# The Creation Map Guide The Creation Map Companion 

The Creation map reveals the land of the Pattern. It is a logical land of geometric objects. The physical universe is the manifestation of this logical land.

The objects of the logical land are all cubes or cube-like objects that are located on the Creation map. Although all the objects derive from one generic object, the Pattern cube, they are positioned in either the Nature or the Scripture regions of the map.

The two most striking features of the Creation landscape, apart from the Pattern cube which is the main focus at the centre of the map, are the Eden cube, below the Pattern cube, and the Creation cube, above the Pattern cube.

The map enables an explorer to follow a path that begins at the creation cluster and eventually, after passing many other cube structures, to end at the centre of the geometric genetic code pyramid pair from where the entire logical landscape could be viewed.

The sides of the Pattern cube in the centre of the Creation map represent the two main perspectives. (See drawing on the right.) The City images on two faces of the Pattern cube represent the Scripture perspective and the Cosmos images on the two opposite faces represent the Nature perspective.
The Creation cube, drawn inside the Pattern cube (on the right), is a 'naked' cube because it is basically a Pattern cube without a cover. It represents a four-dimensional cube whereas the Pattern cube represents a three-dimensional cube.


The Creation map is actually a map of maps because three types of map are used to reveal different aspects of the creation processes.
Space maps, the opened City cube and the opened Cosmos cube, show the internal structure and composition of the Pattern cube as they apply to Scripture and Nature. Shadow maps illustrate the duonity (superposition) state of objects and their disduonity state. Shadow maps are used to depict the Fall, the CityEden and a created particle pair. Spread maps reveal detail of the structure and internal composition of parts of the Pattern cube. One spread map depicts the Standard Periodic Table of the (electron) chemical elements and the other spread map reveals the composition of the Geometric Genetic Code.

Templates for four paper box maps accompany the Creation map. They could be folded and three of them could be placed in their respective positions (squares) on the map.

The Creation map reveals the inner consistency of Scripture and Nature in a concise, simple and highly visual manner.

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## 1 Map Overview

The Creation map is a map of a virtual landscape. The features of the map represent the (geometric) Pattern of creation that matches structures in Scripture and Nature. The main areas of the map contain paper box maps as focal points.
The map is broadly divided into a lower and right part that represents the Scripture perspective and the upper and left part that represents the Nature perspective.

The Pattern cube is the central focus of the map. A paper model (box map) of the cube is positioned over the centre square of the map. Below the centre box map is the Eden cube box map and above it is the Creation cube box map.

The Cosmos images on two faces of the Pattern cube reflect some of the Cosmos cube features. Features of the City cube are depicted on the two opposite faces.

Exploration starts at point 1. The three box maps loom large!
At point $\mathbf{2}$ you see a cubical cluster of twelve SphereCubes. It depicts the $12+12$ creation elements. The Eden cube on your right-hand represents the combined elements. At point $\mathbf{3}$ you see the shadow map of the split Eden cube - after the Fall.

Point $\mathbf{4}$ is one of the highlights of the trip: An equation that emanated from the cluster of spheres!

The Pattern cube at point $\mathbf{5}$ is the focus of the map. Its four vertical faces depict features of the City cube (6) and the Cosmos cube. The opened City cube reveals how some key biblical structures fit inside the arena of Pattern cube.

A detour to point 7 reveals a new (duonity) perspective on the two Falls in the Bible. The magnificent New City creation is shown at point $\mathbf{8}$ on the opposite side of the map.

The Nature part of the map starts at point 9 where you can see the Creation cube up close. See the two interacting bricks of a creating module at point 10. The shadow map at point 11 shows a newly-created real electron. It is part of a brand new (standard) beryllium atom.

The Standard cube (derived from the Standard Model) at point 12 contains the red standard periodic table (SPT) with its chemical elements which is shown at point 13.

Finally, proceed to point 14. The 64 codons of the genetic code are depicted here. Continue to the codon staircase. Climb the codon steps to the top (15) and behold the panorama of creation from the centre of it all. What a view!

Two Perspectives


Basic Map Layout


Images on the Pattern Cube


Exploring The Scripture Part


Begin here at $\mathbf{1}$, and follow the numbers on the map.

The Scripture Detour


Exploring The Nature Part


## The Centre Box Map

The Pattern cube box map is the centrepiece of the Creation map.
Four images on its four vertical faces reflect two City images and two Cosmos images. These images show some of the internal features of the City cube and the Cosmos cube with dotted lines on the cube faces.

## The City Images and the Cosmos Images

The City cube and the Cosmos cube represent the Scripture and the Nature perspectives respectively.

The City cube and the Cosmos cube map onto the (same) Pattern cube that provides a common framework that represents both these cubes.

The Pattern cube box map is used to illustrate the commonality between the (biblical) City and the (natural) Cosmos. Key features of these two diverse contexts are depicted on opposite pairs of the vertical cube faces.

The drawing on the right shows the two (vertical) purple faces of the Pattern cube. The faces are opened up to lie in one plane in line with the red top of the cube. The other two (purple) cube faces are not shown owing to space considerations but if they were similarly depicted they would have formed a horizontal pair.

