Mass, Energy, Space And Time System Theory –MEST

Avoid Next Dark Impaction

- **Author :** *Cao Dayong*
- *E-mail:* *caodayong@hotmail.com*
- *Avoid Earth Extinction Association*

Summary

- An idea about a balance systemic model between star and dark hole-SDS model is bring forward. The SDS model will explain of the dark matter and the dark energy. With a new idea of space-time and space-time center, it is a general model in the universe. This SDS model can use Einstein equation to give a characterization of universe without universe constant

- We do not understand there is a unite space-time of the universe. Everything has a space-time of themselves. The Big Bang is one kind of energy center system. It can take a negative curvature of its space-time. But the universe does not need expanding. Of course, we need explain of the Hubble's red shift in other way.

- Unfortunate, sun has a companion dark hole. They build up a SDS model. The dark hole can take its dark comets belt and the asteroids belt to seasonal impact our earth. So it is a Dark Impaction Model. It can cause seasonal extinctions on our earth. There are many events to show that the new impaction will come soon. We hope to use the SDS model rule to find a way to avoid the next dark impaction.

Outline

- A new impacted systemic model between the sun and a dark hole-SDS model can cause seasonal extinctions. The dark hole can take its dark comets belt and the asteroids belt to seasonal impact our earth. So it is a Dark Impaction Model. New observation maybe Support the SDS model.

- The next Dark Impaction will come in 20 years. Is it a dark comet who had hit on Russia on Feb. 15, 2013?

- Challenge to observe the group of the little dark comets and the little asteroids who will impact our earth.

- Is the dark comet made by the dark matter? What is the SDS model? We hope to use the electron neutrino to observe the dark matter, dark hole and dark comet, use the space-time effect to change the orbit of dark hole and avoid the next dark impaction.

"Seasonal" Mass Extinctions In Earth's History
Seasonal Extinctions=Seasonal Impactions

Call that a mass extinction? Rubbish. In the old days we had *proper* mass extinctions.
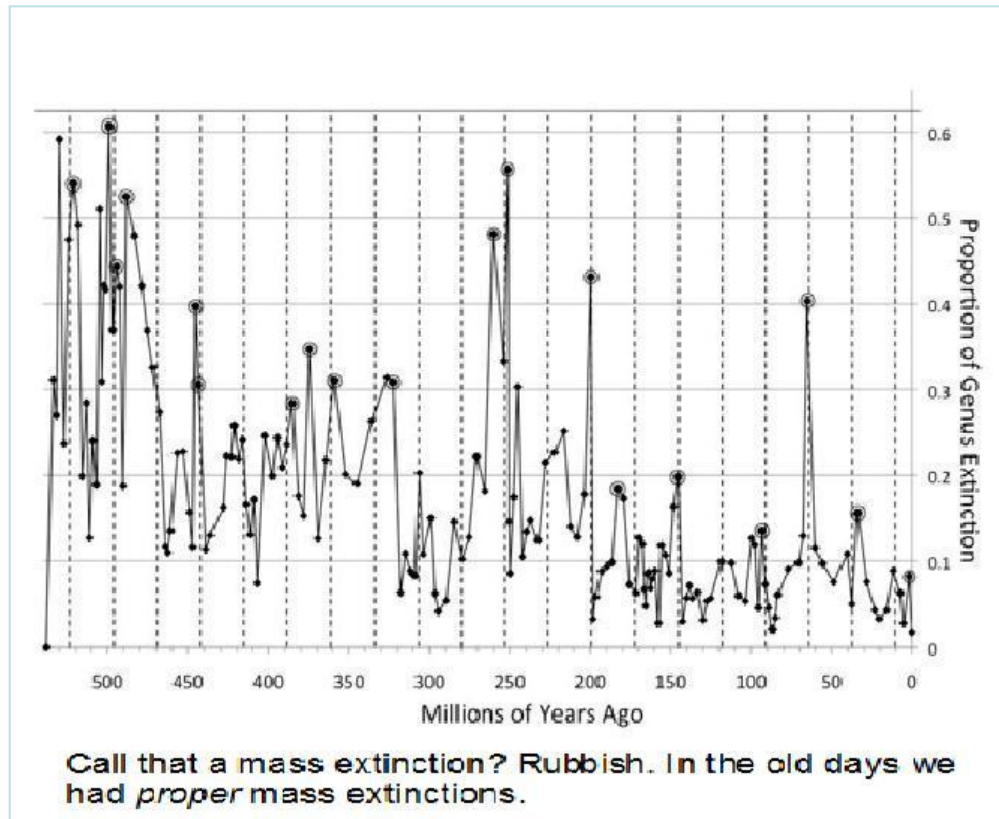
- "Life on Earth gets wiped out <u>every 27 million years</u>, say boffins". *(Richard K Bambach, Adrian Melott, The register 2010)*

- There are many points to show seasonal Extinctions in Earth's History.

- Because in every extinctions, there are a more higher abundance of iridium which is very rare in earth, but very common in comets or asteroids. So they are impacters.

A low probability impaction model:
'Nemesis' catapults comets at the Earth
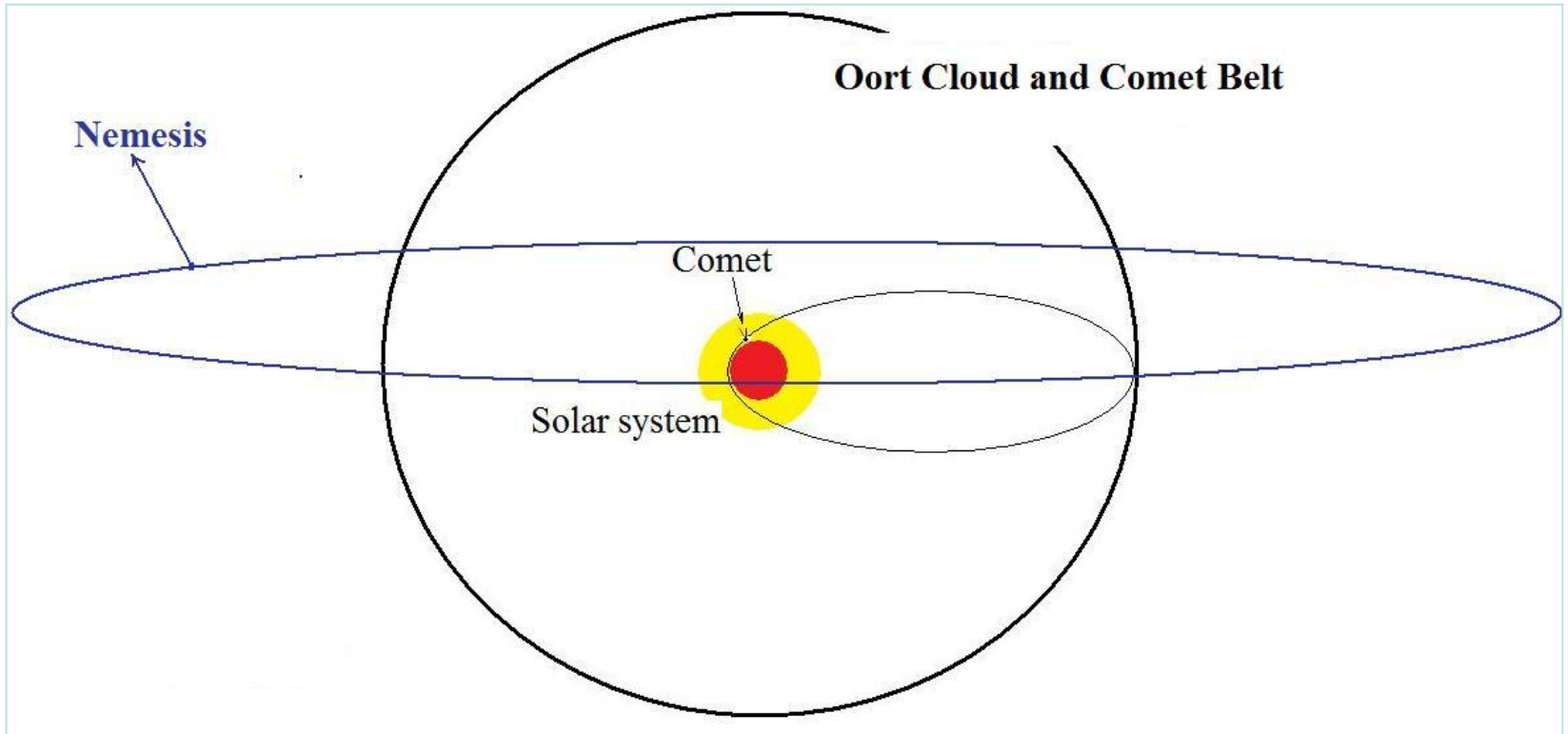
- When the Nemesis travels across the Oort Cloud, it will take some comets from the Oort cloud to impact on our earth. But this model can only take the a low probability impaction.
- So this model can not take comet or asteroid to seasonal hit on our earth.
- So it can not explain of these seasonal impactions.

