

The Book ARCUS V

The Alternative Solution of the Problems of Universe

Of Heinz-Joachim ACKERMANN, Germany, First publication in a book of 1998 under pseudonym "Arcus", immediately online in Internet since 1998 resp. since 2021: www.arcusuniverse.com and www.no-quarks.com

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Some parts of this work are written in "Helvetica" by copies of given "The Book Arcus I and II", another part is newly written in "Times New Roman" and "Helvetica".

Structuring of "TBA V"

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1 Conditions

Dear readers, Ladies and Gentlemen, perhaps you aren't lovely anymore reading this work here! This is my 5th book about the universe completely from the smallest to the biggest things in it. First I published in Germany at „Frieling Verlag Berlin 1998 „The Book Arcus I“ and „The Book Arcus II“ in a common style under the title „Die Einheitliche Feldtheorie – Antworten auf die Weltfrage“. Extremely small demand and devastating feedbacks prevented me from publishing more at any book publishers and trade journals. I wrote many articles in my website arcusuniverse.com. The following books are published just online.

This sad year 2020, in which the “corona virus” negated as well as all intentions, I was sitting at my writing desk with paper and PC. While working there, I found some mistakes in my works of 1998. Additionally, I found new essential ideas. So I think, my base solution remains correct. Possible conclusions, which I offered a lot of more and more, not all of them are correct. Just, there were hypotheses in connection to my solution of the world equation of Albert Einstein. Briefly, it means: Everything is oscillating. The universe is a limited, spherical and stable oscillator. Inside is the next stable area filled of such oscillators and inside them you will have the last hierarchical area.

The way as Einstein liked to formulate what is relative at clocks, at this time I meant correctly: The world consists of a **Rule of the Clocks' Movements** and of a **Rule of the Hierarchy of Clocks**. The watches may be pulse giver. Time only can be a forward gear like a ratchet or a clock pendulum. It can be expressed by the physical oscillation as a vibration. Then the **time** isn't a singular size uniformly flowing and calculated just to itself. Actually, it **always** is the **period time** $\tau = 2\pi t$ or in other words, it is the **oscillating time** τ . And from this, we use the physical size of the way s or the radius r only being the **wave length** or the **oscillation length** $\lambda = 2\pi s$. Together, both sizes reflect all the features by movements of oscillators! Consequently, they are primary, and they can be shifted determined by some amount of motions (of spacetime) as Albert Einstein simply caused the cohesions by his Special Relativity Theory of the year 1905, briefly marked by SRT.

I never had a doubt that waves and vibrations surely can be shifted by their motion relativity (rule of the clocks' movements = motion relativity of oscillators) in relationship to some observers. You probably know that from sound vibration, don't you? An oscillator is approaching you while the frequency of its exchanging wave is increasing. If it is escaping from you the frequency is decreasing (it is the reciprocal size of the oscillation time $f=1/\tau$). This effect is called Doppler shift after his discoverer Christian Doppler. Clearly, you can hear it while a car is passing by.

Einstein really and correctly discovered that this frequency you're only able to shift to the vacuum light velocity. Imagine, some object is flying to me next to light speed. So its frequency is shifted to extremely large amounts, next to the infinite amount. Vice versa, the frequency is next to zero. What does it mean? Let us see, what Max Planck found in the year 1905:

E (energy of radiation quanta) = f (frequency) \times h
(Planck's constant $h = 6.62607e-34$ Js found by him):

$$E = h \times f \tag{1.1}$$

Surely, one knew about intensity of energy. So more quanta were more energy. Quite simply, one liter of hot water is less energy than ten liters of the same hot water. Actually, what energy has that quantum itself, he found it by his equation. In the meantime another resourceful researcher, who didn't get some appreciation for it, found out that the mean kinetic energy of all particles of a body is its temperature. And he found a constant that made it possible calculating the temperature. His name was Ludwig Boltzmann. Max Planck honored him at least when he introduced this Boltzmann k_B constant into physics. To this time, that equation of E_{kin} was signed for some time on Boltzmann's tombstone. Simplified, it is called:

$$E_{kin} = k_B \times T = 1.38e-23 \text{ J/K} \times \text{Temperature in Kelvin K.} \tag{1.2}$$

With it was caused that temperature just is a qualitative size of heat. Actually, the energy in Joule J multiplied with the quantity $m \times c_w$ is now the quantitative amount of heat $Q = c_w \times m \times \Delta T$.

This means to multiply specific heat capacity of a substance c_w with mass m and temperature difference ΔT . In the end, the most interesting thing remained – the frequency of heat or e. m. radiation.

The higher the frequency, the higher is the energy of the vibrating portion of matter, too. Using Einstein's equation the following sentence is valid: The energy is diverging against infinity while the speed is diverging against vacuum light velocity, and vice versa it goes against zero. His equation $E = m \times c^2$ means that the mass m with the constant c^2 is directly proportional to such an oscillation energy E .

