with the findings that the conical helices have a tendency for apex half-angles of sine 1/3, 1/5, etc.

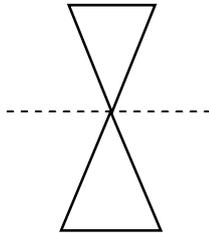


Figure 9. Side Elevation View of a Pair of Conical Helices.



Figure 10. Side Elevation View of a Series of 7 Conical Helices.

### Tori and the structure of the universe

How could the structure of the universe form these Conical Helices? The number 7 adds weight to the suggestion that rotating or vibrating tori are involved in the structure of the universe.

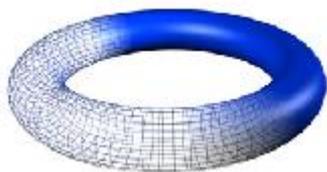


Figure 11. A Torus.

Figure 11 is a representation of a 3-dimensional torus, or popularly known as a doughnut, or bagel shape. In the model about to be developed, let us assume that these infinitesimally small quantum tori are

vibrating at the Planck level, analogous to a “quantum foam”.

A property of a torus is that it can move in 7 different ways. As well as the usual 4 space-time dimensions, a torus can spin or rotate in 3 different ways:

- A fluid subtle energy field can roll in and out on itself. Analogies of this could be smoke rings, vortices in a tornado, or water flowing down a plughole.
- It can rotate about a vertical axis, so it appears to remain in the same place.
- It can rotate about a horizontal axis like a paddle wheel.

Combining motions 1 and 2 above, and visualising a point on the surface, produces a circular spiral.

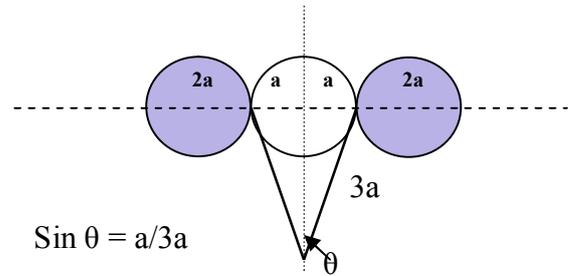


Figure 12. The Geometry of a Single Torus.

Nested rotating tori can produce cones with quantised half angles involving 1/3, 1/5, 1/7 etc. Consider a torus where the hole in the centre has the same diameter as the thickness of the torus. Figure 12 represents a cross-section through the centre of our special torus where:

- Each component has a radius (a), and diameter (2a).
- The thickness of the torus (2a) equals the diameter of the central hole.
- The cone just fits into the centre hole of the torus, so it has a base radius (a).
- The cone’s slope length is equal to the radius of the torus (3a)

The half-angle of the cone is arcsine  $(a/3a) = 1/3$  which is  $19.471^\circ$ .



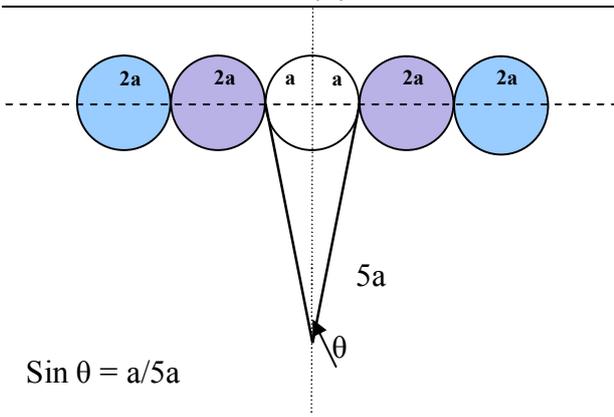


Figure 13. Two Concentric Tori.

Let us now add another torus of the same thickness as the previous, but fits round the first torus. This is depicted in Figure 13, and has:-

- a base equal to the diameter of the centre hole of the first torus, (i.e. it has a radius (a) as before.)
- a slope length equal to the radius of the combined torus (5a).

This cone has a half angle whose sine is 1/5, and represents the second spiral in the series of 11.537°.

Interestingly, if one torus is rotating in one direction the other rotates in the opposite direction. This may explain the frequent observation that alternate spirals flow clockwise and anti-clockwise.

Let us introduce a third torus that fits round the other 2, as illustrated in Figure 14. A cone that has a base equal to the centre hole of the original torus, and a slope length equal to the radius of the 3 combined tori, has a half angle whose sine is 1/7. This represents the third spiral, of 8.213°.