The sun and a dark hole system-SDS model
# seasonal impactions = high probability impaction model
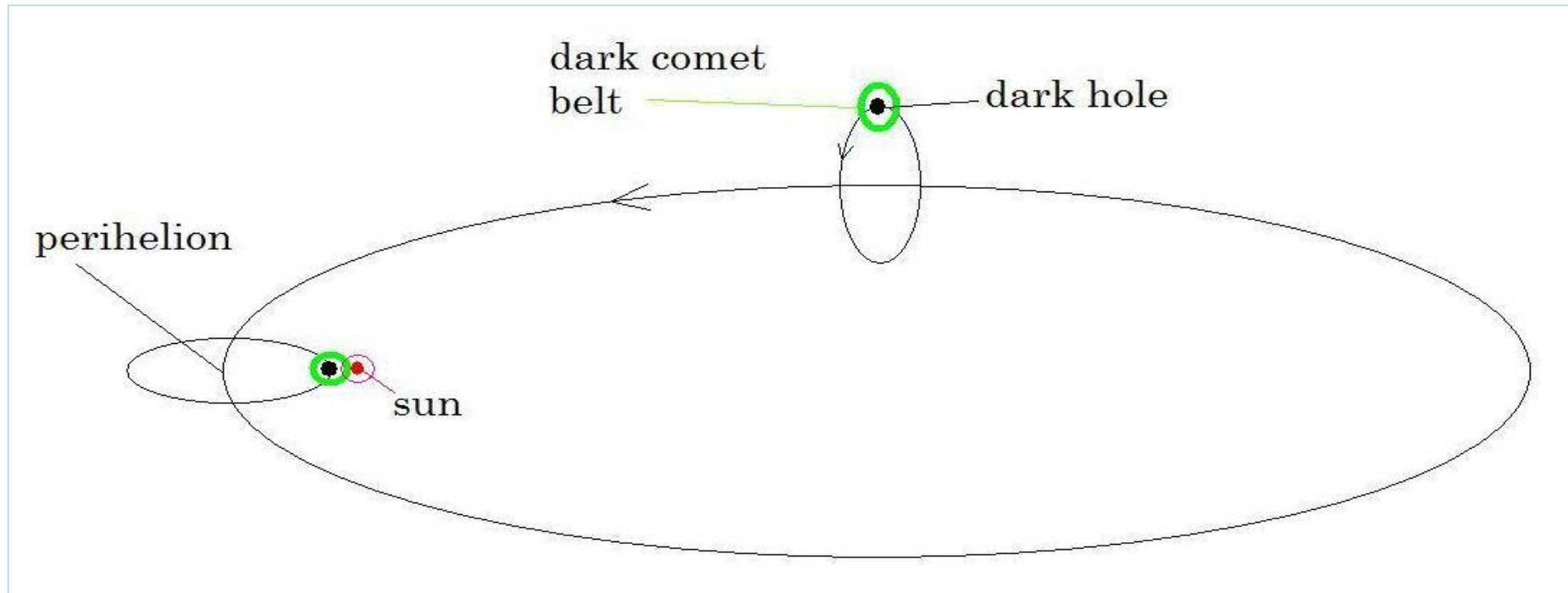
- Sun and dark hole build up a system. (Dayong Cao, 2008)
- The dark hole go near solar system every 25-27 million years.
- The dark hole takes its dark comets belt to go into the solar system to impact our earth, and changes the orbits of asteroids belt to impact our earth.
- So it is a Dark Impaction Model.

Some advantages of SDS model

- Every impactions can not change the orbit of the dark hole. So this model can keep a exact circle of these seasonal impactions.

- During these impactions, because there are many dark comets and asteroids to impact our earth. So it is a high probability impaction model for seasonal impactions. It can keep these seasonal impactions.

- Because this is a dark impaction model, so we can not observe it easy.

- Why the dark hole and dark comet are dark. Because they have space-time center. It is a special model and different from solar system model which has mass energy center.

Suppose:The "Tyche" Is The Companion Dark Hole Of Sun
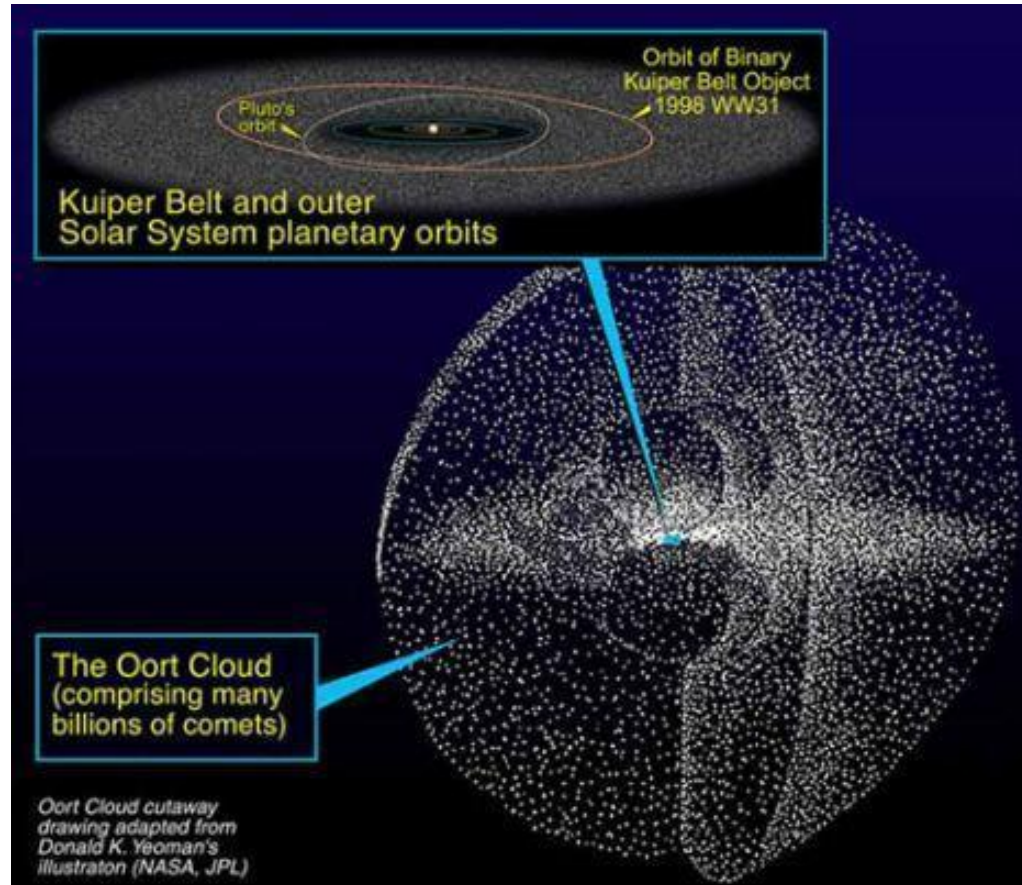
The map is from NASA 2011.

Because the Tyche model likes a dark and dense gas ball. And the dark hole has a space-time center and likes a dark and dense gas ball too. So Tyche and Oort Cloud model are like the dark hole model. And it is different from the solar system model.