Later, with the help of some researchers, he found the "Black Hole". I mark it with "BH". Einstein also found the deflection of light at a "mass" after solution of his General Relativity Theory of 1916, briefly GRT. For example, a star is rotating in an orbit of rosettes around its central body of the sky. Why does it do that way? Einstein recognized the curvature of the space. The sum of the interior angles of a triangle is never 180° or π exactly but larger or smaller dependent on the curvature area. Triangle's side aren't ideally straight distances anymore but curved lines! Why is the space curved? I say: there are the exchange processes of wavequanta between oscillators, between the vibrators! Those ways are changed by all the given deflections of all the other oscillators. Never the line goes straight as Isaac Newton still assumed.

Such a kind of relativities and dependencies make many people really crazy, especially since Einstein was wrong when he was supposed to have meant that the universe would be infinite but also limited. Hardly anyone was able to decipher this „rubbish“. I can simply explain this contradiction. If all the ways through the universe will finally return to their origin, because they are totally curved in closed orbits of circles or ellipses, then you can run on these bows returning while infinite time periods. It still has a defined diameter. And you are running and running never coming out of this loop. You are forced to this run by the exchange quanta. There is no end. And still it really is there. Nobody is able to climb up on the radius radially. Hardly he has tried to do it, just he is forced into the curved way of the circle. These circumstances are only valid inside a completely closed and oscillating universe. Inside of protocosms, the lines are less curved.

It was the year 1972 when I began to think of it. In the end of all my reflections, I created [my own universe](#). Physics and all its scientists created [their own universe](#) publishing incessantly.

SRT makes possible different living times. Objects approximately the beginning of all have more time for their life than objects, which are installed by protocosms next to the amplitude of universe. They have the smallest time to live out of their package.

Well, sometimes everybody needs a "great" idea. Actually, I have a primary base of model. That's the oscillation time (period time). It is the same tact for the complete universe. That tact consequently, that frequency, can be shifted locally by gravitation and by motion, it's not more!

Rule of Clock Hierarchy? What is it? The clocks, the oscillators or better said with other words, the cosms are nested within each other, packed into each other (this is actually my principle of the Black White Hole, BWH). I say: they are packed, because outsides is less matter than insides. It is comparable to the ZIP in data technology, but just comparable! It is like the content in our heads. Surprising how much is packed there! Or think of a package. You watch the outside. What is inside? Black Box! Really black? There was still something of Albert Einstein. Yes!

He and different researchers thought and some currently working scientists think today that the BH would be really black. S. W. Hawking meant in the end of his life reportedly: a BH rather would be a Dark Gray Hole. Never it will be really black. This was already my idea since 1986!

Contrarily, he meant: tiny energy quanta of wavequanta would slowly escape the BH becoming dark gray. After a time period of about 300 billion years, some matter would be evaporated that the rest would be exploding then. Please, think like me: our universe is about 13 billion years old. Until now, no BH can be exploded. The time is missing for such an event. Consequently, sometimes they all have to explode for once. „Cheers! Stephen W.!“

Such ideas aren't mine. They come from the others and their universe. There we can leave them. They feel fine there in their BH, in their flat „Big Bang“ with increasing escape velocity in which cold death threatens. Contrarily, I don't feel good in such a system without any system.

See! The tiny energy quanta of Hawking are my protocosms of extremely small masses. Inside, they carry away big masses from the protocosmic BWH. This way, the BWH will be negated and opened extremely fast. Hawking was right by its equations! Actually, I am much more right! Consequently, I have to state: I think that all the constructs of the others are a gigantic rubbish. Again, that is not my universe!

In my universe, there was not one Big Bang for all (the others think this bang would have created everything). As I heard about it for the first time listening RIAS Berlin in the year 1973, I immediately said "nonsense!" My kind of Big Bang is a „Small Bang“, a centrally small explosion. It was not alone. All the cosms or "clocks" or oscillators, which are in universe, were created by their own tiny small bangs. So there is not **the one big bang for everything** but there are many, many bangs for all. And all of them are dependent on all the others for themselves! Surely this is complicated. Not for me but for the others.

So that something could pop, I found the protocosms, PK. They aren't a wild assumption of me. I found the oscillator solution of the GRT (1, pp 362). After it, all the cosms are oscillating. They are especially or spatially vibrating. Some of them remain closed as Alexander Friedman himself found his solution (1, pp 457). Another kind of cosms are able to open themselves and further kinds change between open and close. Mr. Friedman has strongly inspired me to create my own reflection of the world from all the rubbish of single solutions without cohesions and their insane interpretations.

So I draw my conclusions of stable cosms, unstable cosms and protocosms. Stable are the universe, stable elementary particles here and stable sub-elementary particles inside our elementary particles. Unstable simply are all unstable variants of them. Changing states of open and close is always the expression of instability. My cosms „explode“ depending on their size of oscillation. Tiny PK evaporate while fractions of a second. Big and fulfilled packages of protocosms can open by evaporation after all possible time periods up to 17 billion years. Do you already notice something?

