

About the Super-string Theory series

Not to represent universe, the image which is touched off from thought of cosmological theory is developed.

I have a deep-rooted desire that I'll manage to learn the following problem while I am alive.

The problem is three, "what is human beings, what is existence and how does universe become?"

Thus, these were invented as the main theme for this series.

1) Problem of "What is human beings?"

"Inclusion - suffering inclusion" ("structure of the part" that becomes detailed) comes in succession and has become the plural layer nests, even in human existence.

The part made detailed has not only the entire part but also originality.

Human has the scream of such "part" that became detailed. Human must be human with the set of those scream as for human.

Naturally, I cannot help facing the problem of base point of existence from such an idea.

The scream which is accumulated from the bottom in this base point 'Monade' is something which it should name the liberating impulse.

This liberating impulse resists all totalizing, and seeks the freedom of each existence. The cell, the blood and the meat, the hand and the foot, the internal organs and the nerve, even the one of the hair and the brain, in the respective will.

When such a problem is placed in the original first theme, it goes inevitably in association with forming 'matière'. As a physical act and the experience on the canvas --.

The impulse getting up deeply from the inner part of body selects the needle, the knife and the sandpaper, the shivering of 'Monado' demands making of the painting multilayer, the existence impression of 'matière' becomes the proof of each existence.

2) Problem of "What is existence?"

The detail of body as a structure reaches to quantum theory in the ultimate. Because quantum theory is the study which handles the minimum of substance. So, if it never thinks about the existence of substance, search concerning the human is impossible.

In quantum theory, "the pile of quantum" and uncertainty principle are the axis of theory. According to that, the substance in the macro-world has only one how to see it, but it is seen only the theory of probability in the micro-world (It does not exist.).

The macro or micro is "relative problem of scale and size and others" which is defined by the position on the seen side. Therefore, it cannot be concluded, "There is no problem because the human existence is a macro". Because all existence is the structure with the substance of micro.

It is sure that such a minimum problem causes a variety of thinking images, and invents as not only an abstract expression but also the thinking as real existence.

3) Problem of "How does universe become?"

Quantum theory and gravity theory (theory of Relativity) try to be integrated by the quantum gravity theory. It is because the maximum substance named universe is treated as the original first of universe, in a word, the minimum big band

According to "super-string theory" that is the latest theory, the substance is made by the vibration of minimum string energy, in addition, it is said that this string will have confined the multiple dimension in substance.

Maximum universe starts from the big bang of minimum, and if size and scale are the problem of relative aspect, universe is still thought to be in the whirlpool of minimum big-bang.

In a word, if universe is in "substance of the big bang", there might be "correlation of the reciprocal" that also universe has been coiled by the maximum string energy.

It tries to form and to compose the plane surface by the possibility of thinking image in this series, though it might be able to be said that it is the impossibility of painting that expresses multiple dimension by two dimensions.





Super-string

10⁻⁴⁴ sec. —Occurrence of gravity

2006.11, oil, canvas, F120×4 (521.2×194.0cm)

This work is the one that production process was opened to the public for two months over (2006.10.-11.) at BankART Studio NYK, Yokohama city.



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"10⁻⁴⁴ sec." of the title is a minimum size at time (Planck time), and it is timing that gravity had been first occurred among four forces (universal force; strong force, weak force, electromagnetic force and gravity) which had existed in universe 10⁻⁴⁴ seconds after the big bang. Gravity in the micro-world is the weakest force, but it is assumed that in the macro-world it causes force for all the one that exists in an infinite distance.

As for the big work which uses 4 canvases of 521.2×194 cm, " 10^{-44} second" is theme. Because that is too small size, it has represented the fearful time size that has transcended the moment.

The trace of cable buried under transverse through all canvases and this 'matière' of swelling paints have displayed the string energy. The beginning of universe which had been tightened with the string generated the gravity in that first period. Then the basic force of universe was born. This work is made from such thinking image.

Force is the respective quantum existence, gravity has the particle image of graviton. Around the big bang, there is an elliptic universe circle which shows the range of the time of universe, and many lumps of infinite form in the foundation of canvas made by masking are the image of multidimensional lump.