10,000 Dark Asteroids (comets) Found **lurking** near Earth
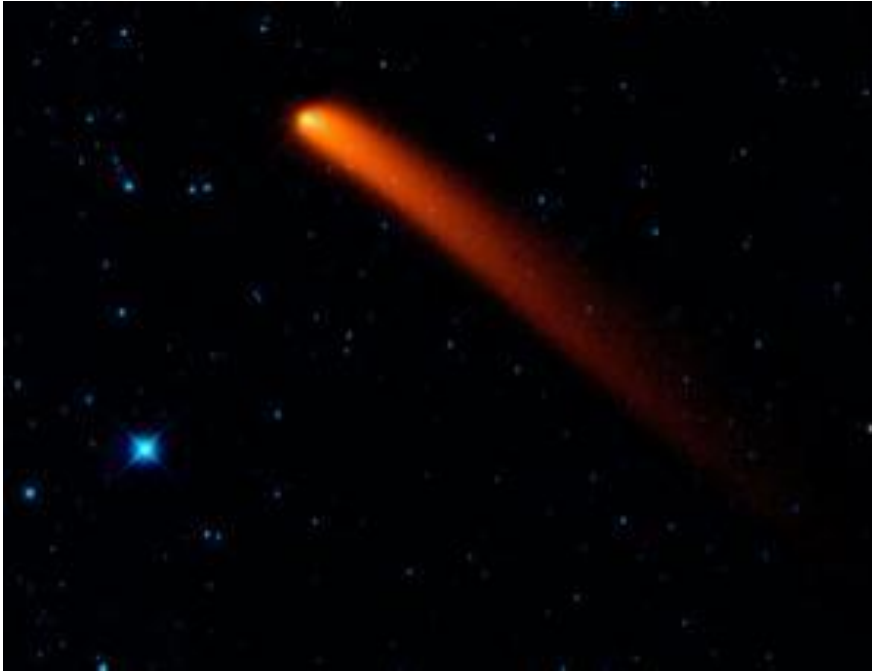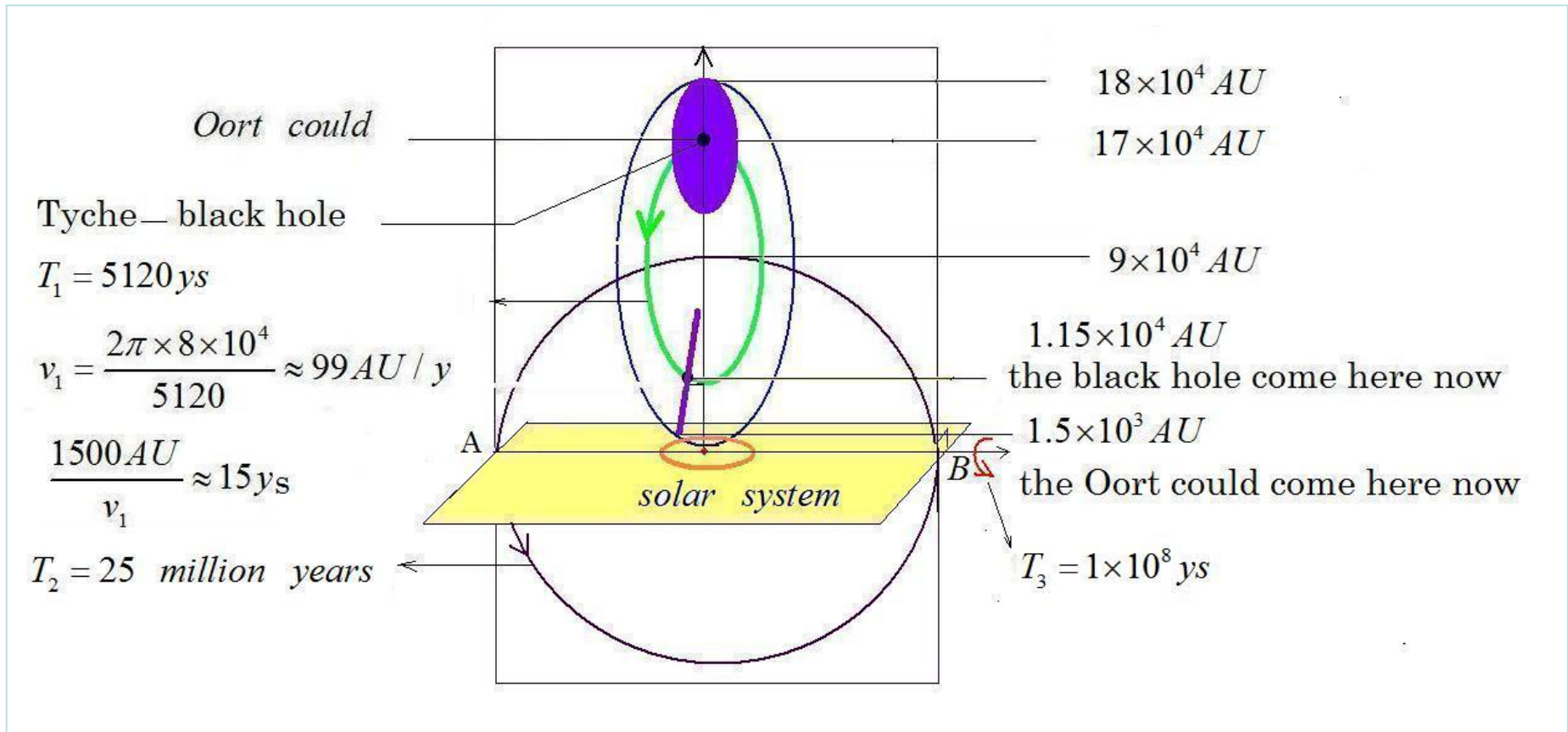

What is the orbit of Tyche ?
When will Tyche go near solar system?
Are there more and more dark comets
to go into the solar system?
Are these dark comets from Tyche?

- (see "Dark, dangerous asteroids found lurking near Earth" , *New Scientist 2010)*

- With very tilted orbits, these dark asteroids are drak comets which were from theTyche.

- After the impaction, many dark comets were arrested by the solar system. So they lurked in solar system.

- When the dark hole-Tyche goes near the solar system again, they will be actived. They will the first impact near planets.
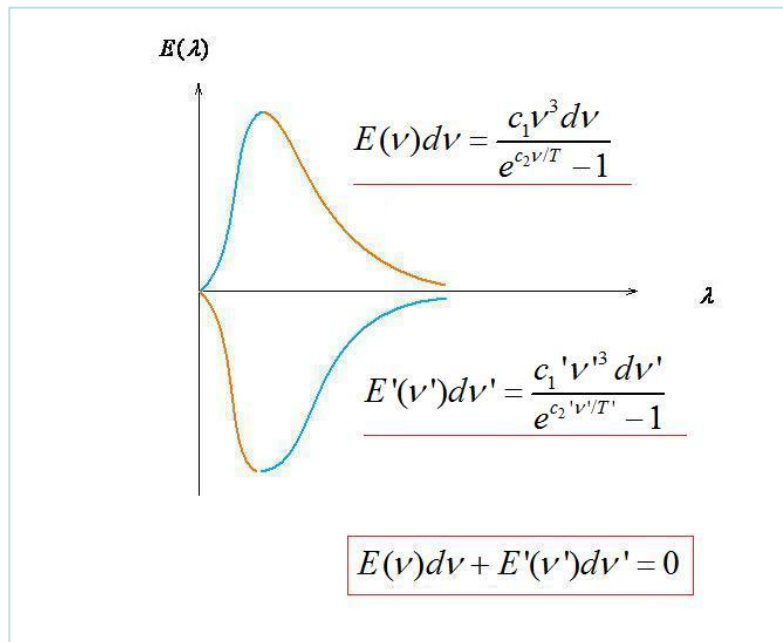
Forecast: the time of next dark impaction