These many small and tiny PK in the center of a cosm evaporate first. They are so similar that one can speak of homogeneity. **That's the Small Bang in our universe.** A propellant charge. Its analogon each are Small Bangs in cosms like in elementary particles and in protocosms.

After the first objects next to homogeneity, the following cosms are flying higher on their own ways. Successively, they are later able to evaporate becoming less numbers but packing out more and more from the inside. So a cosm no matter if the universe, a proton or a PK for a galaxy, too, is build up internally. There is its structure programed. Notice, please, that a protocosm is as fully packed that its top content has to shot out as soon as possible, especially then if still energy is given in abundance in such an energy cosm EK feature of a protocosm PK.

"Explosion" is a word for a bomb. In this respect, PK don't explode like bombs. They include their internal hierarchies, so their interior worlds. And the internal worlds include their interior worlds again etc. to the elementary particles, which are well-known. This is a broken hierarchy down to the stable protons, electrons and electron neutrinos. Yes, these are the cosms! Inside of them are PK, and inside the PK are Sub-PK etc. This is my world of packages! **The packages evaporate in portions! This rather looks like a super programmed fireworks but into 2 directions remained free for annihilation's radiation. You call them Jets.**

A man wrote me: "Go to hell with your assertion of your elementary law of nature **packing law of matter!**" Advice from someone, who knows it better in his universe of the others. Contrarily, I prefer to annoy the representatives of the other universe with my universe for a while. This idea leads me to a thought about special kinds of protocosms. As above mentioned, I call PK as EK filled of energy, ready for emission. Just one state I have forgotten to define.

It is the proximity to the state of a protocosm, the proximity to the theoretic BH. Now I would call it a **Divergent Sphere DS**: This is an area of extreme density of matter, of mass and energy. In the center of such a DS, then PK and especially EK would be generated by increasing density of matter.

In this area, masses are falling and rotating while continuously increasing density and successively increasing relativistic speed. BUT: It is correctly relativistic that they will never reach the vacuum light speed. If anyway they come next to light speed, then after an eternity of falling. Consequently, they will never generate a total BH but always a divergent state while radiation is shooting them together. Seen in the sense of this cohesion, there are no Black Holes, absolutely. Simply, they aren't able to be built. All the resulting states are as well as open. Nevertheless, the falling cannot be stopped. This is the reason that there is defined an event surface, where the causality changes because outside and inside become a new relativity. Coordinate systems are changing!

With this idea, I tell you, in the area of the divergent sphere is falling matter, which represents the external mass m_D in the proximity of the BH masse M_o , $m_D < M_o$. Nobody was ever there to prove the divergence or the expected theoretic congruence. This is why I think, there are no BH in the centers of the objects like in galaxies. There are only DS as divergent states next to the BH state. So these DS aren't yet Dark Gray Holes. They still aren't protocosms. Next to the PK state, it is just an extremely dense matter with properties leading to the assumption that there could be a BH. Matter is falling while it is pushed by radiation. Don't forget, externally generated protocosms also are falling into the DS and the newly built secondary protocosms, also pushed by kinetic energy.

While a fast sequence, in DS such secondary PK are generated and emitted with next to vacuum light speed from the centers into the area. The momentum comes from the environment, which is made of rotations. Some spins are always there. They must not be large because the PK became extremely light by changing of their coordinate systems (cf. eq. 4.1).

This is one of the most important results of my research. A protocosm has a radius next to BH and a mass next to the BH inside. Internal mass M_o but is oscillating, because of the Planck's energy equation. Internal radiation γ_o also is vibrating. This creates an image of the oscillation on the outside, which reflects an external mass m_o into the external coordinate system:

$$M_o = d / m_o$$

I found the constant d. Below in equation 4.1, I will show you special features.

In front of my eyes, there is a picture. A protocosm opens itself because its central sub-protocosms SPK are already open but its top-protocosms still are closed while they're flying out of the horizon r_o . This way, they negate the internal masse of a theoretic BH state. We find the reason in the portions, in the quantization, which was never marked to a BH. Only me have done so. After this, everything, which was inside, now is on the outside, for example a complete galaxy from that their top-SPK were flying away before. What will be of these top-SPK?

I think that they have such a high relativistic speed for flying far away. Even they are very large in diameter. So they carry away gigantic amounts of sub-masses installing them on different places. So I mean, there we find the dwarf galaxies (67 in Local Group) above and next to the extended halo surrounding the galaxy. In the case of a central giant elliptical galaxy, there are a lot of different galaxies surrounding.

If the radius of the PK was less, the top-SPK would generate globular clusters. In the star systems, we find minor planets, asteroids, planetoids etc. crisscross flying. Above there probably is the Oort cloud. So there are systems filled of matter far away from the planets.