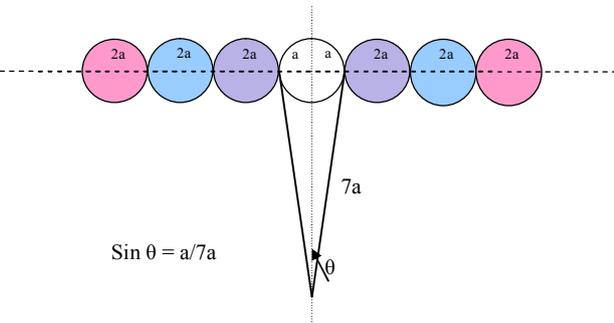


Figure 14. 3 Concentric Tori.

Although this is not a proof of part of the structure of the universe, it may be a good



analogy and starting point and reinforce the belief that vortices and spinning tori are involved.

## Appendix 4 Interaction of Mind, Matter, and Forces Gravity

### Mountains and Aircraft

Qualitative findings on gravity, such as dowsing on the ground and then in aircraft or up high mountains, suggests that a very small reduction in gravity produces a large increase in dowsed lengths. It has been demonstrated that this is not due to either reduced pressure or increased vorticity (Keen, 2010e) both of which would have increased perceived lengths, but observations show the opposite: increased gravity decreases lengths. This effect is now examined quantitatively.

### Effects of Gravity on Consciousness-moon

Measured lengths fluctuate wildly with the position of the moon (Keen 2009 f). Near full moon the readings are maxima, whilst at new moon they are a minima. Full moon produces a lower gravitational force on earth, as the sun and moon's gravity are pulling in opposite directions, as depicted in Figure 15.

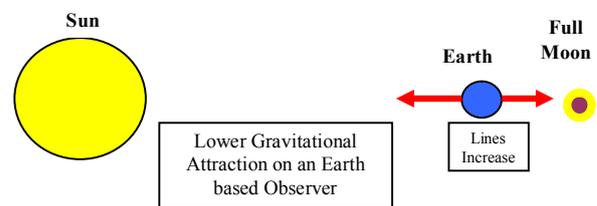


Figure 15. The Effects of Full Moon on Perception.

As depicted in Figure 16, new moon produces a higher gravitational force to observers on earth, as the sun and moon's gravity are pulling in the same directions. Over a lunar month the same measurement of length can vary by a ratio of about 200:1. The moon's effect is much greater than that of the sun.

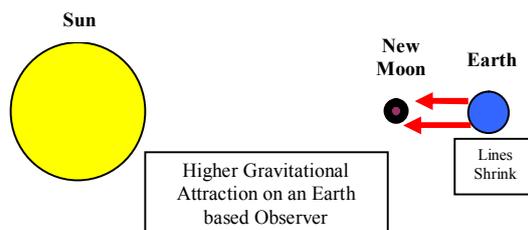


Figure 16. The Effects of New Moon on Perception.

### **Effects of Gravity on Consciousness-Sun**

The mind can quantitatively track the earth's annual elliptical orbit around the sun, due to the change in the earth-sun gravitational attraction. Over a period of one year, the length of a dowsable line increases by about 140%. A stronger gravity situation near perihelion produces shorter lines, whilst weaker gravity at aphelion increases perceived length. This conclusion is consistent with other mind experiments involving gravity.

### **Effects of Gravity on Consciousness - Spirals and Abstract Geometry**

The ubiquitous dowsable earth energy spirals, or more accurately, conical helices, are observed to have a vertical axis (Keen, 2007a); the implication being that the axis is aligned by gravity. The same result is found even when no matter or mass is involved, by dowsing pure 2-dimensional geometric shapes such as a vertical cross (Keen, 2011g). If the cross is not exactly vertical, a powerful generated subtle energy beam disappears.

### **Tides**

Tides have an effect on mind science measurements, causing peaks and troughs which coincide precisely with the predicted times in local tidal charts to an accuracy within 1 minute.

### **Gravity Summary**

In summary, for the sun, the earth's and moon's gravity, the mind perceives *longer* lines when there is a *lower* gravitational force. The reverse is also true. Lines are perceived *shorter* when there is *higher* gravity. This demonstrates that consciousness is affected by gravity – even if mass is absent. This begs the question as to how gravity can affect consciousness.