## The City Cube Images

The one City cube image (on a blue Pattern cube face) maps the relative positions of the tabernacle and the throne of the New City as they would appear inside the Pattern cube space. These objects are indicated by dotted lines on the face of the cube. The dotted lines are actually projections that represent the respective structures inside the cube.

The adjacent purple cube face depicts the same City features from a different ( 90 degree) angle.

## The Cosmos Cube Images

The one Cosmos cube image (on a blue Pattern cube face) maps the positions of two chemical elements of the $1^{\text {st }}$ Cube of the Pattern cube, six particles of the Standard cube and four of the bases of the genetic code. (The $1^{\text {st }}$ Cube is the Nature equivalent of the Eden cube.)

The adjacent purple face depicts the same Cosmos features from a different ( 90 degree) angle.

## The Creation Cube

The Creation cube is drawn inside the Pattern cube on the map to illustrate that it is the same as the Pattern cube but merely a non-compact version of it.

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## More Box Maps

The box map in the centre of the Creation map represents the Pattern cube. The Eden cube box map below the Pattern cube represents the centre cube of the Pattern cube. The box map above the Pattern cube represents the Creation cube.
An extra box map, the $1^{\text {st }}$ cube, is the Nature equivalent of the Eden cube.

## The Pattern Cube Box Map

The faces of the Pattern cube box map serve as a kind of 3D mapping surface. The four side faces of the box are used to illustrate key aspects of the City cube and the Cosmos cube.
The centre cube of the Pattern cube is presented as a separate box map, the Eden cube in the Scripture context. The Eden cube illustrates the twelve timed ( $a$ ) and the twelve spaced ( $b$ ) creation elements.
The Creation cube box map represents the non-compact Pattern cube.

## The Scripture Context

The Eden cube (at the bottom) shows the enlarged centre cube from the City cube perspective.
This cube is used to map the timed and spaced elements of creation as described in Genesis 1 and Genesis 2.
The duonity (two-oneness) of the Eden cube is evident from the observation that both Genesis 1 and Genesis 2 describe twelve distinct items that could be arranged as overlapping elements in three groups of four items each. The elements are shown on the six faces of the cube (the cluster of cubes).

## The Nature Context

The Creation cube (at the top) is the Pattern cube without a cover. (The cover consists of compressed aa bricks.)
The Creation cube represents the quantum vacuum, or void, which creates particle pairs owing to fluctuating energy caused by the quantum uncertainty.
The Creation cube consists of twelve creation modules, with each module a combination of the $a a^{+}$and the $b b^{+}$bricks. (The 'bricks' refer to the pictobrick representation of the parts of the Creation cube.)
The $\mathbf{1}^{\text {st }}$ cube is an extra box map that is the Nature equivalent of the Eden cube.
The six faces of the cube show the chemical elements of the first layer of the Standard cube with its three periodic tables of electrons, muons and taus.
(The Standard cube is the geometric representation of the Standard Model of elementary particles. It is described in


## 2 The Eden Creation

The Eden cube reveals that the creation elements that were recorded in Genesis 1 and Genesis 2 could be arranged in a cuboctahedron-shaped cluster configuration. The higher-dimensional spherecubes of the cluster embodies the principle of duonity.

## Duonity Defined

Duonity is defined as the two-oneness of things; a spherecube duonity is like a superposition of a sphere and a cube. Disduonity is the separation (collapse) of the spherecube to yield a separate sphere and a cube.

Genesis 1 Timed Elements


## Timed and Spaced Elements

The Eden cube reflects the twelve timed elements overlapping the twelve spaced elements that are arranged in three planes.
The timed elements form a loop, blue-purple-red-blue-purple-red, that 'visits' each face of the cube in a six step (six day) chronological sequence. Each step entails two of the timed elements.
The spaced elements form three orthogonal planes, a blue plane ( 4 blue elements), a purple plane (4 purple elements) and a red plane (4 red elements).

## The Duonity of Genesis 1 and Genesis 2

 The two creation stories in Genesis 1 and Genesis 2 caused confusion for interpreters. They seem to be overlapping in some instances and complementary in others.The twelve timed elements in Genesis 1 and the overlaid twelve spaced elements in Genesis 2 match the twelve elements of the cuboctahedron cluster. The principle of duonity explains why there are two separate stories: they are the disduonity components of the original duonity state in which creation took place.

The Eden Cube

Genesis 2 Spaced Elements


## Duonity Modules

It is shown on The Creating Cube page that twelve duonity modules form a Creating cube, or Vacuum


The virtual cells are

The Eden cube is a cluster (cuboctahedronshaped) of twelve spherecubes.
It consists of 4 blue, 4 purple and 4 red spherecubes in the blue, the purple and the red orthogonal plane.
Each plane has a 'theme', i.e. the man plane, the river plane and the woman plane.

The Eden Cube
Front View


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## The Eden Pattern

The Eden cube represents the Pattern that could be recognized throughout the Bible. Two other key instances of the Pattern could be distinguished in the sons of Jacob and also in the precious stones on the clothes of the High Priest.

## Jacob's Sons

The sons of Jacob were born as a series of twins or pairs by his two wives and their slaves. The pairs in the drawing show the sequence of births as coloured pairs. For example, the red coloured dots (pairs 3 and 6) reflect the two sons of the slave and Rachel's own two sons. The Pattern is the same as the 6 -day creation.