After a short time while the top-SPK were escaping from the proximity of the primary PK, each protocosm that is already OPEN finds a location at which it is standing still because of the momentum jump from m to M . That's a change from relativistic speed v_m (minimum mass m) to minimum speed v_M (maximum mass M). Such a center has the smallest angular momentum at the outside. Then it starts and masses M got free are falling. The most distant of them are falling as good as to the center directly, but slowly winning rotation bows.

On locations deeper, opened objects get into areas of tides attraction. They are going into their orbits. In the center itself, there is a process I told you above. New PK, I called secondary protocosms sPK, are generated, also pushed by the given orbital spin of all falling masses. In "TBA I", I wrote that after

primary PK (pPK) the secondary PK (sPK) would follow, complete series of them. In “TBA II”, I added that really fountains of sPK would be created by the centers (DS).

In the beginning of this process, the most massive centers generate most massive sPK. They always will be shot as pairs into the area of their environment. It is logic as follows: from this behavior very heavy transport masses arise, which would collide with the already located objects. After a time period, galaxy arms arise. The less mass is now falling into the center of DS the lighter sPK will be at their inside. These sPK are emitted into the arising galaxy arms. Portion by portion. This way, the barred spiral and spiral galaxies arise. Later the process changes into equilibrium of falling in and emitting out. Galaxies find a certain calm. Calm is no death of creating. As before, the ejection of sPK causes fresh centers of matter to be flown into the environment. Open star clusters arise. New stars will be born. After this, they collect dust. It is not reversed like in the universe of the others!

This process is transferable to everything, to stars, planets, satellites and sub-satellites etc. down to the creation of bodies filled with organic life because everything in universe is living, universe itself is living by oscillating. Elsewhere, we watch the sedimentation of death.

A star-PK is opening and showing its proto-sun. Its top-SPK were the first to fly far away. The center of the DS collapses (condenses) and generates now series of always 2 sPK at once. The reason is the conservation of momenta. So always a pair of sPK has to be created and emitted. Not at one location, but each sPK to the opposite side. This is the way, as from top-SPK and sPK a halo of brown dwarfs, comets, dust rings, but big gas planets and their satellite systems are arising as long as the internal proto-planet PK eject their secondary PK. Distances become shorter. Masses become lighter, so their momenta. The sPK remain below the proto-sun sphere.

Why do secondary PK not reach al longer distance? Why are they disposed in an area like a disk? Well, in the meantime, the center was transforming into a rotating mass of a galaxy core or a star core. Their rotation gives the orientation and direction to the ejecting sPK. So the area on the equator of a star is becoming impoverished in star spots, exactly seen in residual eddies, which cannot appear because their causer (the top-SPK) are already outside. After a series of periods, planets as proto-planets with big gas masses have been created. The proto-star will have experienced some bad contractions and explosions so that it sweeps free its proximity of proto-satellites. Gas was shifted into the areas where we find Jupiter etc. today.

Nevertheless of this process, a second process is running. We observe stars with giant gas planets on extremely near orbits. I think, these could be some remaining SPK at the surface of the center. After my equations, they are still big and internally heavy. There, in this orbit, they race until they will fall into the central body DS or they will leave their orbit. Such objects could rotate reversed. So the stars with gas planets in their proximity cannot be old, not old enough. Certainly, they are in the starting phase of the development of the complete planetary system (sun system).

Using these premises, I found my universe in which everything from the smallest to the biggest thing is caused by unifications – by cosms and protocosms. There are no riddles in principle. All the appearances are different oscillating cosms created by the Grand Programmer, decoded by me as a man like a blind chicken finding a grain of truth.

My laws of development of PK or EK are valid everywhere in sub-particles and in universe itself. Nothing else! No single “Big Bang”, no Dark Energy, no Dark Matter, no eternally eating “Black Holes”, no “quarks” etc.

My model is a continuous reflection of the philosophical and physical matter and antimatter.

2 The Black Hole

To this day, the following applies to the others. “Black Holes only eat.” These thinkers adhere strictly to the GRT, strictly to the previous solutions. Consequently, for them the following is valid: all the appearances are in the wake of such a BH. All interactions come from these cohesions just from the outside.

Additionally, I discovered an interaction between inside and outside. My "BH" are neither black nor permanently closed. I use BWH, non-stationary Black White Holes, my word's creation for them is a PROTOCOSM, derived from my solution of the GRT. In analogy to the Friedman solution for closed cosmos etc., I had developed the special "Oscillator Solution of the GRT". So every cosmos, and so every protocosm is vibrating spatially or spherically between states of opened and locked. From this solution and the quantization of mass and energy portions, I could determine the approximate structure of such a cosm. Then, it was interesting. My world became completely different from the world of the others, who didn't take notice of my models.