### **Electromagnetism**

#### **Photons/Light on Physical Crystals**

There is also an interaction between the mind and electro-magnetic fields (Keen, 2005). The size of the auras of crystals is affected by light photons, and is greatly diminished after the source crystal is kept in the dark for a few days. Electromagnetic radiation “charges up” dowsable objects, and is therefore fundamentally linked to a mechanism that produces consciousness.

### **Screening**

Auras can be attenuated by a metal cage. The results of experiments involving the size of an aura and the thickness of the screening material can be depicted graphically, and produce equations with an exponential relationship having high correlation coefficients. This also applies for different metals. Not only can some dowsable fields be attenuated, but research has demonstrated that certain subtle energy lines disappear when the source object is placed in a Faraday Cage.

### **Photons/Light on Abstract Geometry and sunset/sunrise**

Daily variations in measurements of length (Keen, 2009e) are caused by the earth spinning on its axis. In general, perceived measurements gradually increase in length during daylight hours, and continually reduce during the night. Lengths reach a maximum at sunset, and are a minimum at sunrise. The major turning points are the local times of sunrise and sunset, which the mind detects to an accuracy within 1 minute.

Figure 17 shows the effect on measured lengths around sunrise. The same results are obtained if these experiments are performed in a darkened room. What causes the interaction between perceived measurement of length and sun set and sun rise? The variation in photons due to the spin of the earth would seem to affect the local structure of the universe, which the mind detects.

### **Magnetism**

Magnetism has been shown to have an important effect on consciousness (Keen, 2012 b). For example, a magnet placed near the brain significantly affects dowsing ability. Magnetism has led to a convincing example of remote macro entanglement at the two ends of a long psi-line.

### **Vorticity**

#### **Vortices**

Mind science experiments prove that there is a strong connection between consciousness and vortices. Closer to every day experience, the shape of eggs, flower buds, pine cones and other biological shapes including the pineal gland and the heart, bear a strong correlation to the mathematical treatment of vortices (e.g., see Reference to Lawrence Edwards in the



Bibliography). It is therefore not surprising that if vortices are a fundamental property of nature, then there is a connection between

vortices and consciousness. Some examples are given below.

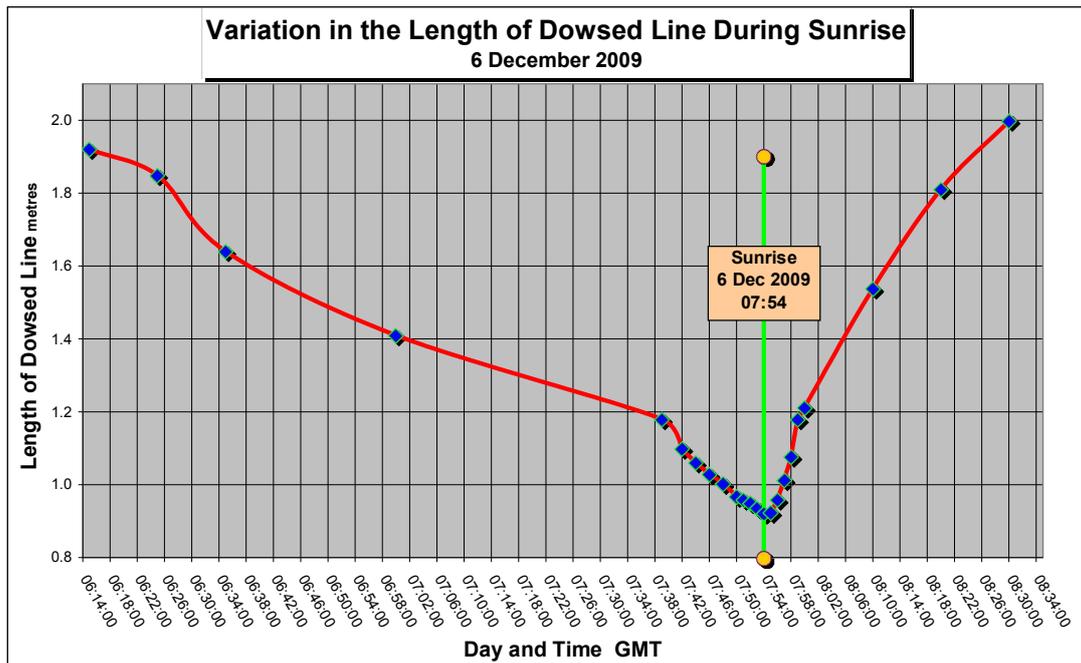


Figure 17

**Vorticity and Solid Objects**

Vorticity significantly affects consciousness and perception (Keen, 2006). For example, Table 1 summarises the findings in the differences between static and rotating objects, and the comparison of their aura characteristics.