Oort could

Tyche — black hole

$T_1 = 5120\, ys$

$v_1 = \dfrac{2\pi \times 8 \times 10^4}{5120} \approx 99\, AU/y$

$\dfrac{1500\, AU}{v_1} \approx 15\, ys$

$T_2 = 25$ million years

$18 \times 10^4\, AU$

$17 \times 10^4\, AU$

$9 \times 10^4\, AU$

$1.15 \times 10^4\, AU$
the black hole come here now

$1.5 \times 10^3\, AU$
the Oort could come here now

$T_3 = 1 \times 10^8\, ys$

A   solar system   B

- (see Daily Mail, "Massive dark object 'lurking on edge of solar system hurling comets at Earth", http://www.dailymail.co.uk/sciencetech/article-1336540/Massive-dark-object-lurking-edge-solar-hurling-comets-Earth.html)
- The next dark impaction will come in 20 years. (Dayong Cao, 2011)
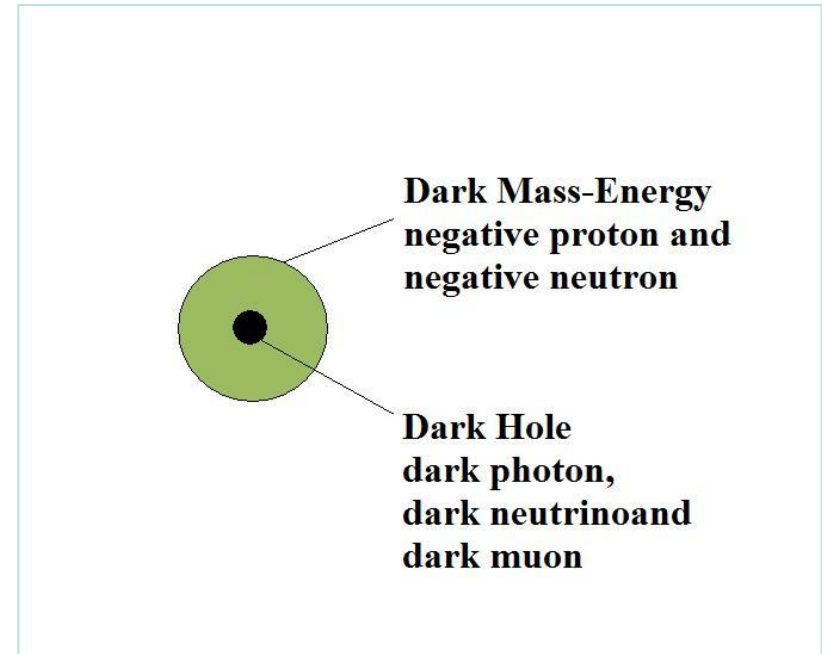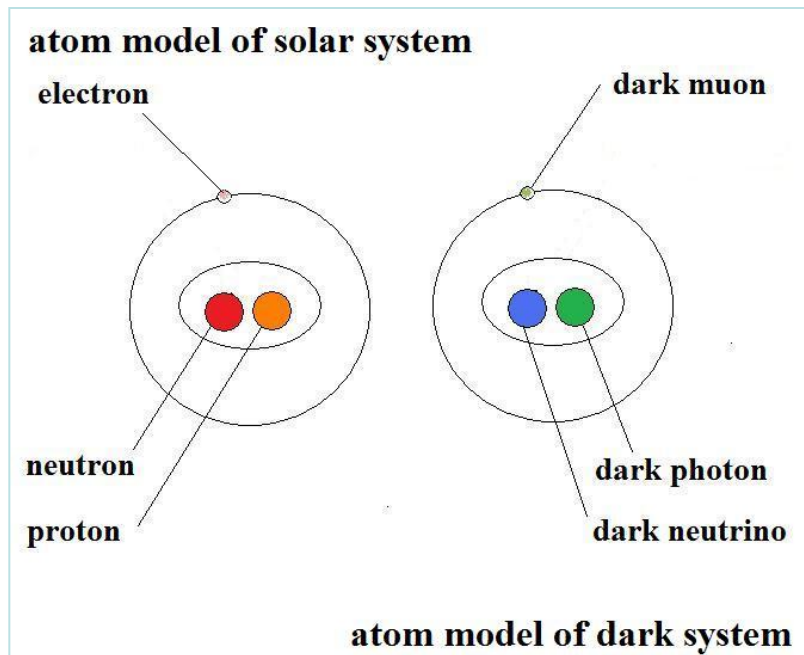
Dark comet and dark hole are dark matter

- Dark comet and dark hole do not radiate the light and reflect the light. So it is like the dark matter.

$E(\lambda)$

$$E(v)dv = \frac{c_1 v^3 dv}{e^{c_2 v/T} - 1}$$

$$E'(v')dv' = \frac{c_1' v'^3 dv'}{e^{c_2' v'/T'} - 1}$$

$$E(v)dv + E'(v')dv' = 0$$

E: black-body radiation, E': black-body absorption. (See Dayong Cao, http://meetings.aps.org/link/BAPS.2012.APR.E1.2)

- What is the dark matter? What is the space-time center model?
- The space-time center model likes a gas ball or black body. Because it absorb the light into its center, so it is dark.
- The dark matter has space-time center.

What Is The Dark Atom And Dark Mass-Energy?

atom model of solar system
electron
dark muon
neutron
proton
dark photon
dark neutrino
atom model of dark system

Dark Mass-Energy
negative proton and
negative neutron

Dark Hole
dark photon,
dark neutrinoand
dark muon

- The dark atom is made up from the dark photon, the dark neutrino, and the dark muon.

- The dark mass-energy is made up from the dark proton and the dark neutron.

dark matter come near our earth to cause current "biodiversity loss"

- Many scientists warn that a new extinction come. (see Anthony D. Barnosky, Nicholas Matzke, etc., "Has the Earth's sixth mass extinction already arrived?" , Nature, 2011）

- When the Tyche goes near our solar system, it can change our genetic code and cause current "biodiversity loss" . Such as we put acid into alkali.

- The dark matter can change dead plants and animals to coal, oil and natural gas which are used as energy, but break our living environment.

- (See Dayong Cao, "The mass, energy, space and time systemic theory-MEST-the auther's new idea about the comet be authenticated", http://meetings.aps.org/link/BAPS.2011.APR.K1.17)

- (See Dayong Cao, "The mass, energy, space and time systemic theory-MEST", http://meetings.aps.org/link/BAPS.2010.SES.FC.9)

- (See Dayong Cao, "MEST-Tyche will take its dark comets to impact our solar system in 20 years", http://meetings.aps.org/link/BAPS.2011.CAL.C1.7, http://meetings.aps.org/link/BAPS.2011.DFD.LA.24 and http://meetings.aps.org/link/BAPS.2012.APR.K1.78)

- (see Dayong cao, "The mass, energy, space and time systemic theory-MEST", http://meetings.aps.org/link/BAPS.2010.DNP.FE.9)

We need check

- Aslo these new observations about Tyche and dark asteroids in solar system maybe support the SDS model. But we need check:
- What is the orbit of Tyche ?
- Where is the Tyche now?
- When will Tyche go near solar system?
- Are there more and more dark comets to go into the solar system?
- Are these dark comets from Tyche?
- Why these dark comets have elliptical orbits?
- What are Dark hole and dark comet made of ?
- Is the Russia Impaction from a dark comet? Why the 1,000 ton asteroid almost has not remains.
- Is current "biodiversity loss" caused by the coming dark comet and dark matter?

A challenge for observing a group of little dark comets and asteroids who will impact our earth

- According to the new SDS model, there are the dark comets belt and asteroids belt who will impact our earth.

- These objects maybe are little and dark.

- The old observer can not find them early.

- So we need make a new observer to find they.

Absorption And Repulsion

absorption and repulsion

solar system
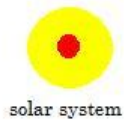
Like charges repel each other, unlike charges attract, Like magnetic attract, unlike magnetic repel each other; Unlike mass repel each other, like mass attract; And like energy repel each other, unlike energy attract.

$$F_g = G\frac{m_1 m_2}{r^2} = -F_r = -\frac{G}{c^4}\frac{E_1 E_2}{r^2} \tag{1}$$

$$F_e = \frac{1}{4\pi\varepsilon_0}\frac{q_1 q_2}{r^2} = -F_m = -\frac{\mu_0 c^2}{4\pi}\frac{q_1 q_2}{r^2} \tag{2}$$

Among it, F_g: the gravitation, F_r: the repulsion, m: the mass, r: the displacement, E: the energy, F_e: the electrostatic forces, F_m: the magnetic forces, q: the quantity of electricity.

New observer for Dark comet and dark hole

- What is the dark matter? The particle of dark matter's light has valence mass-valence neutron and valence energy-valence proton.

$$n^- + \nu_e \rightarrow p + \mu$$

$$p^- + \nu_e \rightarrow n + \mu$$

n^-: the negative neutron,
p^-: the negative proton,
ν_e : the electron neutrino,
p: the proton,
n: the neutron,
μ: the muon.

- The dark matter 's light can take a reaction with the neutrino. So we can use the neutrino to observe the dark matter, dark comet and dark hole.

