K.I.Diagram which supported the conclusion 10 of Dr.Alexander Egoyan's paper "ELASTIC MEMBRANE BASED MODEL OF HUMAN PERCEPTION"



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The purpose of this paper



This paper is described to answer two questions of Dr. Alexander Egoyan. How is consciousness related to IKOSOLID science? Where can we find IKOSOLID like structures in the human brain?

We describe the answer, supporting conclusion 10 of his paper "ELASTIC MEMBRANE BASED MODEL OF HUMAN PERCEPTION"

And this paper is useful to deepen the understanding of our KEYPAPER which was described after listening to the lecture on Sir Penrose and Dr. Hameroff in TSC Toward a Science of Consciousness STOCKHOLM 2011.(KEYPAPER: IKOSOLID Universe with the open gate of BLACK Hole & WHITE Hole)

The paper of Dr. Egoyan is in the direction which is the same as our paper. As the result, our topology paper is helping the understanding of IKOSOLID SCIENCE of the understanding of the scientist of all the fields.

Specifically, it becomes an important message to the string theory person, the loop quantum gravity theorist and the knot theory person who joins the 2 persons.

Therefore, when reading this paper, it becomes important to read the paper of Dr. Egoyan.

This paper and his paper are the papers about the research of TSC Toward a Science of Consciousness (Center for CONSCIOUSNESS STUDIES University of Arizona)

June 27th in 2011

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Introduction

Transmission joint of IKOSOLID

reference: Study of connecting point with three-dimensions and four-dimensions by pictorial art Part 10 <u>http://koeiikuyo.web.fc2.com</u>

IKOSOLID is an Artificial Crystallization and is Solid Benzene.

The point connection and the edge side connection of IKOSOLID as a Solid Benzene.









It sees a solidness connection from above.



TEXT

A. K. I. Diagram to CONCLUSION 1 of Dr. Egoyan's paper "ELASTIC MEMBRANE BASED MODEL OF HUMAN PERCEPTION"

It is shown that <u>human perception cannot be explained in terms of elementary particles</u> and we should introduce new indivisible holistic objects with geometry based on smooth infinitesimal analysis - elastic membranes. The example of such a membrane is our Universe which is an indivisible whole. It is shown that <u>our perception may be considered as the result of elastic oscillations of two dimensional (2D) elastic membranes</u> with closed topology embedded in our <u>bodies</u>. (Excerpt: the conclusion 1 from conclusion 1~10 of Dr. Egoyan's paper)

Human perception cannot be explained in terms of elementary particles

When it does't make the pair annihilation of particles and antiparticles., the perception of the human being can be described with elementary particle.



The series joining corrugation of particle and the antiparticle by the 90 degree topological transformation which depends on IKOSOLID

 $\label{eq:reference:} \begin{array}{rcl} \mbox{Unification of the Electromagnetic Willpower and Gravity of Four-Power of the Space:} \\ \mbox{Proof by \sim for Digest $p.12 $ $\underline{http://koeiikuyo.web.fc2.com}$ \end{array}$

- 3, <u>The positron outbreak without pair annihilation of electron and positron to watch to</u> an oscilloscope.
- 3-1 We watch the positron (a signature wave) in the excitation state and the electron (a cosine wave). = <u>The wave pattern of normal temperature interchange superfluidity</u> <u>of the light wave length.</u> Extract from

for digest



The wave pattern of normal temperature interchange superfluidity of light wave length

Serial junction with a light wave length and the superlight wave

length = attenuation effect of the extension of the light wave length

(=The wave pattern of normal temperature interchange superfluidity of light wave length)



Formation / the success of the complete inversion connection junction wave pattern of a signature wave (positron) and the cosine wave (electron) (=<u>A normal temperature</u> interchange super-conductivity wave pattern) Extract from for digest

reference: Unification of the Electromagnetic Willpower and Gravity of Four-Power of the Space : Proof by ~ for Digest p.13 http://koeiikuyo.web.fc2.com