Therefore, I have to say something about this publication from <https://www.tagesspiegel.de/wissen/ein-film-vom-schwarzen-loch-in-unserer-galaxie-neue-ziele-fuer-das-event-horizon-teleskope/25209630.html>

"Der Tagesspiegel" vom 09.11.2019, 23:49 Uhr (self-translated from German publication by me)

A Movie of the Black Hole in our Galaxy

New Aims for the Event Horizon Telescope

The first photo of a Black Hole was going around the world this year. Now researchers want to photograph it in the center of the Milky Way – and even to film it. ...

RALF NESTLER



... Already now it can be THE scientific picture of this year – the first photo of a Black Hole. On April 10th, researchers of the consortium "Event Horizon Telescope" (EHT) presented it. Don't forget, the **Hole wasn't reflected itself** because neither light nor something else can escape from there. Only the environment of fast rotating and bright radiating matter could really be watched in the galaxy M 87 in the distance of 55 million light years.

That's a perfect breakthrough researching the universe. That there should be **Black Holes**, astrophysicists suspect for a long time. An image of them was still missing. Also this one we now can see is really blurred. Doing this, researchers had to go on their technical limits continuously over decades."

Then from the magazine: "Der Spiegel" (again self-translated by me)

<https://www.spiegel.de/wissenschaft/weltall/schwarzes-loch-verschlingt-eine-sonne-pro-tag-a-0909e7d1-07e9-433b-9d5c-f0640ea14b8a>

"Brightest known Quasar [Black Hole devours one sun per day](#)

Astronomers have measured a Black Hole that has record dimensions: It is the most voracious and fastest growing feature whatever has been found.

07/03/2020, 14.23

In the 1950s, exceptionally bright objects in universe posed riddles to the astronomers. Radio telescopes, which went to rapid technical progress at that time had made them visible. Now the researchers asked themselves what a mighty glow they actually perceived that sometimes appeared point like, sometimes elongated and also changed the brightness. It was probably not a star. Because no name seems to fit, the choice fell on "quasi-stellar radio source", QSR. From this, the concept of a Quasar resulted.

Today we know that light from quasars was running for billions of light years in universe coming here to earth. They are located next to the Big Bang. Quasars are the active cores of galaxies. Their

luminosity may come from a rotation of gas and dust around a gigantic Black Hole with next to light speed when gravitation energy, angular momentum and rubbing heat up the matter.

Now astronomers inform about a record – they watched the most voracious Black Hole. It eats about the mass of one sun per day as the team of Christopher Onken of Australian National University of Canberra told in the British Journal "Monthly Notices of the Royal Astronomical Society". With its mass of 34 billion of suns, it is one of the heaviest Black Hole in universe."

And here is just another information of Black Holes (again self-translated by me):

<https://www.spiegel.de/wissenschaft/weltall/schwarzes-loch-forscher-entdecken-roentgensignal-wieder-das-schlaegt-wie-ein-herz-a-6d4aba2a-b5f1-4fb8-b458-0f3e9934a608>

"Heartbeat of a Black Hole rediscovered

Astronomers have found an unusual signal in universe. It comes from a Black Hole and reminds of a heartbeat.

06/10/2020, 19.39

Per X-ray Satellite, astronomers rediscovered the mysterious "heart beat" of a gigantic Black Hole. This massive monster in the center of a galaxy in a far distance emits regular X-ray signals approximately in every hour.

Origin of the x-ray pulses is the Black Hole in the center of that galaxy in the distance of 600 million light years with the catalog number RE J1034+396. It is surrounded by a so-called accretion disk on, which matter is collecting itself before it disappears in the Black Hole on good bye forever. The falling matter is heating up itself so much that it shines brightly in the X-ray area."

And now I'll tell you about my problems of those publications listed above.

The others have not yet understood that my Black White Holes, BWH or better PK, are actually able to eject the matter itself from its inside to the outside. This way, always a mixture of external and from interior to the outside coming interactions. By observing that, this special behavior can be interpreted mistaken.

They haven't yet understood that quasars come from pPK directly – that these PK eject the matter and doing this they build up the galaxy, pulse after pulse. Temporarily, old matter is falling into the center to emit new matter by sPK.

Astrophysicists obviously always expect an image of a BH where its shadow is in the middle and a bright disk area of radiating matter is in an orbit of the BH (accretion disk). It would be eaten and interact so that extreme energy would be generated by collisions. They expect these appearances because of their assumption that the BH would never give free big masses of matter. So each disk, each bright disk would be an accretion disk on the outside heating up by gravitational interaction.

My question is now: Are all BHs facing the observers on earth with the same side? Are these photogenic guys with a chocolate side? Probably, they aren't!

I say: Such a divergent collapse area is closed all around by matter interacting all over and "shining" in all spectra, emitting electromagnetic e. m. and gravitomagnetic g. m. spectra. The DS is completely hidden by that matter. Expected "hole" itself, nobody is able to see it. He only can observe the active matter surrounding it. So you just have to calculate it. If you haven't enough parameters then your image isn't correct. By a cut through the middle of the space, you get a hypothetical image as shown above.