## High Priest's Stones

The onyx stones on his shoulders had the names of the tribes engraved in the sequence of their birth. The four rows with three stones in each row on the breastplate reflect the same mother-son relationship as above.

Two examples of the Pattern in the New Testament are the twelve disciples and also the twelve gates and twelve foundations of the New City.



The two onyx stones on the Priest's shoulders

Israel: Spaced Names


High Priest's Breastplate

| Reuben | Levi | Dan |
| :---: | :---: | :---: |
| Gad | Issachar | Josen |
| Asher | Zebulun | Benjamin |

## Imaginary Time

The spatial positioning of the 12 timed elements and the 12 spaced elements in the spherecubes of the cluster suggests a duonity time and space relationship.
This spatial nature of time agrees with the well-established idea of imaginary time $(\tau)$, developed by Stephen Hawking, in which $\tau$ is space-like. Imaginary time could be variable, even negative, like distances in space.

The three (colour) $\tau$ dimensions are not extra (additional) dimensions but merely another (duonity) perspective on the three space dimensions of the Cluster.

The six days of creation seems to be another type of time altogether. It is a chronological progression rather than a dimensional arrangement such as the imaginary time. This type of time is chronos time, also called realtime.

A simple example illustrates the effect of imaginary time: "The tree whose seed was planted yesterday is a 1000 year old today." The tree grew in imaginary time but it was checked in chronos time.

The existence of $\tau$ in a heaven and earth duonity, that potentially lasted until Noah's flood has major implications for the period interpretation (geological times) in geological formations, for example.


Imaginary Time and Space


The two pictographs above show the relationship between imaginary and chronos time.

## $\sqrt{3}$ The Eden Fall

The Eden cube is a cuboctahedron cluster of spherecubes that is formed by the twelve timed elements plus twelve spaced elements of creation. The Eden cube is a 4D duonity object that is shown to collapse into a 3D cluster of spheres 'vertical shadow' and a 3D cluster of cubes 'horisontal shadow'. The collapse represents the effect of the Fall.

## Shadow Map of the Collapsed Eden Cube



## Shadow Maps

Shadow maps are used to represent a dimensional drop of a higher-dimensional object. The two examples below show a 3D circlesquare (cylinder) and its two orthogonal 2D shadows, a circle and a square. It serves as a lower dimensional analogy for the 4D spherecube case.


## $\sqrt{4}$

## The Pattern

The 'cluster of spheres shadow' of the Eden cube possesses an innate code that could be generalized as an equation. The variables $(a, b)$ could be substituted by the Pattern values. Small cubes, equal to the numbers of the terms, could be used to build a cube.

The cluster of spheres is one of the two 'shadows' of the spherecubes cluster. The cluster could be sliced at different angles to yield the sets of configurations in the rows of the Pattern code table.

The Cluster of Spheres
Cuboctahedron-shaped


The values of the variables $(a, b)$.

The Pattern Code

$a+b=c \& c=b+a$

The Pattern Equation
$a+b=c \& c=b+a$
The basic equation pair is a generalization of the numerical Pattern values of the code table.
Note that the configurations in the centre column resemble the orbital shapes of electrons, e.g. row 2 is $p$, row 3 is $d$ and row 4 is $f$.

## The Pattern Defined

The basic Pattern equation pair is; $a+b=c($ Left $) \&($ Right $) c=(b+a)$. The Pattern could be stated as ' $a$ is decreasing while $b$ is increasing'. $a$ is progressively transformed into $b$, while $c$ stays constant. $a$ and $b$ are a pair of conjugate variables whose sum is a constant for the default Pattern values, $a=6,5,4,3,2,1,0$ and $b=0,1,2,3,4,5,6$.
The basic duonity and disduonity module fields are shown on the right. Note that only the fields of the Left equation (of the pair) are shown.

The inversion line indicates where $a$ becomes $b$, and vice vers $a$. In Cartesian coordinates $b$ is on the $x$-axis and $a$ is on the $y$-axis. In the complex plane $b$ is real and $a$ is imaginary.

Mapping of the fields onto a coordinate system reveals 1 as the origin of the duonity version and 0 as the origin of the disduonity version. The Pattern is, however, fundamentally an inverse symmetric relationship between two identical entities. It differs from a coordinate ( $\mathrm{x}, \mathrm{y}$ ) relationship in that it relates two entities ( $\mathrm{a}, \mathrm{b}$ ) in the same 'line'.

The cubed equation $(a+b)^{3}=6 x$ the squared equation $(a+b)^{2}$ and
$6 x$ the squared equation $(a+b)^{2}=6 \times 6 \times$ the basic equation $(a+b)$,
therefore $\quad(a+b)^{3}=6 \times(a+b)^{2}=6 \times 6 \times(a+b)=6 \times 6 \times 6$.
The different versions of the Pattern equation yield mathematicalgeometrical structures, represented by pictographs. Some pictobrick modules of an $a$ and $a b$ 'brick' are shown on the right and pictographic representations of the basic and squared equations are shown below.