In addition, those make the pile of layer of paints bare, emphasize the multilayer conversion of plane surface.

The canvas as a cloth, the exposure of wooden framework, the ambiguous relationship of those which encircles and which encircled, reverse side and right side, the one that turns, the one tucked in. Including facing with the reality, the meaning that space-time sheet with curvature has multiplexed is included in these.

In this work, artist has existed in the act of creating. It doesn't describe the relation with a physical distance of artist and work. It exists respectively in an innumerable line (It was cut by the needle), and exists inside the lump of innumerable, rough grainy paints (It was cut in pieces and having changed in quality).

In a word, this 'matière' is "shivering frenzied bubble" originated from each base point of existence in large quantities. And, all of these acts are quietly swallowed at the redoubtable minimum time of 10⁻⁴⁴ second.



Super-string Theory

2005.7, oil, canvas, F100×5 (651.5×162.0cm)



Super-string Theory

Seeking "liberating impulse of all existence or respective existence" and "cosmological theory what's freedom" on the far side of super string theory.

While producing the works for "Super-string or the liberating impulse that getting up, in 7th private exhibition" and "the small series of White Image, in 8th private exhibition", I have found a certain directionality which is a method of forming pictures by buring the string, scraching and grinding. The production of large size works with this technique have been planned immediately after this.

Though the thought "liberating impulse" till then arose from the search to the lower layer of existence to approach current "man→body→cell→'Monade'", in addition, being greatly touched off a stimulative modern physics that minimum quantum and maximum universe unite by the string theory, I had decided to designate the "Super-string series" as big theme. Because this thought continues essentially to the liberating impulse which is problem of oppressing and freedom.

In this picture a set of five pieces, the minimum is wave motion and vibration of light and string, and the maximum of universe is the big change of space and time.

To express a vibrating string and a huge string with big undulation, hemp and palm ropes and cotton threads were buried in the foundation, and a large amount of oil colors were painted many times, in addition, it was scratched with the needle and the knife, furthermore it was ground with the sandpaper many times.

'Monade'→cell→"the rhythm of body", in other words, a physical act of "liberating impulse" is here. And, it connects directly with forming the 'matière'.

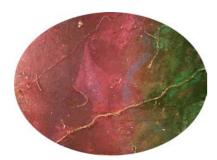
All vibration of strings have encountered to this liberating impulse on the canvas.

I think that universe is deeply related to the rhythm of existence and the rhythm of body.

With physical job, the following some respects are significant.

- · Repetition of pure, physical act.
- The movement of primitivity in "creative act".
- · Liberating impulse of "each existence" included to the existence.

[Large work of 6.5 meters in width, 5 canvases, 2005.5.26-7.20. The record of photograph of production process has been disclosed with WEB.]









Super-string
Occurrence of liberating impulse
L, C, R

2005.12, oil, canvas, F100 (130.3×162.0cm)



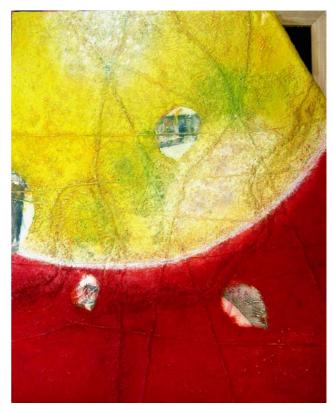




Super-string
Search for liberating impulse I, II

2006.4, oil, canvas, F100 (130.3×162.0cm)





Super-string 10⁻³⁶ second (L, R)

2006.7, oil, canvas, F100 (130.3×162.0cm)





Super-string
Thinking image of super-string theory I, II

2006.10, oil, canvas, F100 (130.3×162.0cm)

Super-string
Super-string, or liberating
impulse getting up

2005.2, oil, canvas, F100 (130.3×162.0cm)





Super-string
Remote power

2006.8, oil, concrete panel, 90×180cm

D-brane

Dirichlet menbrane.