The black area (a pure construction by a cut imagination) would be an area of mass $M_{o(PK)}$. It doesn't stay there however, but it will be emitted completely. A new area of divergent mass is moving down. Now a sPK pair is filled again and exported into the environment. Out of the center, a fountain arises! Or you could imagine a kind of a heart pumping matter.

Why do I think of it this way? Here I'll introduce to you some illustrations of my solutions. At first, there is the general solution of a stable space-time oscillator. Mass M_0 is concentrated in the center. It oscillates by building down and up of their own sub-protocosms (SPK) and their hierarchies (SSPK, SSSPK etc.). The radiation cosm is above the mass M_0 . At stable cosms like universe, proton, electron and electron neutrino, the radius R_0 of the mass M_0 is the same as the added radius R_0 of the radiation cosm. This is the base of my construction that the central mass M_0 and the above located radiation cosm γ_0 together with $2R_0$ are disappearing below the event horizon of $r_0 = 2R_0$.

In addition to the general solution of stable cosms, we find the instable cosms and protocosms. Their internal mass reaches above R_0 . Extreme kinetic energy is lifting most of the sub-protocosms SPK on essentially higher orbits and smaller radii striving out of the horizon $2R_0$! So the top-SPK escape from the event horizon $2R_0$. The primary protocosm is negated and opened now.

S. W. Hawking thought in an explosion of a Black Hole if his Black Hole would miss some certain quanta. Well, the reality is: My protocosms lose their SPK quanta pretty quickly. And just there is the END of the protocosm in a dialectic sense. This is not the end of the top-SPK. They are flying for a long time fare away until they suffer a fate like their packages.

Here, you can observe an image of an organic cell of rat comparing my general solution of a cosm. This is the universal principle:

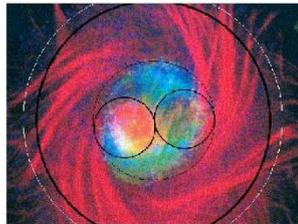
Comparison of a cell to the laws which make you recognize the universal life as universal-principle



Here is no galaxy but a cell consisting of a connective tissue of a rat. "Protein fibers of the cell bark are red." The central, oval and blue granulated sphere makes the cell core, which includes both of the core bodies - the nucleons.

Source: bdw 9/2001, p 12,

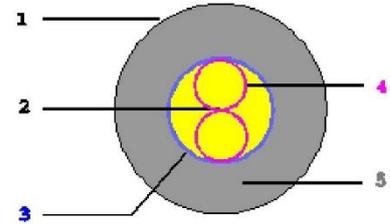
Bild des Monats: Einblick in die Rattenzelle (H. Scherthan)



Now I have drawn the essential areas: 2 nucleons, 1 cell core and many protein fibers of the cell bark which obviously have the freedom that they do not have to come back to the center by its run.

Following my theory, the cell is an opened cosm - analogously to the protocosm, or arisen from some protocosm. Although open, it is even closed, because the protein fibers aren't infinite but really ending.

The reason is the exchange. Just one cell doesn't exist. Always there is the exchange with the environment leading to the conservation balance: the amount of given is equal to the amount of taken.

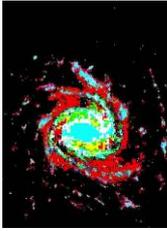


This is the schematic result of my theory, which is valid for all of the closed cosms:

- 1 - the horizon, from which nothing can escape, may be it would be open - like to see in the picture of the middle signed by a white ring.
- 2 - the center
- 3 - the central area of internal mass
- 4 - the parities
- 5 - the vacuum space of returning radiation

- 1 - $r_0 = 2R_0$
- 2 - Center
- 3 - R_0
- 4 - Rotation orbit of a Sub-PK
- 5 - Radiation Cosm γ_0

In yellow color, there is marked the space of M_0 . At a protocosm PK or energy cosm EK, everything is expanding over the horizon r_0 and evaporating in combination with emission of radiation most from annihilation. The interior comes out. It becomes a part of the external coordinate system. At unstable cosms, the radius R_0 reaches up to the horizon r_0 .



For comparison, here is a photo of a colored galaxy. You see a core, which reminds at my area of M_0 . Unmistakably, the external interaction area appears in relationship to radiations and emitted SPK, which were changed into stars and star systems.

A galaxy and its direct environment in the halo simply is an open protocosm approximately evaporated down to the rest in the center where its DS is interacting and generating sPK.

For the pure theoretic an static solution of a BH from GRT, there is an interval of the radii r_0 to be more than zero until infinite. Everything seems to be possible, but only the special states are programmed and possible in the eternity.

I tell you: Everything in universe is in an equilibrium of exchanges. One single and lonely BH is not there. Everything consists of the model of PK! Just everything!

3 Why is the Sky Black around the Stars?

There would be too less stars to illuminate the universe, so you are told (how many should them be to do it well?). And the farthest stars would be too small because of the distance. They wouldn't be able to illuminate a larger area (so they are still bright enough in their area). Can this be the correct explanation? Certainly, no one has tried to explain. So far, no price has been awarded for it.