## Duonity

Disduonity
$a+b=c \quad$ (Only Left equation used)

$\begin{array}{ll}a=6,5,4,3,2,1 & a=6,5,4,3,2,1,0 \\ b=1,2,3,4,5,6 & b=0,1,2,3,4,5,6\end{array}$
$c=7,7,7,7,7,7 \quad c=6,6,6,6,6,6,6$






The Basic Geometric Pattern Equation Pair

The Squared Geometric Pattern Equation Pair (aa $+a b$ ) simplified is aa $^{+}$ $(\mathrm{ba}+\mathrm{bb})$ simplified is $\mathrm{bb}^{+}$

\& $\qquad$


## The Linear Pattern

The basic and the squared equations are linear.
The Pythagoras equation ( $a \mathrm{a}+\mathrm{bb}=\mathrm{cc}$ ) is, however, nonlinear. It forms a subset of the Pattern equation.
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## 5 <br> The Pattern Cube

Small cubes, equal to the numbers of the terms of the squared Pattern equation pair, could be used to build a Pattern pyramid. Six of these pyramids form the Pattern cube. The Creation cube is a higher-dimensional version of the Pattern cube with overlapping parts. It is not possible to construct the Creation cube in 3D.


## The Seven Concentric Cubes

The cells of the Pattern cube are arranged in 6 concentric cubes plus a cover cube. The cover consists of compressed aa parts.

## The Six Concentric Cubes

The cells of the Creation cube are arranged in 6 concentric cubes. Some cells overlay each other and a 3D rendition is not possible.

The (compressed) covers (aa) are transparent to reveal the composition of the lower cubes.

The $a b / b a$ modules (under the cover)

The $b b$ modules (under the cover)

## The Creation Cube



The cubed Pattern equation pair yields a cube (on the right) with overlapping parts that could not be constructed in 3D. This higher-dimensional cube is the Creation cube (the naked cube) and it is described in more detail at point $\mathbf{9}$ in this Guide.

## The Pattern Cube

The Pattern cube is the compact version of the Creation cube that fits in 3D. The $a a$ parts of the cube are compressed to form the cover. The twelve (aa) cover plates are shown transparently in the drawing below, left.


The Pattern Information
It is shown in Folder 6 that the Shannon information is a special case of the Pattern information. The Shannon information (in the Pattern context) is defined as Pattern number 1, and its unit of measurement is the 'bit'. The unit of measurement of the Pattern information could be called the 'cubit', i.e. a cube bit. A cubit could be defined as a discrete version of a (quantum) qubit.

The Pattern number 6 defines the Pattern information module that represents a cubit. The twelve (information) modules of the Pattern cube could, perhaps, be used to do Pattern computing, analogously to quantum computing.


The Pattern Cube Box: Top


## $\sqrt{6}$ The City Cube

The City cube represents a space frame in which certain key biblical structures fit perfectly. The opened cube reveals the relative spatial positioning of structures such as the tabernacle/temple and the throne/mountain of the City.


The 3D grid-like space of the Pattern cube, as shown above, enables the tabernacle and the temple (of Ezekiel) to be positioned accurately inside the cube if the relative ratios and orientations of their structures are considered. The matching of the salient dimensions of the vertically-oriented temple of Ezekiel with the Pattern pyramid ratios is shown below. The topography of the area around Jerusalem, e.g. the Mount of Olives, also matches the applicable references in the Bible.
The City's throne position, its foundations, gates, etc. match the New City description in Revelation 21 and 22. The throne position also matches the Eden cube, as the Holiest of the tabernacle, in the centre of the City cube. These matches are testimony that the abstract Pattern cube could have been the invisible arena of many events that are described in the Bible.


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## $\sqrt{7}$ <br> The CityEden

A shadow map is used to depict the fall of Lucifer from the City (the original HeavenEarth).

In this context the duonity Eden cube represents a new creation and also a restoration of the destroyed Earth.

There is, however, likelihood that Fall 1 and Fall 2 could have been overlapping events. This scenario is depicted as the CityEden scenario that is shown at the bottom.

The Fall 1 shadow map is based on state of the Earth as described in Genesis 1:2.

The earth was without form, and void, and darkness was on the face of the deep.

The restored Eden was a new creation
The restored Eden, apparently, did not encompass all of the (destroyed) Earth. Eden could have been like an ark on the waters (planet earth?).
Genesis 2:8 The Lord God planted a garden eastward in Eden and there he put the man...

The Fall 2 shadow map is based on Genesis 3 where Adam and Eve's sin and God's curses (also of the Earth) is described.

The destroyed earth - cursed, dying, dark The scenario described above, where Fall 2 follows on Fall 1, is the City-and-Eden scenario.
$\square$


Fall 2 - Adam \& Eve
Fall 2 caused the Eden Cube to collapse/separate into the (lower) heaven and the earth.

## The CityEden Scenario

In the alternative CityEden scenario the Fall 1 shadow map and the Fall 2 shadow map are overlaid. The City and the Eden are here (in) a duonity state.
The CityEden scenario is based on the description of Lucifer in Ezekiel 28:13. You were in Eden, the garden of God. Every precious stone was your covering. Note that the stones seem to refer to the foundations of New City of Revelation.

The New City of Revelation could be like the original CityEden because she also contains the tree of life and a river, both of which were found in Eden.