Property	Static Object	Rotating Object
Field Types	1 and 3	4
Number of Field Boundaries	7	9
Boundary Separation Distances	Arithmetic	Geometric
Permanence	Always present	Only whilst spinning
Range Dependence	$R = F_n(M)$	$R = F_n(r, \omega)$
3-D Aura shape	Uniform	Directional
Source of aura	Matter	Rotation

Table 1

Figure 18, represents a polar diagram of the aura perceived to be emanating from a rotating object, where the horizontal axis of rotation is pointing north i.e. the north-south 0° to 180° line. The 3-dimensional representation of the aura can be obtained by visualising this diagram being spun around this axis of revolution. It is similar to two

back-to-back pears, and the subtle energy is similar to psi-lines.

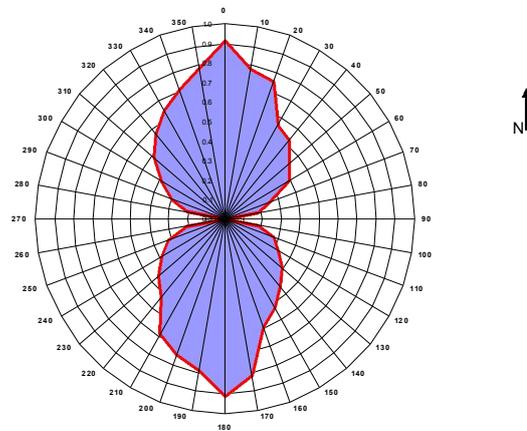


Figure 18. The Aura of a Rotating Fan.

From experiments involving spinning solid objects, the auras produced do not spin with the associated source object. For spun liquids, their auras do not return to their static states. This is further evidence that supports the theory that auras of physical objects seem to be a result of matter interacting with the structure of the universe. Are Torsion Fields the link between vorticity, auras, and mind created subtle energy fields?



### Orientation of Tetrahedral Geometry

For both abstract and solid versions of Tetrahedral Geometry, 8 lines, 36 vortices, and subtle energy cones are found. When the major axis is aligned *east-west* all the vortices and subtle energy disappear, leaving only the 8 energy lines and the central vertical vortex (Keen, 2011c) due to the earth's spin and magnetism.

Philosophically, turning a sheet of paper through 90° destroys these 36 vortices and the subtle energy cones. Or if turned another 90°, 36 vortices and the subtle energy cones are created. What does this tell us about the mind, consciousness, and how geometry interacts with the universe? For example, a horizontal rotation does not change the vertical force of gravity, but the angles to the direction of the earth's spin and magnetic field do change. The findings suggest that the earth's magnetic field, the earth's vorticity, the earth's gravity, as well as conscious observations are all involved in producing complex dowsed pattern and perception.

### Peace Grids and Vorticity

Buddhist Temples seem peaceful and tranquil even when there are throngs of people, noisy ceremonies, and hordes of tourists. On investigation (Keen, 2009d), there is a grid pattern of very straight lines similar to psi-lines. Natural earth energy lines meander and they move about daily, over lunar months and during eclipses etc. They do not form regular square grids. These temple lines have none of these characteristics. The evidence suggests they are man-made.

The mind can easily create a 5ft x 5ft square grid, as depicted in Figure 19. The size and area covered by the "peace grid" could also be specified as part of the original intent. Experimentation suggests that the earth's spin on its axis, as well as the mind, are the main factors in creating a peace grid.

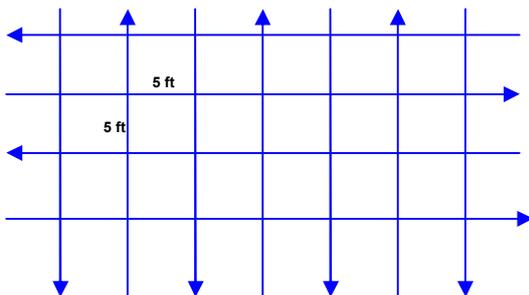


Figure 19. Mind Created Peace Grid.