I tell you, that you only can illuminate something, if it will be reflected, partially absorbed and transmitted by re-emitting. You cannot illuminate a vacuum, if it wouldn't have white walls but swallowing walls in black. Nobody can see a lateral beam of light to the left (for example), because its photons never hit here but somewhere at an absorber at the left side. So I found an interesting idea. I compare the universe light to a bundle of glass fibers (light lines). Only one fiber of all hits my eye to absorb the light of that star, which is in light contact to me. How winding the light ran through the bent fiber remains hidden from my eyes. If one fiber does not contact my eye, so this part of the project is black for me. Simply, it is not existing!

Can I see a light beam, which does not hit my eye? Isn't it because of the naive view of things that people believe that a star could illuminate the universe? There is only a small amount of matter, which could catch the light and transmit it even without loss like at a mirror. Actually, in universe there aren't ideal reflectors. Radiation is absorbed or flying eternally through the gigantic gaps between matter by certain vacuum and gas clouds. It seems to be like light fibers would nowhere end. As you know, these fibers weren't fixed there to wait for radiation. The radiation itself creates its own way. A radiation, which is still on its way, you also cannot see. Just when its first photon hits your eye, then you can begin to see the incoming light.

Can you see a photon coming from the side (does it hit the retina of the eye or does it fly passing it)? Are you able to indicate a photon on a screen if it doesn't hit the screen at all?

Actually, how does a star shine? It only shines over its face. This means: Each rays going aside or behind the star do not illuminate us here. We cannot indicate them, unless they would or will be reflected at another celestial object like certain rays of the Sun do at the Moon.

This is why the interacting shell of a DS only can illuminate us by its limited radiation area (its face). Some part of it is emitted matter of the dark gray state, which was just turned to gray white. Its emitted radiation cosm is the first at all.

Briefly said, dear reader, you are standing on the Moon and you hold a spotlight in the direction of Venus. Who will see the light? The astronaut on Venus or the idiot on Earth thinking to see it here?

4 Radiations

After every shot out of a sPK pair from the area of the DS, space will become free for generating the next sPK. If a DS emits pulses they should be gravitomagnetic pulses. That's why in DS and PK the gravitation is the determining force in magnitudes! Additionally, this isn't a wave, which could be measured as wave. Gravitomagnetic momenta can be indicated with e. m. resonators without that you could notice a difference of the origin. Electrons have mass and electric charge. Both, electromagnetism E. M. and gravitomagnetism G. M. consequently are coupled inseparably.

A stable cosm (BWH) that doesn't open would theoretically have a stable frequency, which doesn't reflect itself as such a feature but as a frequency of its external mass after Max Planck, for example $\tau_o = 4.4e-24$ s for the proton with $M_o = 2.8e+11$ kg.

34 billion Suns inside a DS are $3.4e10 \times 2e30$ kg = $6.8e40$ kg. This is the complete content of a small galaxy. Continuously, all the rest is coming down from the environment of the galaxy core so that always there is enough mass and radiation energy to generate sPK by this central DS.

Obviously, there are stable BWH features in our cosmos just as protons, electrons and electron neutrinos or their anti-particles.

Unstable BWH, being PK or EK, evaporate and give a rotation system into the external coordinate system. Some of them collapse in the central area of a DS after and after. In these series, they export secondary protocosms sPK, which behave themselves the same way as their producers, but just smaller projected on smaller areas.

So the DS state is open approximately to a "Black Hole" that would interact to the outside internally producing sPK. An observer who doesn't see anything thinks this could be such a Black Hole of the General Relativity Theory. Because of the gigantic concentration of central matter, interactions of this feature can be observed. They suggest, this would certainly be such a BH of GRT. So I tell you, it isn't. Why isn't?

Because the internal mass of a really temporarily closed BWH (as PK or EK) doesn't directly act to the outside. I found that it is internally locked like a zipped file. It has its own coordinate system there in its own spacetime curvature. As using a ZIP file, a certain and small size externally remains in the end.

By oscillation of the internal mass M_o , the external mass m_o remains calculated by my equation and my constant d developed in my book "TBA I", p. 338 (published in 1998):

$$m_o = d / M_o \quad \text{mit } d = \hbar c / G ; \quad d = 4.73716 \text{ e-16 kg}^2. \quad (4.1)$$

with \hbar as reduced Planck's quantum, c light speed, G gravitational constant.

If you would photograph a BWH in time lapse, you surely would observe a motion matrix by the pulses showing opened and locked states. The complete universe is a time lapse. Each picture of it only shows us a small part of the processes.

Sgr A* has a **DS** of about **7.363e36 kg**. We cannot measure sPK. **M 87** is an elliptic and very active giant galaxy, in Virgo, age 13.24 billion years. The DS has 2.4 trillions of Sun masses, so about $2.4e12 M_o$ or **5e42 kg**. These are next to 1 million times more mass in the Divergent Sphere.