3-2, <u>Formation / the success of the complete inversion connection junction wave pattern of</u> <u>a signature wave (positron) and the cosine wave (electron)</u> (=<u>A normal temperature</u> <u>interchange super-conductivity wave pattern</u>) Extract from for digest <u>A normal temperature interchange super-conductivity wave pattern</u> <u>of velocity of light</u>

The multiple junction of velocity of light and the super velocity of light.

velocity of light \rightarrow (electron) Junction

super velocity of light(positron)

The multiple junction (<u>The normal temperature</u> <u>interchange super-conductivity of velocity of light =</u> <u>the junction</u> of a signature wave and the cosine wave)

<u>The complete inversion connection junction wave pattern of a signature wave (positron) and</u> <u>cosine wave (electron)</u> and 720 <u>degrees phase spin movement</u>

reference: Unification of the Electromagnetic Willpower and Gravity of Four-Power of the Space : Proof by ~ for Digest p14 http://koeiikuyo.web.fc2.com



The complete <u>inversion</u> (signature wave cosine wave signature wave) <u>connection</u> (The course of the reverse progress of a signature wave and the cosine wave was made one way connecting) <u>junction</u> (parallel junction of a signature wave and the cosine wave)wave pattern of a signature wave (positron) and the cosine wave (electron).

The difference with multiple two dimensions body and two dimensions body of 1 layer



The three-dimensional body

The cross with the 90 degree phase of the flyover



The multiple two dimensions body It doesn't form in the two dimensions body of 1 layer. The multiple two dimensions have both sides (The table and the reverse).

The two dimensions body of 1 layer



The three-dimensional body

The table and the reverse with ordinary three-dimensional body becomes only the table as the two dimensions body of 1 layer.

The two dimensions body of 1 layer

Most existence of 3-D becomes two dimensions body of 1 layer. That is, the two dimensions body of 1 layer has only the surface.

The reference and the excerpt: Dr. Egoyan's Paper p.1 of "ELASTIC MEMBRANE BASED MODEL OF HUMAN PERCEPTION"

Modern physics is not truly multidimensional – we don't know how universes of different dimensionalities (I mean here the number of large dimensions) and different physical parameters can be embedded one into another. In order to create multidimensional physics we firstly should create multidimensional geometry. This will be done in the next section.

DUAL METRIC MODEL OF MULTIDIMENSIONAL GEOMETRY

The concept of multidimensional geometry itself has a dualistic meaning: each surface may be embedded into a higher dimensional bulk and at the same time it may contain lower dimensional surfaces embedded in it. Multidimensional geometry is tightly connected with the basic rules of human perception and depends on how we explain the terms "dimension", "embeddance" and "space".

we should introduce new indivisible holistic objects with geometry based on smooth infinitesimal analysis - elastic membranes.



Real Image Picture = 1/n square

720 degree phase rotation

REVOLVING DOOR becomes the vehicle particle with & antiparticle to join our universe and other universe through **BLACK** Hole & WHITE Hole.



Plane Magic Square K.I. Theorem $n = 16x^{2}$ n is the division total of Plane Magic Square. 16 is fixed number of **IKOSOLID**



Real Image Picture

= 1/n square

the

surface

on IKOSOLID

circulates in

IKOSOLID.

of

Connect each neighboring two sides. Then, one IKOSOLID appears degree The 90 topological transformation



Solid Magic Square IKOSOLID



our perception may be considered as the result of elastic oscillations of two dimensional (2D) elastic membranes with closed topology embedded in our bodies.

$\frac{\text{Two dimensional (2D) elastic membranes with closed topology}}{\text{embedded in our bodies}}$

Closed 3D

Closed

bodies

embedded

Plane Magic Square

XY

Closed

Male

Male

topology

Closed 2 D.

embedded in our

bodies as DNA of

The magic square of the symmetry to the 3 directions. This moving in the 3 directions stops at the outer fence side.