## Appendix 5 Multi-body Interactions 3-Bodies

### 3 Dynamic Bodies

Earlier discussions relate to the changes in perceived length measurements caused by 3 static bodies. Figures 20 and 21 summarise graphically the findings in the dynamic situation such as the moon orbiting the earth. Although these graphs relate to new and full moon, identical variations to the measurement of length are found as any 3 bodies move in and out of the cosmos created alignment beam. The 3-bodies can be very large or very small. They could even be 3 abstract shapes drawn on paper or 3 physical objects.

The maxima and minima occur at optimum alignment, i.e., when the centres of the 3 bodies are in a straight line. Although 3-body alignments were discussed earlier in relation to gravity and consciousness, the phenomenon here is totally different. In this case mass or gravity is not a factor. It is the result of the geometry of the cosmos, and is similar to psi-lines "knowing" when they are in a straight line.

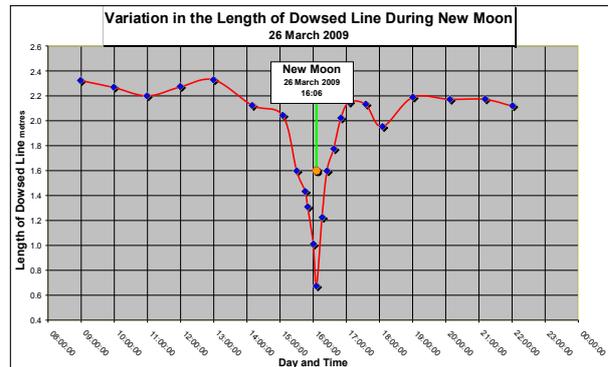


Figure 20. The New Moon's Effect on Mind Science Measurements.

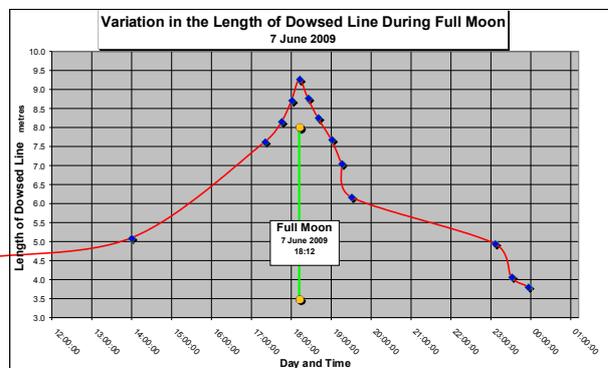


Figure 21. The Full Moon's Effect on Mind Science Measurements.



**Comparison between 2-body and 3-body Interaction**

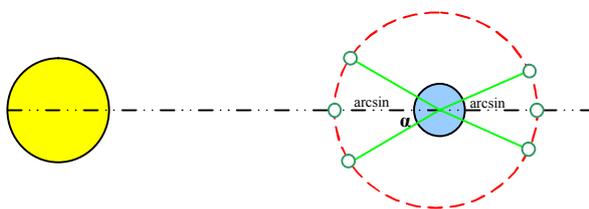
Table 2 summarises the differences between 2-body and 3-bodies interactions – be they abstract or physical, micro or astronomical. As is apparent, they seem totally different phenomenon, even though they are both produced as a result of the structure of the universe. The challenge now is to use these differences in further research in to the structure of the universe.

What are the limits of the alignment of the 3-bodies that is required to produce the subtle energy beam? Figure 22 summarises the findings (Keen, 2010c). For observations made near the outer of the 3 bodies, the alignment must be less than arcsine 1/4. But for observations near the middle body, this alignment must be within arcsine1/5.

Measurements of length using 3 stones or 3 abstract circles are decreased if made near the outside of the 3 objects, or increased if measured near the middle of the 3 bodies. This effect is identical to dowsing at new moon and an eclipse of the sun, or at full moon.