This assumes Dirichlet boundary condition (boundary condition on a fixed edge) to be menbrane of the dimension, and opened super-string moves about there. This is thought to be a theory that connects the super-string to the black hole.

In the work, the image of various super-strings moves on the menbrane of quantum 'D-brane' as a menbrane sheet of universe.

Image of wave motion of light and spiral, super-string that exists in the background as slipping, or menbrane piled up. Round symbol with color like cutting plane of string that ties menbrane piled up.

The minimized substance of universe sheet, anti-dimention, and spin of quantum etc. have scattered to the background of screen with feeling of quality also that is the residue of geometrical.

And, white 'imaginary space' with a faint pink color has spread to cut out the canvas to the other side of 'D-brane'.



Super-string **D-brane**

2007.7, oil, canvas, F100 (162.0×130.3cm)



Transition 1, 2

Phase transition means that the phase of a certain substance turns to the phase of another form. In mathematics of super string theory, it is meant that the dimensional space which is tightened by the string energy shifts to the space of another form.

It seems to be related to the M theory that geometry and mathematics of plural super string theories are another appearance of one principal theory, and to the idea that the big bang is born from the black hole.

In addition, it is suggested that just changing the viewpoint changes the object, also the substance itself naturally changes in other physical state or space phase.

Basically, the dimension is the idealized scale, but "Transfer 1" is the following image. When the space that was born suddenly in the substance is ripped and transfers the phase, the dimension with curvature springs out. Four forces, or four dimensions. The string energy of being about to burst hint the flop transfer. (flop transfer: In Calabi-Yau space that is the geometry of string theory, the transfer restores the ruin of space by converting the phase of space.)

"Transfer 2" is the image of twisting tube and ring with quite different shape, though it looks similar to "Transfer 1". It is not possible to match viewpoints at the same time, but it exists in the position where the same substance differs simultaneously.

In the respective work, strings of being torn are imbedded on the bottom of yellow paint.

Super-string **Transition 1. 2**

2007.3, oil, canvas, P20 (53.0×72.7cm)





Super-string Universe sheet 1, 2

2007.5, oil, canvas, P20 (53.0×72.7cm)

Universe sheet

Universe sheet is a symbol of the image on the world sheet abstracted more. And, curve of time-space, occurrence of the black hole and the big-bang and material and antimatter, etc. are expressed in this work. This is a cross section of universe.

In addition, looking down on this symbol from a flat aspect is the main theme of this work.

Moreover, 'geometrical shadow and free-form curve in the back' and 'exposed basic layer that showed the other side of the dimension' were composed. In giving a soft floatage feeling by accompanying a certain kind of emotion.

Some small circles divided into black and white symbolize the spin of the quantum.









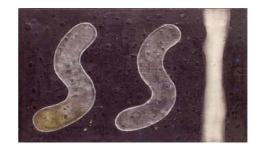


Super-string

Universe sheet (short piece) 1 to 5

2007.5-6, oil, canvas, S0 (18.0×18.0cm)









Super-string
Uncertainty principle 1 to 4

2007.3, oil, canvas, M6 (41.0×24.2cm)

Uncertainty principle 1 to 4

These 4 works of 41×24.2cm do not use the string unusually.

Title is "Uncertainty principle" of quantum theory.

After mixing the resin into the powder of carbon black, I painted it many times on the canvas, and polished with the cloth, put out the gloss like the silk. Before that, I scattered the color point of acrylic paint in the foundation.

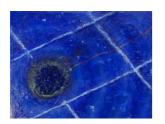
The figure seen shape of S character is the substance which represents phase transition, and is itself the string. Silver is based color, but with increasing the figure it makes the variation of changing the erosion by using gold. Superposition and uncertainty......

In addition, in the foundation which removed the masking, the faint slit reminds us the double slit experiment of light, and it impresses the world of the quantum.











Super-string
Life field 1 to 5

2007.6, oil, canvas, F6 (41.0×31.8cm)

CMB (Cosmic Microwave Background) 1 to 5

These are 5 works which designate "Cosmic Microwave Background" as theme.