Elastic oscillations of two dimensional (2D) elastic membranes with closed topology embedded in our bodies.

It changes **closed topology embedded in our bodies** into **opened topology** <u>embedded in our bodies.</u> It changes DNA of the male into the female.

topology

in our



10

The transmission moving of elastic oscillations of Multiple two dimensional (2D) elastic membranes with **opened topology** = The symmetry transmission movement of 1/n square to the 4 directions which are related to String Theory and Knot Theory is the multiple two dimensions spin network.



IKOSOLID (Solid Magic Square).

K.I. DIAGRAM that it transforms a multiple two dimensions body into the solid magic square of 3D IKOSOLID.

reference Study of connecting point with three-dimensions and four-dimensions by pictorial art Part 3 http://koeiikuyo.web.fc2.com

4. "K. I. combination-2" = the cross combination of one half IKOSOLID It is the figure just before Magic Squared Picture becomes Moebius Strip; the figure just before the plane/finite Magic Squared Picture transforms to the dimensional/infinite and endless (circulating) Magic Squared Picture, the figure just before the finite transforms to the infinite.



When the edges of A=A'' B = B' C = C' D = D'Are combined, one IKOSOLID appears.

Photo 1

* The Magic Squared Picture is described as un-figured in order to make the combination of Magic Squared Pictures on the wall of one half of IKOSOLID more precise and clearer. The Magic Squared Pictures are put all over IKOSOLID.

The 3D spin network of IKOSOLID which is related to the Loop Quantum Gravity Theory, with closed topology and opened topology .

D - 2 It projects the usual square which doesn't have a 90 degree topological transformation onto usual solidness. <u>Closed topology</u>

Reference : study c.p.t.f.p.a part - 6

The usual square (= the plane two dimensions body) is the prototype in the three dimensions world. In the plane two dimensions body there are only X axis (Either side) and Y axis (The front and the rear) and the Z axis(The top and the bottom) is hidden in the surface center-point .



D-3 It projects the square which changed in the quality with 90 degree topological transformation by IKOSOLID onto usual solidness. Opened topology



6

Figure 3-d-2

Internal observer can see going in and out particle and an antiparticle in this 3D like External observer.

14

is the point with feature of 90 degree topological

the

transformation

D - 4 It projects the usual body-centered cubic structure which has minus-SEPTIMALNOTATION of 1 : - 8 without 90 degree topological transformation by IKOSOLID onto usual solidness. Closed topology



In usual solidness, because it lurks, usual body-centered cubic structure can not clarify. It isn't possible to be eloquent of minus-SEPTIMALNOTATION of 1 : - 8.

D - 5 The square (SEPTIMALNOTATION of 1:6) which changed in the quality with 90 degree topological transformation by IKOSOLID . And the body-centered cubic structure (minus-SEPTIMALNOTATION of 1:-8) which changed in the quality with 90 degree topological transformation by IKOSOLID = Opened body-centered cubic structure . <u>Opened topology</u>

a. The body-centered cubic structure (minus-SEPTIMALNOTATION of 1: -8) which changed in the quality with 90 degree topological transformation by IKOSOLID = Opened body-centered cubic structure



b. It projects opened body-centered cubic structure(minus-SEPTIMALNOTATION of 1 : - 8) which changed in the quality onto the square (SEPTIMALNOTATION of 1 : 6) which changed in the quality.



c. In opened body-centered cubic structure, projected square which changed in the quality penetrates into Usual square trace



d. It projects square which changed in the quality (Figure 5-b-1 & Figure 5-b-2) onto usual solidness.



e. The solidness (Figure 5-d-1)which changed in the quality penetrates into the trace of usual solidness.



Opened body-centered cubic structure manifests in the solidness which changed in the quality. That is, the structure of minus-SEPTIMALNOTATION of 1 : - 8 emerges in the solidness which changed in the quality.