**Table 2.** Limits of Alignment of 3 bodies.

Observation	3-objects	2-objects
Auras must overlap	x	✓
Short beam length dependent on the separation	x	✓
Vortex produced	x	✓
Bifurcation	x	✓
Type 4 lines	x	✓
Lengths measured are not invariant to direction	x	✓
Mager colour when aligned	mauve	white
Frequency of perceived beam vibrations	mHz	kHz



**Figure 22.** 3-Body Interaction: The Geometric Limits to Produce a Subtle Energy Beam.

**Appendix 6**

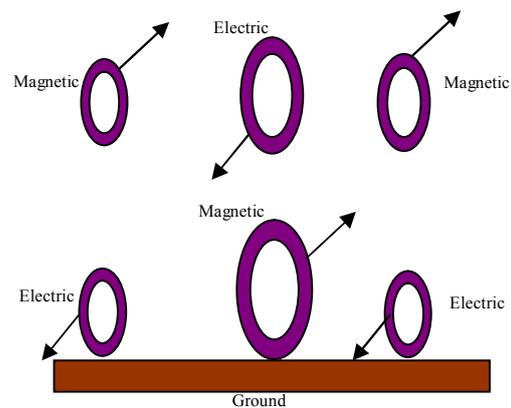
**Mind Generated Psi-lines**

*The Connection of Psi-lines to the Structure of the Universe*

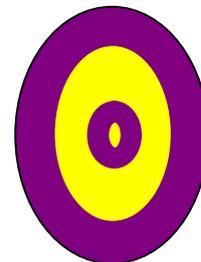
In reality, psi-lines are 3-dimensional and comprise 3x pairs of cylinders stacked

vertically above the ground as illustrated in Figure 23. Floating psi-lines have 8 cylinders. Figure 24 is a cross section through one of these tubes showing their composition of two different coaxial subtle energies.

The 3 pair of coaxial tubes are terminated at each end by a pair of coaxial spirals each having different properties. The apex half-angle of one of these 3-dimensional helical coaxial bicones involves the Golden Ratio ( $\phi$ ), and the other involves sine 1/3. The width/length relationship for psi-lines involves  $\phi$  and  $\delta$ . Once again all these involve universal constants.



**Figure 23.** Vertical Cross-section through a Psi Line.



**Figure 24.** Vertical Cross-section through one of the Oval Tubes comprising a Psi Line.

**Psi-line nodes**

Figure 25 is a graph of the number of nodes in psi-lines of different lengths, and the relevant equation is a power relationship with a very high correlation coefficient. Is the similar value (0.8) of the exponential and the constant in this equation a coincidence, or is this a significant clue to the purpose and structure of these nodes?



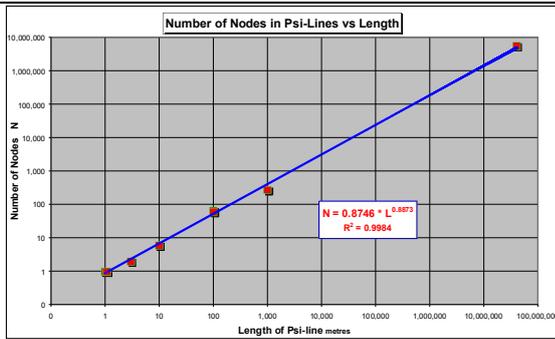


Figure 25

**References**

Keen JS. Measuring Range, September 2001, Vol. 39 No. 273 The Journal of the British Society of Dowsters

Keen JS. The Physics of Dowsing & the Brain, December 2001, Vol. 6 No 24 The BSD Earth Energy Group Newsletter

Keen JS. Entanglement of Large Objects; Jan 2002, www.jeffreykeen.co.uk

Keen JS. Two Body Interaction Parts 1 & 2, Dowsing Today December 2002, March 2003 Vols. 39, 40 Nos. 278, 279

Keen JS. Mind Created Dowsable Fields, March 2003, Vol. 8 Issue 29 Earth Energy Matters

Keen JS. Dowsable Geometry of Ancient Sites, Dec 2003, Vol.8 Issue 32 Earth Energy Matters

Keen JS. Auras Revisited - Parts 1-3, December 2003, September 2004, March 2005, Vol. 40 Nos. 282, 285, 287 Dowsing Today

Keen JS. Consciousness, Intent & the Structure of the Universe. ISBN 1-4120-4512-6, 2005.

Keen JS. Consciousness, Vorticity, and Dipoles. The Journal of General Evolution 2006; 62(5).

Keen JS. The Anatomy of Conical Helices, Consciousness, and Universal Constants – Parts 1-4, February June, October 2007, Vol. 47 Nos. 1-4 The American Dowser

Keen JS. Angkor Wat, Consciousness, and Universal Constants – Parts 1&2 September, December 2007, Vol. 41 No 297, 298 Dowsing Today; The Journal of the British Society of Dowsters

Keen JS. The Tree of Life and Universal Constants ASD Digest 2008-09, Vol. 49 Issue No. 1

Keen JS. From Banks and Ditches to Dowsing 2-dimensional Geometry, Network Review, Spring 2009, No 99.