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## $\sqrt{8}$ The New City

According to Revelation, the current creation that is decaying continuously (owing to entropy) will be un-created and a new creation, apparently based on the same Pattern, will appear. The new creation is the New City, and it will likely be a duonity of a new Heaven and a new Earth. Features of the New City match the features of Pattern cube in many respects. The story, Peter in the Pattern City, details some of these features.

## The Pattern City

The City map on the right is from the story, Peter in the Pattern City. It highlights six Points of Interest (Pois) from the story where Peter experienced several views of the City. The sightings include the East Gate, the Throne Room, the Codon Corner and Peter's Place. From the Throne room Peter also saw the Tree of Life and the River of Life.

The City cube, which is the same as the Pattern cube, is the cubical rendition of the Pattern, but a spherical rendition is also possible.

The basic spherical rendition of the Pattern is the cluster of spheres which has twelve spheres around the core sphere. The twelve outer spheres agree with the twelve gates of the City, which are twelve pearls.

## The Pattern of Eden in the City

The twelve pearl gates of the City (with the names of the tribes) correspond with the timed elements of the Eden cube and the twelve foundations (with the names of the apostles) with the spaced elements.

This observation links Genesis with Revelation in such a way that it could be construed as evidence for the

THIT: HITVITR
 existence of the Pattern in the Bible.

## The Scripture Process Diagram

The diagram on the right gives an overview of the process flow of key Bible events in terms of the duonity and disduonity states of the events, places and persons involved.
The diagram illustrates the City-and-Eden scenario where Fall 1 and Fall 2 are two separate sequential events.
A comparative diagram for the CityEden scenario would have no middle layer and only one combined Fall event.

## The End of the Scripture Part



The Scripture Part of The Creation Map reveals an innate geometric relatedness of biblical structures and also of its many ratios and numbers. The geometric-spatial Pattern interpretation of the Bible could open up a new way of interpreting, and relating, many parts of the Bible.

## $\sqrt{9}$ The Creation Cube

The Creation cube is a cluster of twelve creating modules that spontaneously produce virtual particle pairs. The effect is known as quantum fluctuations.

Virtual particles could become real under certain conditions and then they would form atoms that are structured according to the Atom cube. A standard beryllium atom is an example of a created atom The Atom cube is derived from the Standard cube.

The Standard cube consists of the standard periodic tables of electron, muon and tau atoms.

## The Creation Cube

The Creation cube is the 4D version of the Pattern cube. The aa parts of the cube overlay some other parts of the cube which is not possible in 3D. The Creation cube is the pre-compact version of the Pattern cube, the cover of which is composed of the compressed aa parts.

The Creation cube is also called the Creating cube to highlight its particle production capability. The Creating cube is shown below, left. The particles created by the Creating cube are arranged according to the parts of Created cube that is shown below, right. Both the geometric and pictographic renditions of the two different cubes are shown.


## A Creating Module

A creating (duonity) module consists of two complementary pictobricks ( $a$ and $b$ or $a a^{+}$and $b b^{+}$). The creation of a particle pair is caused by a boost action between the two pictobricks of a duonity module. The energy action (conversion) along the inversion line is caused by the 'uncertainty' of which Pattern value pair equals the sum $c$ ( $c$ is the same for all six value pairs). Each value pair has the same probability of being the sum.

## The Creating Cube

The Creation cube represents the composite Pattern field that is a cluster arrangement of twelve duonity modules. Each module could create, for example, one virtual particle pair. The virtual particle pairs typically annihilate but one could become real if the other one is trapped (as an anti-particle) in the cover of an anti-cube (black hole). The real particles could form, for example, a standard beryllium atom consisting of electrons, muons, taus as well as protons and neutrons consisting of quarks.

## The Created Cube

A beryllium atom is used as an example of the Created cube. The particles of the beryllium atom match the component parts of the Standard cube which is a geometric version of the Standard Model of elementary particles.
The Standard cube is typically the field version and the Atom cube the particle version of the Pattern cube.

The Standard cube and the Atom cube are described in Folder 18 The Pattern Cube.

The Creation Cube: Top View

## The Pattern Module

The Pattern cluster of spheres seems to represent a higher-dimensional origin of creation. The cluster's innate operation is expressed as a pair of Pattern modules. The Pattern modules could also be used to explain how standing waves are formed.

## The Duonity State Rotations of the Cluster

The cluster of twelve spheres could be split into two rings of six spheres each. See the drawing on the right.
The spheres represent duonity states that flow in each ring as shown by the arrows. A duonity state is a superposition of $a$ and $b$. $a$ could be, for example, $a$ sphere that is OFF and $b$ a sphere that is ON.
An $a, b$ duonity state could then be imagined as a sphere that is both OFF and ON.

## Boosting Pattern Module

The flow of $a, b$ duonity states in a ring generates a pattern of $a$ and $b$ combinations. (See the dotted and solid squares on the right.) This pattern 'fields' reflects the numerical Pattern derived from the Pattern code.
The pictograph of the basic duonity module is shown next to the module. $a$ and $b$ are two complementary fields that are in an uncertainty relationship. When $a$ is a minimum then $b$ is a maximum and vice versa. $a$ and $b$ could never be the same, but their sum is always a (the same) constant. The uncertainty which $a, b$ pair equals the sum is the cause of the boost action (shown by the arrow) of the module.