D - 6 The fundamental form of the three-dimensional 8 directions (4 directions of the length, 4 directions of the diagonal side. IKOSOLID minus-SEPTIMALNOTATION of X³ of 1 : - 8) *Reference : Theme A* study c.p.t.f.p.a part -5 (3.31MB)





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D-7 The fundamental form of the lump of IKOSOLID

As the feature structure : the three-dimensional 8 directions (4 directions of the length, 4 directions of the diagonal side. IKOSOLID minus-SEPTIMALNOTATION of X^3 of 1 : - 8) and as the outer fence structure : the three-dimensional 6 directions (2 directions of the length, 4 directions of the side. IKOSOLID SEPTIMALNOTATION of X^3 of 1 : 6)

a, The rule of the structure : The overlap connection (The length and the diagonal side) $\cdot\,\,\cdot\,\,$ The monopole

The diagonal transversal connection which doesn't overlap $\cdot \cdot O + A$ or A + O* Only the overlap connection of the vertical connection among the fundamental forms. [-7A]+[-8A] or [-7O]+[-8O]



B. K. I. Diagram to CONCLUSION 2 of Dr. Egoyan's paper "ELASTIC MEMBRANE BASED MODEL OF HUMAN PERCEPTION"

2. The new model of multidimensional geometry based on smooth infinitesimal analysis has been proposed. The proposed geometry has four features, which distinguish it from the existing geometries:

a. It is holistic. Space is represented as interweaving of connections; each point exists only in the context of the background space, which may be understood as indivisible whole.

b. It is really multidimensional. Point-connections of different dimensionality have different topology.

c. It is elastic. Embedded surfaces possess dual metric: internal and external. They can change their form in the bulk without changing the internal metric;

d. Structures composed of holistic elements – "point-connections" have a metric embedded in them: from the inside the metric has a discrete character and it will be continuous from the outside.

(Excerpt: the conclusion 2 from conclusion 1~10 of Dr. Egoyan's paper)

a. It is holistic. Space is represented as interweaving of connections; each point exists only in the context of the background space, which may be understood as indivisible whole.



b. It is really multidimensional. Point-connections of different dimensionality have different topology.



Point-connections of different dimensionality have different topology.

IKOSOLID SEPTIMALNOTATION of 1 : 6

Two points connections which are in the symmetry



IKOSOLID SEPTIMALNTATIN of X^3 of 1:6as a conductor Structure of only point-connections



The connection of the top and the bottom point



IKOSOLID minus-SEPTIMALNOTATION of 1 : - 8.

One point connection with one piece of asymmetry



IKOSOLID minus-SEPTIMALNOTATION of X³ of 1 : - 8 as a conductor Structure of only point-connections

The point connection as the solid benzene

Asymmetry Symmetry





The connection between edge and edge or point (the tip) and point (the tip) Point-connections have two ways in the symmetry and asymmetry. c. It is elastic. Embedded surfaces possess dual metric: internal and external. They can change their form in the bulk without changing the internal metric;



Without changing the total of 1/ n square, the size of whole IKOSOLID can be changed.

They can change their form in the bulk without changing the internal metric; Without changing the size of whole IKOSOLID, the total of 1/ n square can be changed. <u>They can change the internal metric</u> <u>without changing their form in the</u> <u>bulk</u>; (As adding and the opposition)

 $n = 16x^2 n$

square

n is the total of 1/n

16

1/ n square

Embedded surfaces possess dual metric: internal and external. Both observers of <u>internal and external</u> know these dual metrits



<u>Dual metric</u> as the multiple two dimensions body of IKOSOLID

bulk; (As adding and the opposition) hal and external. hd external know these dual metrits Big right angle isosceles triangle



<u>Dual metric</u> as two kinds of right angle isosceles triangles of IKOSOLID

Big right angle isosceles triangles is 8 Small right angle isosceles triangles is 16

d. Structures composed of holistic elements – "point-connections" have a metric embedded in them: from the inside the metric has a discrete character and it will be continuous from the outside.