- (see Dayong Cao, "MEST-The dark hole, dark comet and dark matter are the space-time enter",http://meetings.aps.org/link/BAPS.2012.APR.K1.79, http://meetings.aps.org/link/BAPS.2010.DNP.FE.9)

The Quantum Space-Time Of Wave

$$S = P(\lambda) = |\psi(\lambda)|^2 = f^2.$$

These above equations are space equation. S: the quantum space, x: the displacement, f: the amplitude of wave, P(λ): probability function of wavelength.

$$T = P(t) = \ln(1 + \frac{1}{t}),$$

$$e^{P(t)} = 1 + \frac{1}{t} = P(t) + 1, \quad (P(t) < 1)$$

$$T = P(t) = \frac{1}{t} = \nu.$$

Accroding to the Benford's law, these above equations are time equation. The "t" must be a circular and periodic number. T: the real time, t: quantum period, ν: the frequence of wave, P(t): probability function of period.

The benford's law is a very general rule in universe.

new uncertainty principle

MEST-The quantum space-time explain some questions of quantum mechanics DAYONG CAO, Beijing Natural Providence Science & Technology Develoment Co., Ltd — The probability of displacement and period of wave are the quantum space-time. The paper explain of the two-slit interference and the uncertainty relation. (1) $S = P(r) = P(\lambda) = f^2$. According to the Benford's law, (2) $T = P(t) = ln(1 + \frac{1}{t}) = \nu$. Among it, S: the quantum space, f: the amplitude, r: the displacement, T: the quantum time, t: the period, ν: the frequence, λ: the wavelength, P(x): the probability function. (3) $E'\psi = i\hbar\frac{\partial\psi}{\partial t}$. (4) $m'\psi = i\hbar\frac{\partial\psi\partial t}{(\partial x)^2}$, equation (3) over equation (4), substituting equation (1) and (2) into it, (5) $E'\psi = m'\psi c'^2 = m'\psi\frac{(\partial f^2)^2}{(\partial\nu)^2}$, getting the energy-wave and mass-wave equation, (6) $E' = i\hbar\frac{\partial f^2}{\partial\nu}$. (7) $m' = i\hbar\frac{\partial\nu}{\partial f^2}$. (8) $\Delta E'\Delta\nu = \Delta E'\Delta t = i\hbar\Delta f^2, (\Delta f^2 \geq \frac{1}{2})$. (9) $\Delta p'\Delta f^2 = \Delta p'\Delta\lambda = i\hbar\Delta f^2, (\Delta f^2 \geq \frac{1}{2})$. Among it, E': the energy of wave, m': the mass of wave, c': the velocity of light, ψ: the Wave Functions, f^2: the probability. Here, the equation (8) and (9) are new uncertainty relation. In the

(see Dayong Cao, "MEST-The qutuam space-time explain some questions of quantum mechanics", http://meetings.aps.org/link/BAPS.2012.MAR.K1.256)

New explanation of red shift

$$Z = \frac{u}{c} = \frac{\lambda - \lambda_0}{\lambda_0} = \frac{v_0 - v}{v}$$

$$u = H_0 D$$

$$\rightarrow H_0 = (\frac{\lambda}{D})\Delta v$$

$$tc = \lambda \rightarrow \Delta tc = \Delta \lambda$$

Among it, H_0: Hubble constant, u: the speed of star, c: the speed of light, v: the frequence, λ: the wavelength, D: the universal displacement, λ/D: the rate of the translation between the wavelength and the universal displacement.
(see Dayong Cao, "MEST-The universe has not the time arrowhead and space expanding", http://meetings.aps.org/link/BAPS.2012.APR.E1.2)

When the wave travel in the universe, its quantum space-time will conversion to an universal space-time. It will cause the quantum space-time to change and cause its red shift.

New balance system model

- "Like mass attract, like energy repel each other."

- A mass-energy oscillation can produce a mass-energy wave which can build up a mass-energy field like a space-time field of the mass-energy, because the space-time is frequency and amplitude square.

- The Big Bang system has an energy center which makes a repulsive gravity and a negative curvature like dark energy.

- But a light has the space-time of itself. When a light travels in the universe, its quantum space-time will convert to a universal space-time. It will cause Hubble's red shift by itself.

- We need find a balance system of the flat universe between star and dark hole.

# Solar system model and Dark hole system model

- The dark hole system is the space-time center, and the dark mass-energy and dark planet (dark comet) are around. Dark hole absorb the light (space-time), and radiate the dark mass-energy (mass-energy).

- The dark mass-energy has a dark <u>mass-energy structure</u>. It is a <u>negative</u> curvature and a spherical structure.

- The solar system is mass-energy center, and the space-time wave and planet are around. Sun absorb the matter (mass-energy) and radiate the light (space-time).

- It's space-time has a space time structure. It has a positive curvature and a spherical structure.

The Star System

Light,
Space-Time Around

$$R_{ik} - \frac{1}{2}g_{ik}R = -kT_{ik}$$

Sun,
Mass-Energy Center
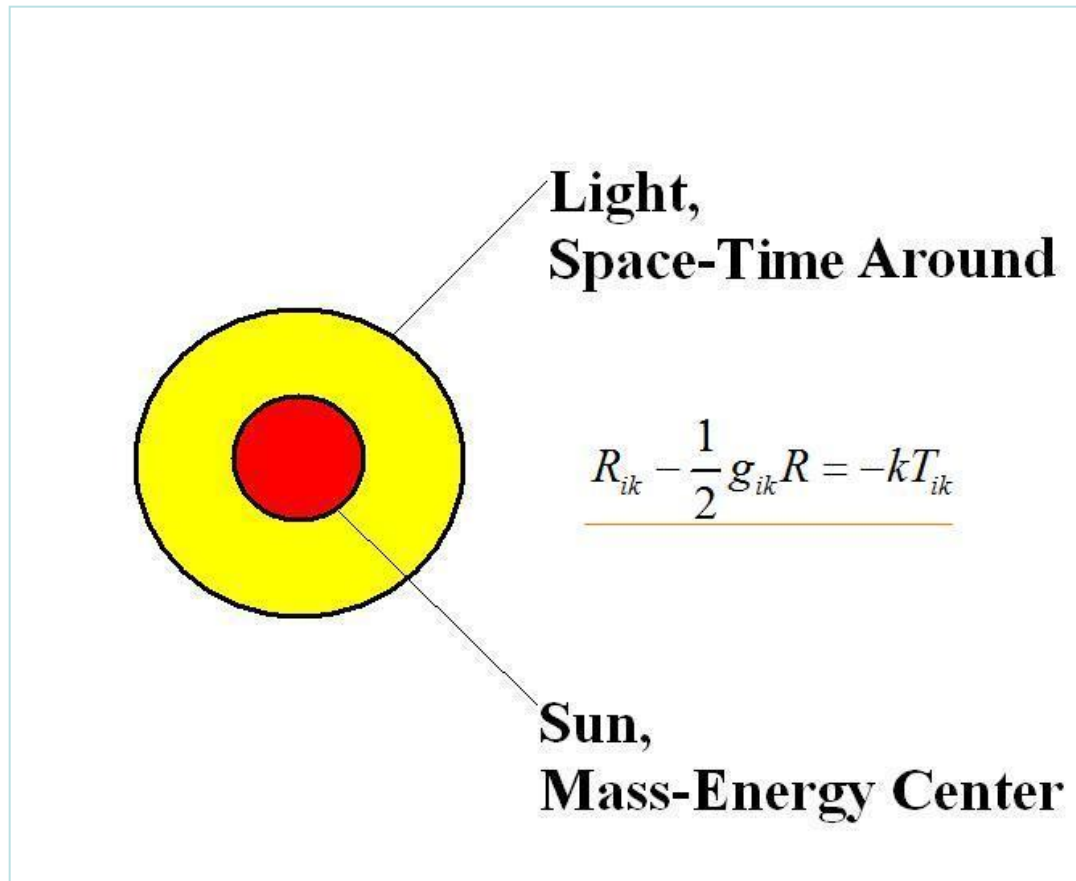
- In here, the left of the equation is the metric tensor; the right of the equation is the energy- momentum tensor.