## A Standing Wave

A repeating (four) module boost action is shown on the right. The sequenced (bi-directional) boost action would cause a linear boost 'wave' with $a$ vertical and $b$ horizontal.

A pair of duonity modules would cause a linear type of standing wave. The effect of the R-module is illustrated by the grey-lined $a$ and $b$ parts of the wave diagram.

Another, unidirectional, boost method to obtain a standing wave could be achieved if the top and bottom of a module are 'glued' to form a Möbius-type band. The resulting unidirectional boost action would yield a sawtooth-type of standing wave.

The splitting of the Cluster could be compared to splitting the Earth into a North and a South hemisphere and then flattening the halves into 2D discs.

## Cluster of Spheres



Left Pattern Module


Ring of Spheres
The Pattern Module


Duonity Module Sequencing


## Squared Duonity Module

Two types of linear duonity modules could be distinguished; basic (see above) and squared. The squared values for $a a^{+}$and $b b^{+}$and the applicable module icon are shown on the right.

The boost arrow represents the conversion from $a a^{+}$into $b b^{+}$along the inversion line.


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## $\sqrt{10}$ The Creating Cube

The Creating cube consists of twelve creating modules. A creating module is a duonity module consisting of two interacting pictobricks $(a, b)$ that manifest the Pattern uncertainty principle.

## The Pattern Uncertainty Principle

The Heisenberg uncertainty principle is fundamental to the quantum theory. The position-momentum instance of the principle is:
$\Delta x \Delta p \geq \hbar \quad$ (position $x$ momentum $\geq$ Planck's constant)
(The $\Delta$ represents the range of possible measurements of $x$ and $p$.)
The equivalent Pattern uncertainty is illustrated by the (duonity) Pattern module on the right. The Heisenberg uncertainty relation could be expressed in the Pattern context as the product: $\Delta \mathrm{a} \Delta \mathrm{b} \geq 6$ ( 6 is the Pattern constant). When the values of $a$ is minimum, the values of $b$ is maximum and vice versa.
Note that the $a$ and $b$ values are never the same, but their sum is always a constant.

## The Time-Energy Uncertainty Principle

The time-energy instance of the uncertainty principle is given by:
$\Delta \mathrm{t} \Delta \mathrm{E} \geq \hbar \quad$ (time-energy $\geq$ Planck's constant)
The less uncertainty with which the energy is specified, the more uncertainty appears in the time to make the energy measurement.
The time-energy module that represents the time-energy uncertainty is on the right. (Note that this is also a duonity module because disduonity modules do not represent the uncertainty principle owing to the fact that that the multiplication of values yield a zero for the extreme value pairs 6,0 and 0,6 of the basic disduonity module.)

## The Creating Module

The $a a^{+}$and $b b^{+}$fields of a squared duonity module represent relativistic quantum fields, according to the quantum field theory. The addition of energy (in the form of photons) to the module would cause what is known as particle pair production.
Without the addition of energy virtual positron-electron pairs are, however, spontaneously created by what is known as the quantum vacuum. The virtual particle pair normally annihilates in the time allowed by the time-energy uncertainty. It is possible, however, for the virtual positron to be pulled into a black hole which leaves the other virtual particle without a partner, and it has to become real in the process.

The created virtual pair diagram on the right represents an 'uncertainty created' positron $\left(\mathrm{e}^{+}\right)$-electron( $\mathrm{e}^{-}$) virtual particle pair in a duonity relationship with an amount of energy equal to $2 \mathrm{mc}^{2}$ (from $\mathrm{E}=\mathrm{mc}^{2}$ ).

## The Creating Cube

The creating cube consists of twelve squared Pattern modules. It can create twelve particle pairs (leptons) and also 24 quarks (indicated by the ${ }^{+\prime}$ sign.
(The Creating cube is also called the Vacuum cube in Folder 18 The Pattern cube.)

## The Basic Energy Module

The $a$ and $b$ values of the basic Pattern module reflect the motion of a quantum pendulum if the $a$ variable represents the potential energy (PE) and the $b$ variable the kinetic energy (KE). The PE is a minimum when the KE is a maximum, and vice versa.

The quantum pendulum behaves differently from a classical pendulum which could have both PE an KE values at zero (a minimum) simultaneously.

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The Pattern Module



The Creating Module



## III The Created Cube

The Created cube consists of three orthogonal pyramid pairs. Each pair consists of four disduonity Pattern modules.

The Atom cube is a specific (created) cube that is based on the generic Pattern cube. The Atom cube particles are structured according to the Standard cube which is the geometric version of the Standard Model of Elementary Particles. (See the development of the Standard cube on Map 3 The Standard Model Map.)

A standard beryllium atom is used as an example of a standard atom.

## The Standard Cube

The Standard cube is the geometric version of the Standard Model of Elementary Particles. (See Folder 4 The Geometric Standard Model.)
The three pyramid pairs (red, purple, blue) of the cube represent the periodic tables of electron, muon and tau atoms.

The Standard cube with its generic ( $a a$ ), $b b$ and $a b / b a$ fields is illustrated by its pictographic rendition on the right.