400,000 years after the big bang, the universe had escaped from plasma state, and had entered the time called "clearing up of the universe". The microwave (photon) that was emitted in the cool transparent space had reached the entire universe, and then, that is the evidence of the big bang and the expansion theory of universe.

The pattern of curved line of strings and the unevenness pattern of grinding the lower stratum are images of photon which was influenced the red shift in consequence of the expansion of universe.

The part where masking was peeled off is concealed dimension, hither of the exposure, and also thither of the exposure.











Super-string

CMB (Cosmic Microwave Background) 1 to 5

2007.3, oil, canvas, P3 (19.0×27.3cm)

Lump of anti-dimension 1 to 5

"String energy" of simple arrangement has tightened the substance and the space. With the side, like the lump of dimension has displayed the one part of substance.

In addition, white flatly image of "anti-dimension" which hidden in the vacuum is a pair of dimension.











Super-string

Lump of anti-dimension 1 to 5

2007.3, oil, canvas, F3 (22.0×27.3cm)















2007.7, oil, canvas

Wide, weak graviton, F3 (22.0 \times 27.3cm)

Inflation, F6 (31.8×41.0cm)

(22.0×27.3cm) untitled, F10 (45.5×53.0cm)

Shock to inclusion relation, F3

Certain illusion C, F8 (38.0 \times 45.5cm)

Thus, F3 (22.0×27.3cm)

untitled, F6 (31.8×41.0cm)

Feature of works

Imbedding the hemp rope, the palm rope and the cotton thread etc. to the canvas, I paint large quantities of oil colors many times repeatedly. It is also repeated scratting by the needle and grinding with the sandpaper, while painting the canvas. By doing that, the conceptual image is progressed that based on the expression of the 'matière' with the real existence feeling. In addition, exposure of masking part; folding of canvas; exposure of wooden framework, and so

A production concept

Theme of these two years is the image of thinking about "Super-string Theory" that connects quantum theory and Relativity, also is the problem of oppression and freedom.
The image of thinking has been expressed to the canvas by contemplating "What is human beings, what is existence and how does universe become?"

Put emphasis on work production as the act of body, and it appears to the texture of 'matière', it is sure to become an expression of the problem of "Real existence".

Though I think that the source of work creation is in the primitivity of act, it has meant the liberating impulse of the inside world which is accumulated from the base point of existence.

In addition, the work of "consideration of the cosmology and the quantum theory" and poetries is announced at the same time with WEB and pamphlet for the exhibition and the distribution etc., and it has been converged in the field of creating canvas

Using many strings is practical image of super string theory. But, scratching, grinding, exposure and folding of the canvas are related to the following. Problem concerning with the multilayer pile of plane surface. What meanings are to wrap the actuality and to turn to the reverse side? Curvature space of Riemannian geometry. dimension, etc.

In the near future, as for problem of substance and universe, there is a possibility of becoming clear depending upon super string theory. Big turning of sense of values and world views is getting near, I am strongly touched off as an

Furthermore, I set up the production plan of the work to every private exhibition. According to the plan, I produce large and small size works as an individual theme of the super string series, and has announced energetically. (As for series works which are produced in these 2 years, there are 100 items or more including about 20 items above size

Painter's career

1951.5: Akira Kamita, Japanese, was born in Louyang, China.

2000.12. 25: Became aortic dissection.

2001. 5: Suddenly, had begun to paint in oils.....

2001.10: Started participation in the public advertisement exhibition.

2003. 6: Started the exhibition activity.

[Exhibition]

19th Exhibition: 2007.5., Akira Kamita 'Forming of cosmology', Ono gallery, Kyobashi, Tokyo. The exhibition was held 19 times between 2003-2007 in Ginza and Kyobashi. Tokyo. The exhibition of Super-string series becomes 13 times from the 7th exhibition, 2005.4.

[etc.]

Production of opening to the public, and exhibition of the work, BankArt NYK of Yokohama city, 2006.10.1-11.30. Super-string series '10-44 sec. --Occurrence of gravity'.

The selected work in the contest and public advertisement exhibition is many.

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Contemporary art

The Super-string Theory series



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