The Dark (Black) Hole System

Dark Mass-Energy, Mass-Energy Around

$$R'_{ik} - \frac{1}{2} g'_{ik} R' = -k' T'_{ik}$$

Black hole, Space-Time Center
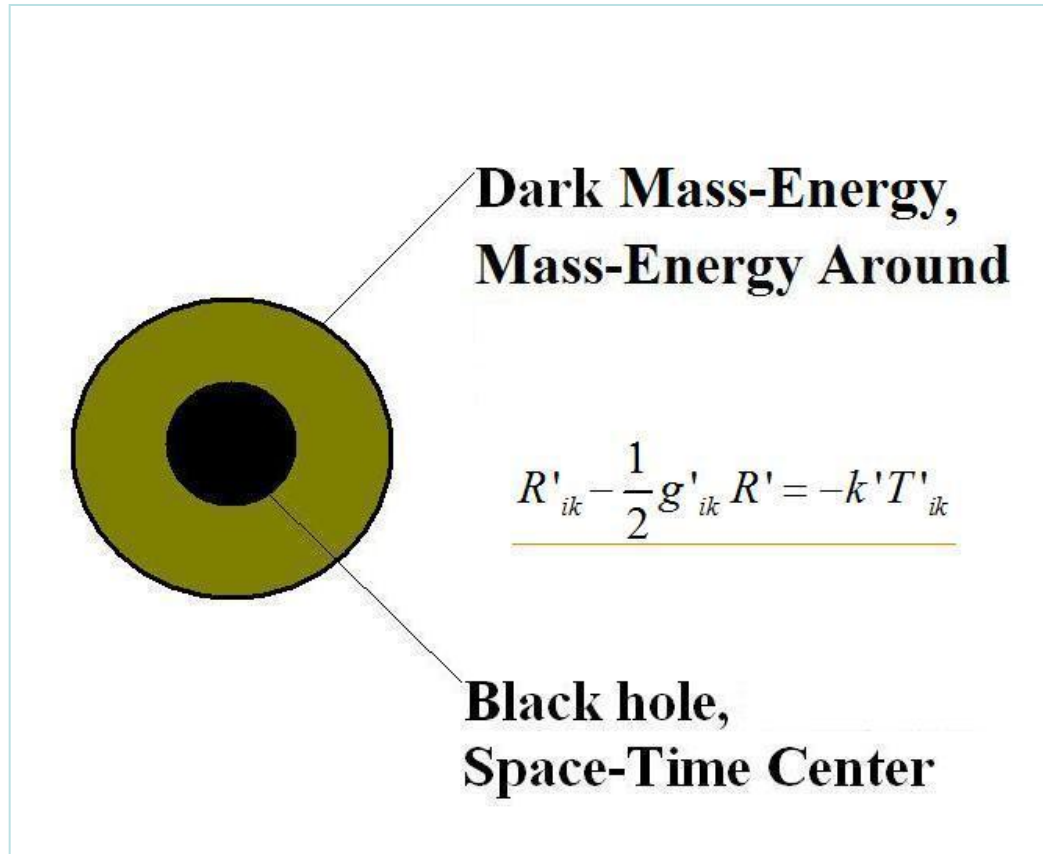
- In here, the left of the equation is the metric tensor of the dark mass-energy structure; the right of the equation is the dark space-time (field) tensor.

Balance and Symmetry Between Star and Black hole

$$(R_{ik} - \frac{1}{2}g_{ik}R) + (R'_{ik} - \frac{1}{2}g'_{ik}R') = -(kT_{ik} + k'T'_{ik}) = 0$$
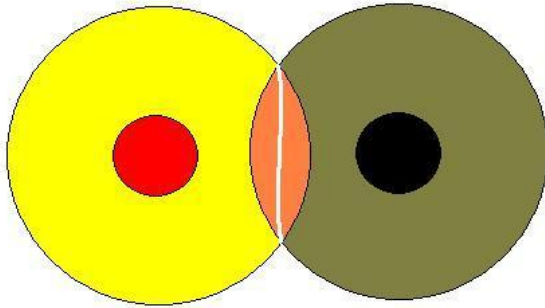
interaction between dark hole and sun

transmutation between dark hole and sun

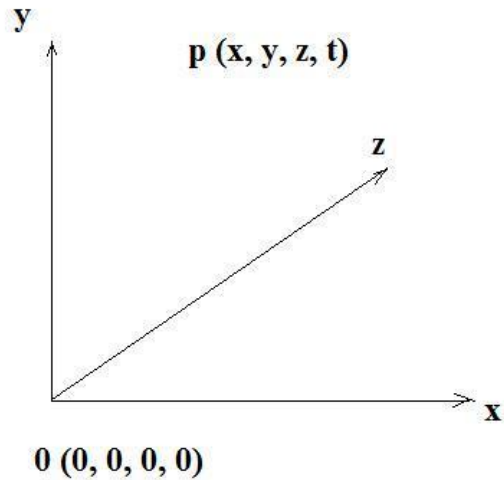$$(R_{ik} - \frac{1}{2}g_{ik}R) + k'T'_{ik} = 0$$
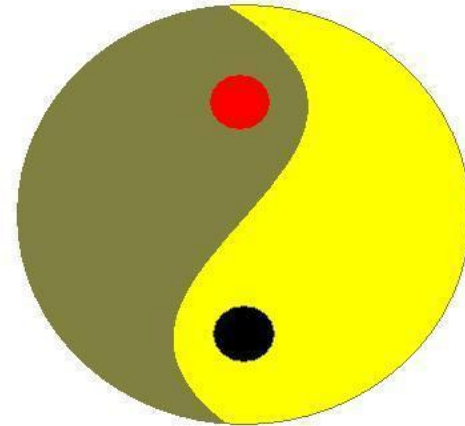
Chinese "Taiji" Model Of Universe

- the universe systemic model is a balance system between the star system and the black black system.
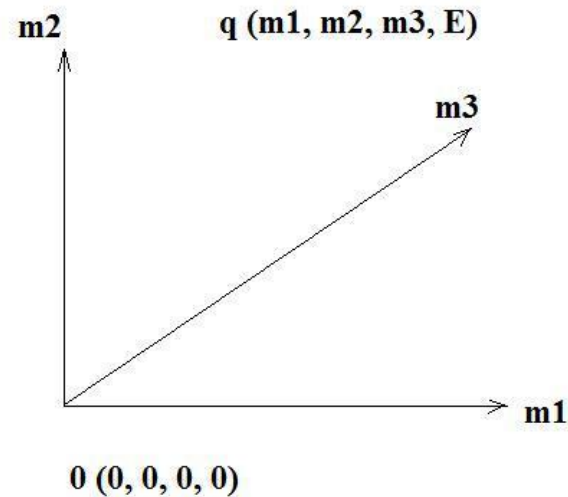
- Sun has a Companion Dark Hole.

We need use a mass-energy coordinate in dark hole system

x, y and z are the coordinate of the space, t is the coordinate of time.

y

p (x, y, z, t)

z

x

0 (0, 0, 0, 0)

the space-time coordinate for solar system

m1, m2 and m3 are the coordinate of the mass, E is the coordinate of energy.

m2

q (m1, m2, m3, E)

m3

m1

0 (0, 0, 0, 0)

the mass-energy coordinate for black hole

- (See Dayong Cao, "The mass, energy, space and time systemic theory-MEST-the auther's new idea about the comet be authenticated", http://meetings.aps.org/link/BAPS.2011.APR.K1.17)

Balance and Symmetry Between Star's light And Dark Hole's light

$$hv = mc^2,$$

$$i\hbar \frac{\partial \Psi}{\partial t} = m'c'^2 \psi'.$$

$$hv + i\hbar \frac{\partial \Psi}{\partial t} = mc^2 + m'c'^2 \Psi,$$

$$(c'^2 = \frac{(\partial x)^2}{(\partial t)^2}).$$

Star and black hole build up a universe systemic model.

(See Dayong Cao, The mass, energy, space and time systemic theory-MEST-quantum gravitational field, http://meetings.aps.org/link/BAPS.2010.DFD.QE.2)

looking for a new method to avoid next extinction

- Thought wave can change electric wave of the P-N junction and the output voltages of solar cells.

- The SDS model is alike the P-N junction model between electron cloud and electron hole. Because the electron cloud is like the dark comets cloud.

- The thought wave changes the electric wave and the P-N junction model by space-time effect.

- So the experiment will offer a method to use space-time effect to change the orbit of Tyche and SDS model, in order to avoid next dark impaction.

- Because the orbit of dark hole, dark comet and asteroid are directed by space-time.