Structures composed of holistic elements



Verification that IKOSOLID changes m to m'. (Refer to "Study of connecting point with three-dimensions and four-dimensions by pictorial art Part 5") m is three-dimensional volume energy, which is changed into m' (septimal notation structure of 1:6) by changing six faces of volume energy (m) of the cube (=crystal cube) into six dots.



C. K. I. Diagram to CONCLUSION 3 of Dr. Egoyan's paper "ELASTIC MEMBRANE BASED MODEL OF HUMAN PERCEPTION"

3. Reality may be considered as the process of time evolution of holistic energetically very weak macro objects -elastic membranes with the geometry based on smooth infinitesimal analysis. An embedded membrane in this multidimensional world will look different for the external and internal observers: from the outside it will look like a material object with smooth infinitesimal geometry, while from the inside our Universe-like space-time fabric.

(Excerpt: the conclusion 3 from conclusion 1~10 of Dr. Egoyan's paper)

Reality may be considered as the process of time evolution of holistic energetically very weak macro objects -elastic membranes with the geometry based on smooth infinitesimal analysis.



Elastic

<u>Membrane</u> (The reverse of the lower section is time.)

<u>Membrane (The surface of</u> the upper section is time.)

Elastic

The process of time evolution of holistic energetically very weak macro objects -elastic membranes with the geometry based on smooth infinitesimal analysis.

An embedded membrane in this multidimensional world will look different for the external and internal observers



Internal observer's sight **Nonlinear** connection



External observer's sight Linear connection

From the outside it will look like a material object with smooth infinitesimal geometry, while from the inside our Universe-like space-time fabric.

<u>A material object with smooth infinitesimal geometry</u> = IKOSOLID <u>Universe-like space-time fabric</u> : Space is Tip of IKOSOLID. Time is Surface of IKOSOLID.



D. K. I. Diagram to CONCLUSION 4 of Dr. Egoyan's paper "ELASTIC MEMBRANE BASED MODEL OF HUMAN PERCEPTION"

4. When interacting with elementary particles and other membranes, a membrane will transform their energy into its elastic energy (a new form of energy) - the energy of stretching of the infinitesimal segments. The theory postulates that these elastic deformations will not be observable from the point of view of the internal observer. Heisenberg's uncertainty principle will work in this physics only from the point of view of the internal observer. For the external observer each embedded elastic membrane may be stretched and even a very small region will become observable.

(Excerpt: the conclusion 4 from conclusion 1~10 of Dr. Egoyan's paper)

When interacting with elementary particles and other membranes, a membrane will transform their energy into its elastic energy (a new form of energy) - the energy of stretching of the infinitesimal segments.



small region will become observable.

The theory postulates that these elastic deformations will not be observable from the point of view of the internal observer. Heisenberg's uncertainty principle will work in this physics only from the point of view of the internal observer.

these elastic deformations will not be observable from the point of view of the internal observer.



Other universse & The Place of Antiparticle are on this reverse of the lower section

Other universe of the multiple two dimensions body is out of view of the internal observer who has Heisenberg's uncertainty principle.

<u>Heisenberg's uncertainty</u> principle will work in this physics only from the point of view of the internal observer. In the physics of the 1 layer two dimensions, the multiple two dimensions body can not be understood.

For the external observer each embedded elastic membrane may be stretched and even a very small region will become observable.



observable.

E. K. I. Diagram to CONCLUSION 5 of Dr. Egoyan's paper "ELASTIC MEMBRANE BASED MODEL OF HUMAN PERCEPTION"

5. According to the theory an embedded membrane may be considered as a holistic excitation of the bulk, while elementary particles, in contrast, are systems of point-like excitations of the elastic membrane.

(Excerpt: the conclusion 5 from conclusion 1~10 of Dr. Egoyan's paper)

According to the theory an embedded membrane may be considered as a holistic excitation of the bulk, while elementary particles, in contrast, are systems of point-like excitations of the elastic membrane.

systems of point-like excitations of the elastic membrane.