## A Standard Periodic Table

One pyramid pair of the Standard cube represents one standard periodic table. The three pyramid pairs represent the periodic tables of electron, muon and tau atoms. A standard periodic table depicts fields of leptons and quarks. The red (electron) table, whose pictographic is shown on the right, includes the specific fields (electron fields, positron fields and their neutrino fields). Note that the neutrino fields are accommodated in the inner periodic tables (in the core) that are not shown here. See Folder 4 The Geometric Standard Model for detail.

## The Atom Cube

The virtual particle pairs that were produced by the Creation cube could become real by a collapse process. The anti-particles could be separated from their particle mates by the gravity pull of the black hole (anti-cube) that surrounds the Creation cube. (See Folder 18 The Pattern Cube.) The anti-particles would then become part of the (anti-matter) cover of the Pattern cube which forms the surface of the black hole. The fact that the black hole owes the energy of the anti-particle to the Creation cube is the reason why the black hole evaporates eventually (it repays the energy debt according to the Hawking radiation).
The real particles would be arranged according to the framework of the Created cube as shown on the right.

## A Standard Beryllium Atom

Particles that were created by the creating cube could yield a standard beryllium atom, for example.

The standard beryllium atom that is shown on the right consists of atoms of 4 electrons (red), 4 muons (purple) and 4 taus (blue), their anti-particles (in the cover) and 4 protons and 4 neutrons consisting of quarks and anti-quarks.

Note that the exclusion principle is evident from the cleft between the (red) electrons that have the same quantum states but different spins.


The Red Standard Table


## 12 The Standard Cube

The Standard cube is a geometric version of the Standard Model of Elementary Particles. The cube consists of all the quantum fields/particles of the Standard Model. The Standard cube consists of three pyramid pairs. Each pair represents one type of periodic table, i.e. electron table (red), the muon table (purple) and the tau table (blue).

## The Standard Periodic Table (SPT)

The three pyramid pairs of the Standard cube represent the standard periodic tables of the electron, muon or tau atoms. The first elements ( $\mathrm{He}, \mathrm{He}, \mathrm{Li}, \mathrm{Be}$ ) of each $b b$ field is shown (below, right) inside the cells of the first energy level.

## The Pattern State Identity (PSI) System

 Pattern state number $\mathbf{c}$ is for colour, $\mathbf{n}$ is for the energy level, $\mathbf{s}$ is for shape as well as spin (spin is indicated by the sign of $\mathbf{s}$ ) and $\mathbf{m}$ is the distance of a cell from the middle row of a layer of cells (where $\mathbf{m}=0$ ).A comparison between the four quantum numbers and Pattern state numbers is given below. The cube (below) shows the signs for the values of Pattern state numbers $\mathbf{s}$ and $\mathbf{m}$ ( $m=$ vertices).

Signs of Pattern state numbers $\mathbf{s}$ and $\mathbf{m}$

| None |  |
| :--- | :--- |
| $\mathbf{n}$ | (energy level) |
| $\mathbf{I}$ and $\mathbf{s}$ | (orbital shape and spin) |
| $\mathbf{m}$ | (magnetic number) |

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| The Quantum Numbers | Signs of Pattern <br> state numbers |
| :--- | :--- |
|  | $s$ sand $\mathbf{m}$ |

n (energy level)


The Standard cube consists of three pyramid pairs: a red, a purple and a blue pair, each with four modules. A module's equation is: $a a+a b+b a+b b=c c$. A compact module's equation is: $(a a)+(a b+b a+b b)=c c$.
A simplified module's equation is: ( aa ) $+\mathrm{bb}^{++}=\mathrm{cc}$.


The Red Standard Periodic Table



## Energy levels

The diagram on the left shows the energy levels of a standard periodic table. The positive levels represent the periodic table of electrons. The negative (dotted) levels represent the corresponding anti-matter levels. Note that the cells of the $b b$ fields are filled by particles from the lowest energy level upward. The aa fields are all pre-filled with (negative) energy particles, i.e. the Dirac sea.

$$
2
$$

## The PSI system for the identification of the cells of the periodic tables is based on four coordinates [c, $\mathbf{n}, \mathbf{s}, \mathbf{m}$ ].

| The Pattern State Numbers |  |
| :--- | ---: |
| Colour of pyramids | $\mathbf{c}$ |
| Layers of pyramids | $\mathbf{n}$ |
| Shape and spin of cells | $\mathbf{s}$ |
| Deviation (from middle) | $\mathbf{m}$ |



## 13 The Standard Periodic Tables

The Cosmos cube represents the electron, muon and tau atoms by its three pyramid pairs. Only the electron elements of the red pyramid pair are shown on the spread map.


The chemical elements of the standard periodic table of electrons are shown by the spread map. The map shows the plates of the red pyramid pair that are spread-out to be on the same level.

The $1^{\text {st }}$ cube in the centre of the plates represents the first four elements:
$\mathrm{H}, \mathrm{He}, \mathrm{Li}, \mathrm{Be}$
Two elements ( $\mathbf{H}$ and $\mathbf{H e}$ ) are framed to highlight the fact that they also appear on the top face of the $1^{\text {st }}$ cube image below (bottom).
The electron chemical elements are in shown red plates, the tau elements in purple plates and the muon elements in blue plates. (The purple and blue plate sets are identical to the red plates.)