Thought waves can change electric wave and output voltage of solar cell
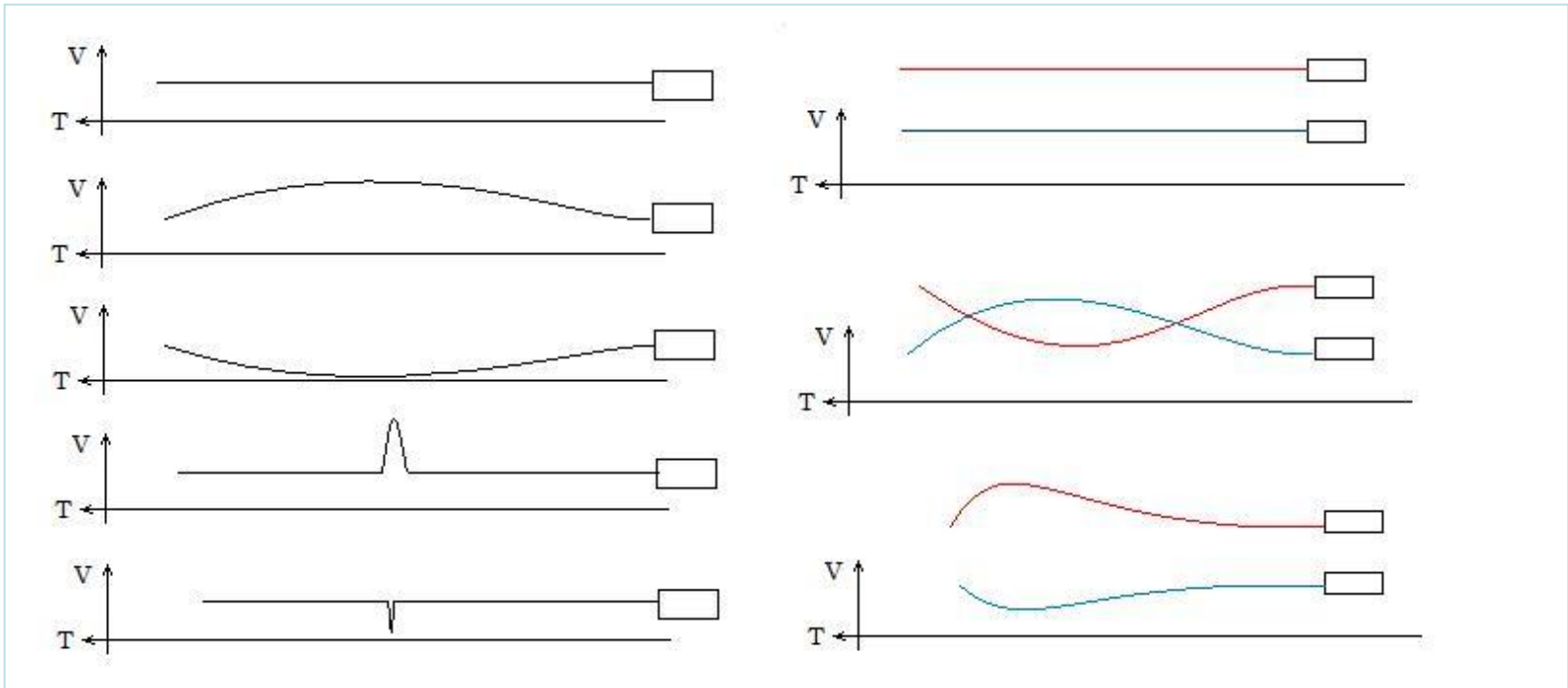
The light produce the originally voltage of solar cell. It is a **direct current**. The tester use his thinking to change the curve of the voltage to go up (or go down), and changes it Slowly and gently (or Quickly and acuate). In other hand, there are two cells, The thinking can change tow curves of voltage to intersect each other. Please pay attention, when sun's light produce the curve of output voltage, the thinking also can change it.

Thought wave remotely changes electric wave and output voltage of solar cells
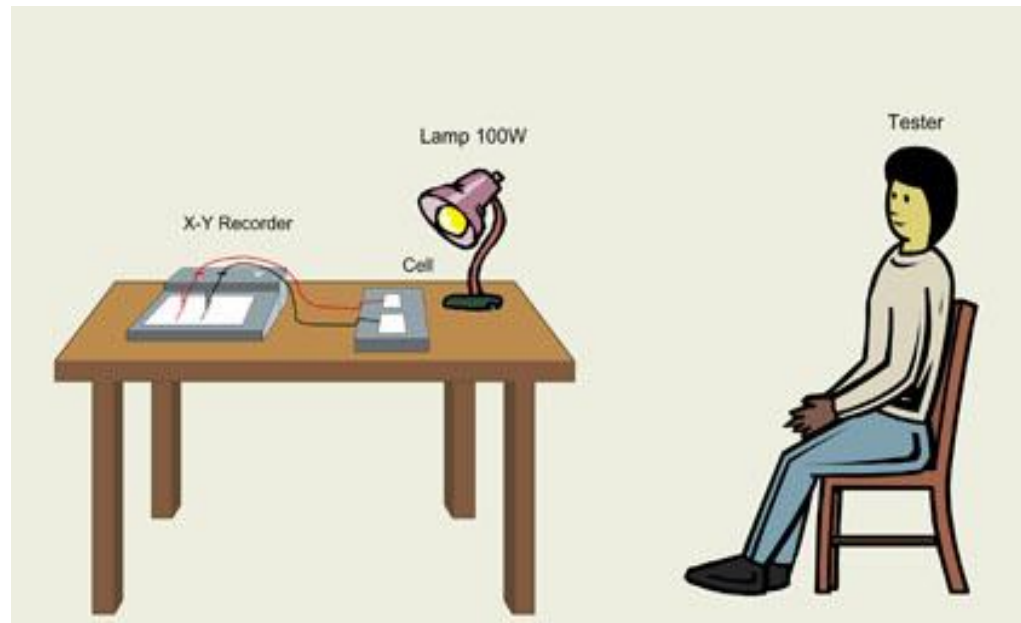
Two solar cells are put side by side and are put under the lamp(100W),
When the light of lamp radiates two solar cells, they will produce their photocurrents.
A X-Y recorder records two Voltages(open-circuit voltage).
1-3 meters between the human and two solar cells.
The human only uses his thinking to change two Voltages.
There are no wires between brain and solar cell and so the thought wave **remotely** act on the solar cell.

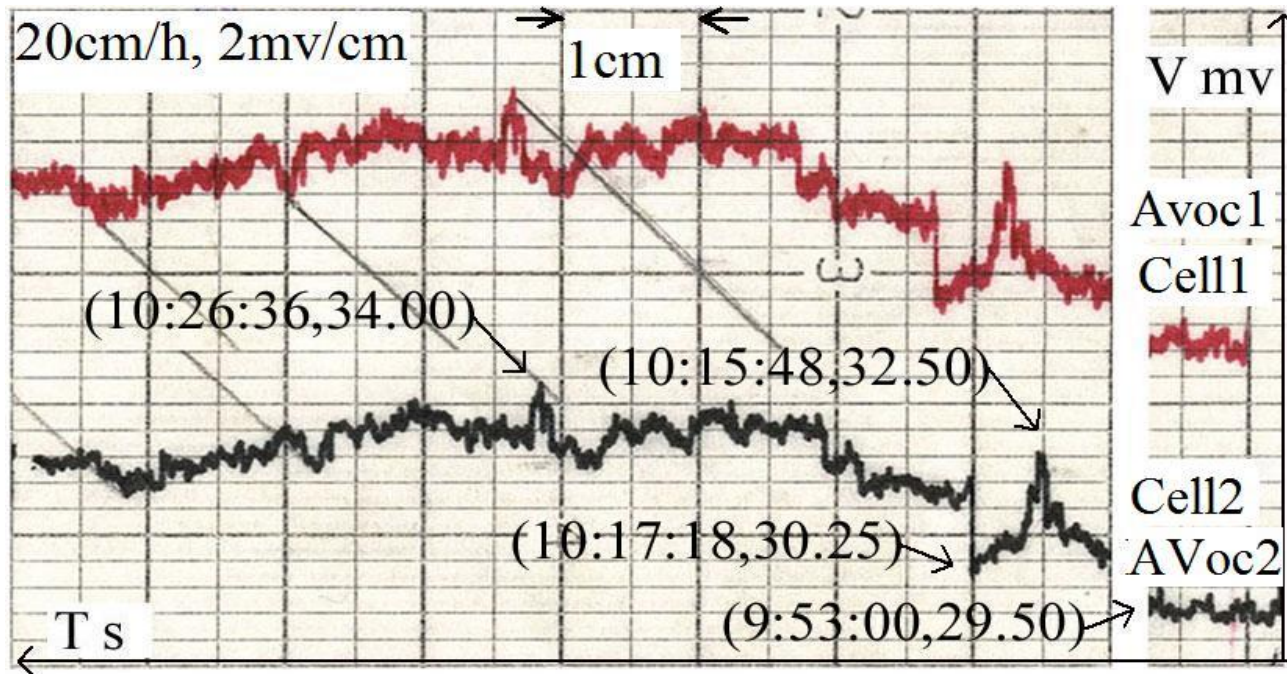# Thinking Augment the curve of V_{oc} slowly and gently

Figure 2: thought wave augments The V_{oc},

The lamp's light produces two lines of originally voltages.