Place of Antiparticle as Space on surface

F. K. I. Diagram to CONCLUSION 6 of Dr. Egoyan's paper "ELASTIC MEMBRANE BASED MODEL OF HUMAN PERCEPTION"

6. In the context of the new approach Loop Quantum Gravity and String Theory are complementary: Loop Quantum Gravity represents the point of view of an internal observer, String Theory, when powered by elastic features and being really multidimensional, will describe the point of view of an external observer.

(Excerpt: the conclusion 6 from conclusion 1~10 of Dr. Egoyan's paper)

In the context of the new approach Loop Quantum Gravity and String Theory are complementary: Loop Quantum Gravity represents the point of view of an internal observer, String Theory, when powered by elastic features and being really multidimensional, will describe the point of view of an external observer.



String Theory





The theory to join and to make <u>String Theory</u> and <u>Loop</u> <u>Quantum Gravity</u> leap



Loop Quantum Gravity

G. K. I. Diagram to CONCLUSION 7 of Dr. Egoyan's paper "ELASTIC MEMBRANE BASED MODEL OF HUMAN PERCEPTION"

7. According to the proposed model living organisms may be treated as elastic two dimensional holograms embedded into higher dimensional space-time.

(Excerpt: the conclusion 7 from conclusion 1~10 of Dr. Egoyan's paper)



H. K. I. Diagram to CONCLUSION 8 of Dr. Egoyan's paper "ELASTIC MEMBRANE BASED MODEL OF HUMAN PERCEPTION"

8. It is shown that our perception may be considered as the result of elastic oscillations of two dimensional (2D) elastic membranes with closed topology embedded in our bodies. Only one elastic membrane responsible for its perceptions will correspond to the selected organism, but there may be other membranes, even at the cell level.

(Excerpt: the conclusion 8 from conclusion 1~10 of Dr. Egoyan's paper)

It is shown that our perception may be considered as the result of elastic oscillations of two dimensional (2D) elastic membranes with closed topology embedded in our bodies.



Our perce	eption	,the	resul	t of
elastic o	scillati	ions	of	two
dimension	al	(2D)	el	astic
membrane	s s	with	cl	osed
topology	embe	dded	in	our
bodies				

The two dimensions body of 1 layer <u>Closed topology</u>

Most existence of 3-D becomes two dimensions body of 1 layer. That is, the two dimensions body of 1 layer has only the surface.



It doesn't form in the two dimensions body of 1 layer. The multiple two dimensions have both sides (The table and the reverse).

Only one elastic membrane responsible for its perceptions will correspond to the selected organism, but there may be other membranes, even at the cell level.

with opened topology embedded in

the body of IKOSOLID



Opened 3D A quarter of IKOSOLID

I. K. I. Diagram to CONCLUSION 9 of Dr. Egoyan's paper "ELASTIC MEMBRANE BASED MODEL OF HUMAN PERCEPTION"

9. Elastic membranes stretch and propagate along the direction of attentive focus and occupy energetically favorable positions around microtubules involved into ORch OR. In these positions membranes start squeezing and become sensitive enough to produce perceptions.

(Excerpt: the conclusion 9 from conclusion 1~10 of Dr. Egoyan's paper)



J. K. I. Diagram to CONCLUSION 10 of Dr. Egoyan's paper "ELASTIC MEMBRANE BASED MODEL OF HUMAN PERCEPTION"

10. The proposed model may help us to understand not only the physics of perception, but the intrinsic features of perception as well. The method also gives us explanation of energetically very weak processes – under certain conditions elastic membranes have influence on the consciousness processes and become experimentally detectable.

(Excerpt: the conclusion 10 from conclusion 1~10 of Dr. Egoyan's paper)

The proposed model may help us to understand not only the physics of perception, but the intrinsic features of perception as well.

The physics of perception