Keen JS. A Model of Consciousness, May-June 2009, Vol. 65 No 4 World Futures Taylor & Francis, The Journal of General Evolution

Keen JS. A Standard “Yardstick” and Protocol for Dowsing Research Measurements; October 2009, e-paper online at <http://vixra.org/abs/0910.0037>

Keen JS. Hindu and Buddhist Temples - Creating Peace and Tranquillity , November 2009, Vol. 42 No. 305, Dowsing Today - The Journal of the British Society of Dowsters

Keen JS. The Causes of Variations When Making Dowsable Measurements; Part 2- Daily Variations Caused by the Earth Spinning on Its Axis, 10 December 2009, e-paper online at <http://vixra.org/abs/0912.0024>

Keen JS. The Causes of Variations When Making Dowsable Measurements; Part 3- Monthly and Annual Variations caused by Gravity, 24 December 2009, e-paper online at <http://vixra.org/abs/0912.0049>

Keen JS. The Causes of Variations When Making Dowsable Measurements; Part 4- The Effects of Geometric Alignments and Subtle Energies, 7 January 2010, e-paper online at <http://vixra.org/abs/1001.0004>

**Psi-line nodes and subtle energy**

The Type B terminating coaxial conical helices of psi-lines have the same type of subtle energy as found at the nodal points. This subtle energy is also the same as in the mauve ellipses in Figure 24, relating to psi-line cylinders.

Keen JS. The Causes of Variations When Making Dowsable Measurements; Part 5- Communicating Information Instantaneously across the Solar System, 7 January 2010, e-paper online at <http://vixra.org/abs/1001.0012>

Keen JS. Using Noetics to Determine the Geometric Limits of 3-Body Alignments that Produce Subtle Energies, 10 January 2010, e-paper online at <http://vixra.org/abs/1005.0018>

Keen JS. [Is Dowsing a Useful Tool for Serious Scientific Research?](http://vixra.org/abs/1011.0026) World Futures Taylor & Francis - The Journal of General Evolution October 2010; Vol. © 66 No 8.

Keen JS. The Effects of Gravity on the Mind's Perception, 12 November 2010, Published as an e-print in <http://vixra.org/abs/1011.0026>

Keen JS. The Auras of Circles and Abstract Geometry, their Interaction with Space-time, and their Effects on the Mind's Perception –v2, 5 April 2011, 28 February 2011, e-paper online at <http://vixra.org/abs/1102.0055>

Keen JS. 2-Body Interaction with Space-Time and the Effects on the Mind's Perception, 18 Jul 2011, 6 Mar 2011, Published as an e-print in [vixra:1103.0017](http://vixra.org/abs/1103.0017)

Keen JS. The Positive Feedback of Tetrahedral Geometry with Space-Time and Its Effects on the Mind's Perception, 10 Mar 2011, Published as an e-print in [vixra:1103.0029](http://vixra.org/abs/1103.0029)

Keen JS. Variation in Dowsing Measurements due to the Combined Vorticity in the Ecliptic Plane of the Earth's Orbit around the Sun, and the Spin of the Earth around its Tilted Axis, 25 May 2011, Published as an e-print in <http://vixra.org/abs/1105.0039>

Keen JS. How Dowsing Works – v2, 2 October 2011, 10 June 2011, Published as an e-print in <http://vixra.org/abs/1106.0015>

Keen JS. The Mind, Intergalactic Space, and Phi (φ). NeuroQuantology 2011; 9 (4): 649-659.

Keen JS. Dowsing Geometry and the Structure of the Universe- v2 - A Database of Patterns Analogous to X-ray Crystallography; 21 July 2011, e-paper online at <http://vixra.org/abs/0909.0008>

Keen JS. The Mind, the Macro Properties of Psi-lines, and the Structure of the Universe. NeuroQuantology 2012; 10(3): 403-415.

Keen JS. Psi-Lines, Chaos, Spirals, Magnetism, and Entanglement. NeuroQuantology 2012; 10(3): 416-427.

Keen JS. The Weird Effects of the Mind and Gravity. NeuroQuantology 2013; 11(1): 52-55.

Keen JS. Psi-Lines, Standing Waves, Nodes, and their Affect on Perceived Measurements; 25 January 2013; Published as an e-print in <http://vixra.org/abs/1301.0154>