The tester's thinking augments two Voltages. They go up. The V_2 is from 29.5mV to 34.00mV. $\triangle AV_{oc2}=15.25\%$.

The process is about 20 minutes. The thought wave changes two curves slowly and gently.

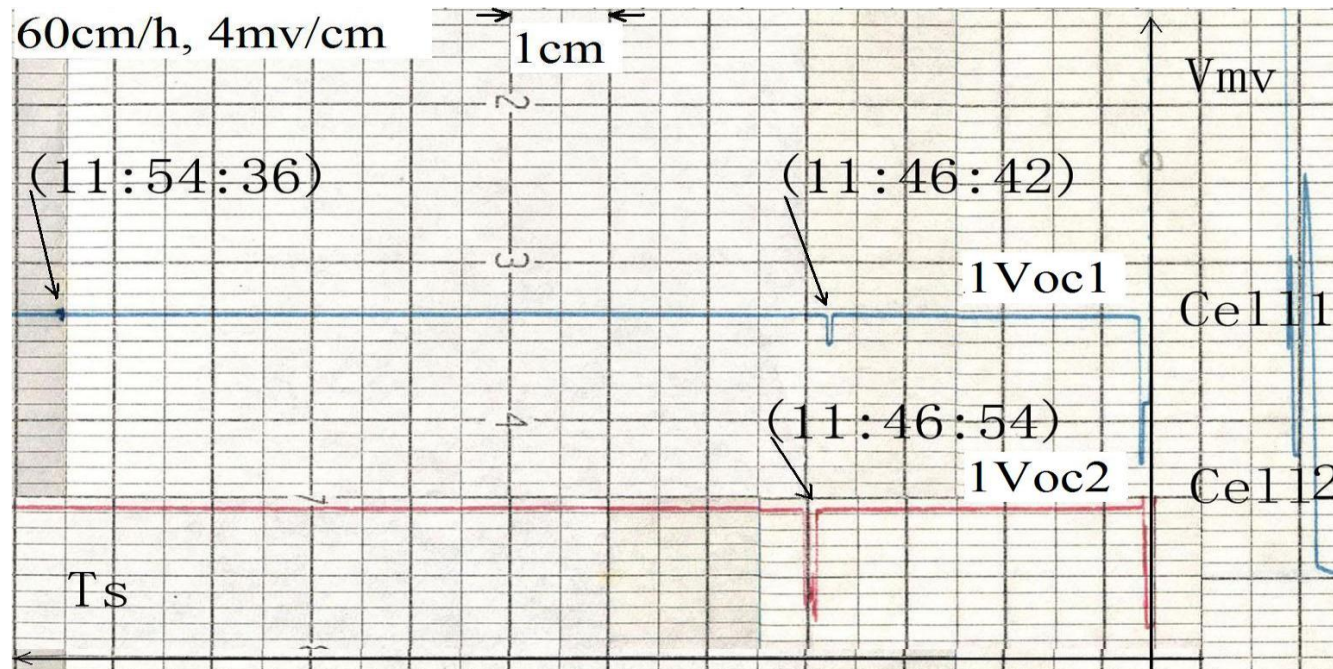# Thinking Reduce the curve of V_{oc} quickly and acuate

Figure 4: thought wave can Reduce the V_{oc} of one of two being tested

The lamp's light produces two straight lines of voltages.
At first, the tester's thinking reduces the V_1, and then, the V_1 goes down, at the same time, the V_2 does not change;
After 10 seconds, the tester thinks to reduces the V_2, and then, the V_2 goes down, at the same time, the V_1 does not change.

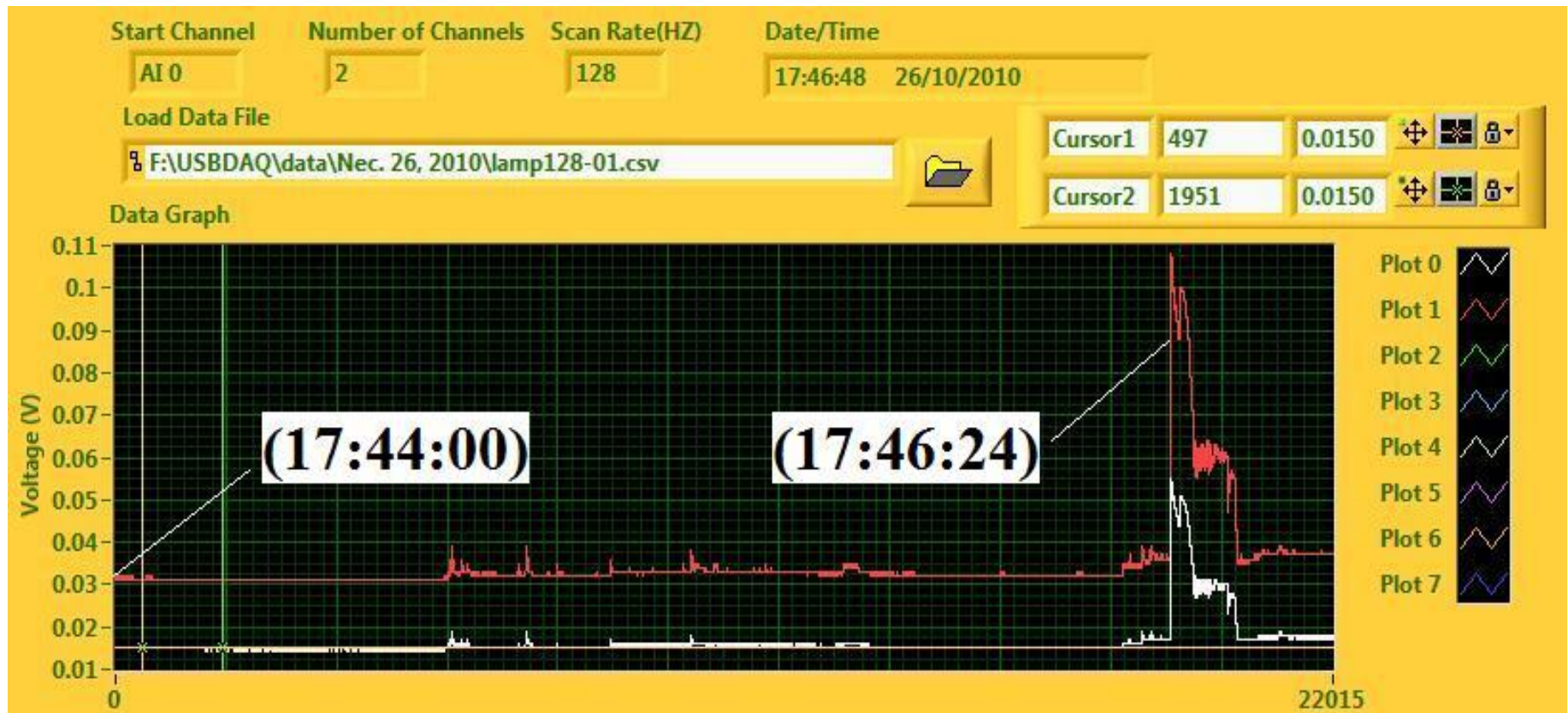# Thinking Augment the curve of V_{oc} quickly and acuate

Figure 7: The lamp's light produces two straight lines of voltages. The tester 's thinking Augments the V_{white} And V_{red} quickly and acuate at 17:46:24. (10/26/2010)

Thinking Aaugment the curve of V_{oc} slowly and gently

Figure 8: The lamp's light produces two straight lines of voltages.
The tester 's thinking Augments the V_{white} And V_{red} Slowly and gently during 13:01:55 to 13:30:00. The process is about 30 minutes.
When the tester stops to chnage the photocurrent. Two curves of voltages go back straight again. (2/4/2011)

Thank you!