Only the four inner pyramid plates are shown because the cells of the other plates are empty.

| $\begin{aligned} & 3 \\ & i \\ & 0 \\ & 0 \end{aligned}$ | $\begin{gathered} \hline \mathrm{GAC} \\ \mathbf{A} \end{gathered}$ | Fermion | $\begin{gathered} \mathrm{AGG} \\ \mathbf{G} \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| g | e electron $\mathbf{H e}$ | E | $\begin{gathered} \text { e electron } \\ \mathbf{H} \end{gathered}$ |
| $\stackrel{y}{\underset{F}{f}}$ | $\begin{gathered} \mathbf{G} \\ \mathrm{CGU} \end{gathered}$ | Fermion | A <br> UAA |

The diagram on the right indicates the manner in which the plates of red pyramid pair are shifted to enable the spread map to show the chemical elements on one level.

Upper Red Plates - Viewed from Above


## 14

## The Geometric Genetic Code

The codons of the genetic code fit in the vertices of the concentric cubes of the Cosmos cube. The vertices form codon chains that appear flat on the spread map.


Note that the RNA bases of the cube and the map match, both upper and lower.

The Cosmos cube represents 56 codons of the genetic code in the vertices of the seven concentric cubes ( $7 \times 8=56$ ) and the initial 8 codons in the vertices of the core.

The $1^{\text {st }}$ cube (the centre cube of the Cosmos cube) together with the (virtual) codon cells of the $2^{\text {nd }}$, $3^{\text {rd }}$, and $4^{\text {th }}$ concentric cubes are shown.

Four codons of the $4^{\text {th }}$ concentric cube are highlighted by the frames (also in the spread map). The three bases of each codon are colour coded: the first base is red; the second base is purple; and the third base is blue.

The lower 32 codons (in four chains) are shown as they appear when viewed from above. (The upper 32 codons are shown at the top, right.)

| $\begin{aligned} & 3 \\ & i 0 \\ & i \end{aligned}$ | $\begin{gathered} \hline \mathrm{AGG} \\ \mathbf{A} \end{gathered}$ | $\begin{gathered} \overline{\boldsymbol{\tau}} \operatorname{tau} \\ \mathbf{L i} \end{gathered}$ | $\begin{gathered} \hline \mathrm{GAC} \\ \mathbf{G} \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { 甲1 } \\ & 0 \\ & 0 \end{aligned}$ | Fermion |  | Fermion |
| $\begin{aligned} & \stackrel{\rightharpoonup}{n} \\ & \stackrel{\rightharpoonup}{\sharp} \end{aligned}$ | $\begin{gathered} \mathbf{G} \\ \mathrm{GCA} \end{gathered}$ | Be $\tau$ tau | $\begin{gathered} \mathbf{A}< \\ \text { AUU } \end{gathered}$ |

The diagram on the right indicates the manner in which the red pyramid pair is split and then shifted to enable the spread map to show the upper and lower codons chains separately.

The arrow above and the arrow below point to the same RNA base (A).

Upper Codon Chains - Viewed From Above


## The Pattern is Profound

## The Pattern Idea

The Pattern idea is an age-old idea usually ascribed to Plato because he pronounced the philosophy that ideas, or forms, are at the heart of everything that exists. His famous cave analogy stems from his belief that material things are simply the shadows of other-dimensional forms.
The Pattern idea had, however, already been mentioned in the Bible by God in Exodus when He told Moses how to build the tabernacle.
According to all that I shew thee, after the pattern of the tabernacle, and the pattern of all the instruments thereof, even so shall ye make it. Exodus 25:29.
And look that thou make them after their pattern, which was shewed thee in the mount. Exodus 25:40.

## The Pattern Law

Everything develops according to the law of the Pattern. It is analogous to the manner in which everything falls according to the law of gravity.

The Pattern law implies that the Pattern cube is a conserved object which means that it represents something, almost like an abstract type of energy, which could not be created or un-created. (The Pattern law is described in Folder 18 The Pattern Cube.)

## The Four Pattern Maps

A map is a useful kind of medium to get an overview of a something and, therefore, a series of four maps is used to depict the role of the Pattern in the unification of knowledge of Nature, but also of Scripture.

The first map, The Pattern Map, shows the unification of the mathematics and geometrics of the Pattern in a detailed exposition of the Pattern cube.

The second map, The Standard Model Map, depicts the progression from the Standard Model to the Standard cube with its constituent periodic tables.

The third map, The Unified Physics Map, highlights the Pattern's potential for the unification of classical physics and quantum physics.

The fourth map, The Creation Map, reveals the common Pattern underlying Scripture and Nature.

## The Pattern Potential

The traditional manner in which Scripture and Nature were treated as two distinct fields of knowledge is clearly outdated. Science has also reached a ceiling which is evident from scientist's inability to resolve the issue of quantum gravity.
The Pattern has the potential to resolve conundrums and could be a new foundation for an integrated study of Nature and Scripture.

The conclusion of all that is written about the Pattern is:
The central idea of creation is simple; there is a single Pattern behind it all.