Elliptic galaxies would be the oldest. They were the first features of the development. Spirals consequently were younger.

So, this is an argument of the others that elliptic galaxies would have experienced mergers and interactions etc. Then after this, they would have become elliptical. I think, this is just confused, because you can see the oldest in the beginning of their development as they were infants. By the distance of more than 13 billion light years of M 87, we see its age of childhood. **We observe a Giant Baby!** So M 87 hardly can survived merger and interaction time periods. Hubble's classification is very doubtful! Yes, because the others always have to think of development series. Everything seems to be a product of one Big Bang. Contrarily, I think of evaporations of PK or EK. In Wikipedia you can read (self-translated into English) the following.

“Within a radius of about 30 million light years around the Milky Way, about 34 percent of the galaxies are spirals, 13 percent are ellipses and 53 percent are irregular galaxies and dwarf galaxies.”

What should I learn from it? I think, 34 younger, 13 older and 53 smaller objects as rests of interactions and some dwarf galaxies are the part of 100. Fine, I'll tell you now! These ellipses are the first. We see less of them in the past. We don't see the flew SPK and sPK. They are extremely dark gray. Just their results after opening we can see. They became spirals, barred spirals, star clusters, irregular galaxies and dwarf galaxies. What more do we want?

In my opinion, barred spiral galaxies are features of spiral galaxies. Obviously, they are the first state of spirals coming out of an elliptic center. Where is the beginning, where is the end? This question is suggestive! From each PK, origin and end approximately came from the same start although the center was free at first, an approximately homogeneous sphere. Do we see correctly when we look in the sky and guess?

My phantasy gives me the following image: one primary protocosm pPK of the universe is opening. After some processes, a complete giant and elliptic galaxy appears in the external coordinate system, in our universe environment. We first observe the tiny opened center of the pPK and both rays. After a further time period, the center is stretched by the extreme radiation. All the flying sub-protocosms SPK we don't see flying. They are still locked without sending light. Later we suddenly see the result of their opening: more galaxies in the environment of the elliptic galaxy, lighter galaxies in its cluster.

Now the spatial process of change is starting in the center of the giant galaxy. Mass is falling to the center and creating a giant divergent sphere DS. In its center, now after discrete steps, extremely filled pairs of sPK are created and emitted, one pair after the other. The first of them are very rich of internal mass. After equation 4.1, externally they are the lightest. Their openings follow in the farthest environment of the fresh giant galaxy core while the giant is gradually shrinking. In the beginning, the environmental galaxies “feel” a gravitational attraction momentum into the central galaxy still very thick. This attraction forces them into their inherent orbits of the given space curvature. And then, step by step, the mass of the central galaxy is decreasing because of the series of emission. It is like the principle of discus throw in stages of changing force.

Every further sPK pair is internally lighter and externally heavier. Those pairs of sPK don't fly so far away anymore as the first of them. Giant PK of the universe surely have extremely much electric charges in concentrations. Extreme magnet fields are possible.

Pairs of sPK are contradictions of angular momenta. In the center of their origin, the momenta are zero. While the process of separation, they will fly into contrary directions. This is the way of both galaxy arms with the same rotation sense.

In the beginning, the sequence of sPK production took a long time. Very large sPK had to be created. This sequence then became successively shorter creating successively smaller sPK. Additionally, you may not forget that the central galaxy began to rotate faster because of its loss of mass. Just in the beginning, all the system parts were standing there like frozen out from the primary PK. Those exported sPK were directed into a common plane where these SPK of orbital 1s came from. It was the year 1998 as I already called this area a Funnel Slot. Here the forces are equalized. And here is free travel. While successively faster sequence, one sPK pair after the other appeared becoming internally lighter. Even a physicist without phantasy should recognize now that exactly these spiral galaxy arms arose from these projectiles. Step by step, an elliptical galaxy becomes a barred spiral galaxy and later a spiral galaxy with more and more spiral arms.

In the center, the ellipsoid remained, which became lighter in the past. It is the bulge. There at the expanded rest, we clearly see the **Mass Block of a PK**. At the origin mass block, no angular momentum was stored. The emission of SPK and sPK left a tiny angular momentum. In the meantime, gas was absorbed! The center was free as first. Not a long time later, the other SPK became free. The environment always is moved faster than the center of the PK. And now, the certain mass block lost mass and extent. So it had to rotate faster now. Nevertheless, it remains the slowest part because it expanded supported by the annihilation's radiation.

Consequently, this is no evolution chain as Hubble suspected! Spiral and barred spiral galaxies never will be develop to a uniform ellipsoid or to a sphere. When I observe such a uniform ellipsoid, I know, it is the beginning of the complete universal theater. The biggest angular momentum is not in the center. Additionally, there would be too less gas between the old stars, red stars relatively. It's all right!

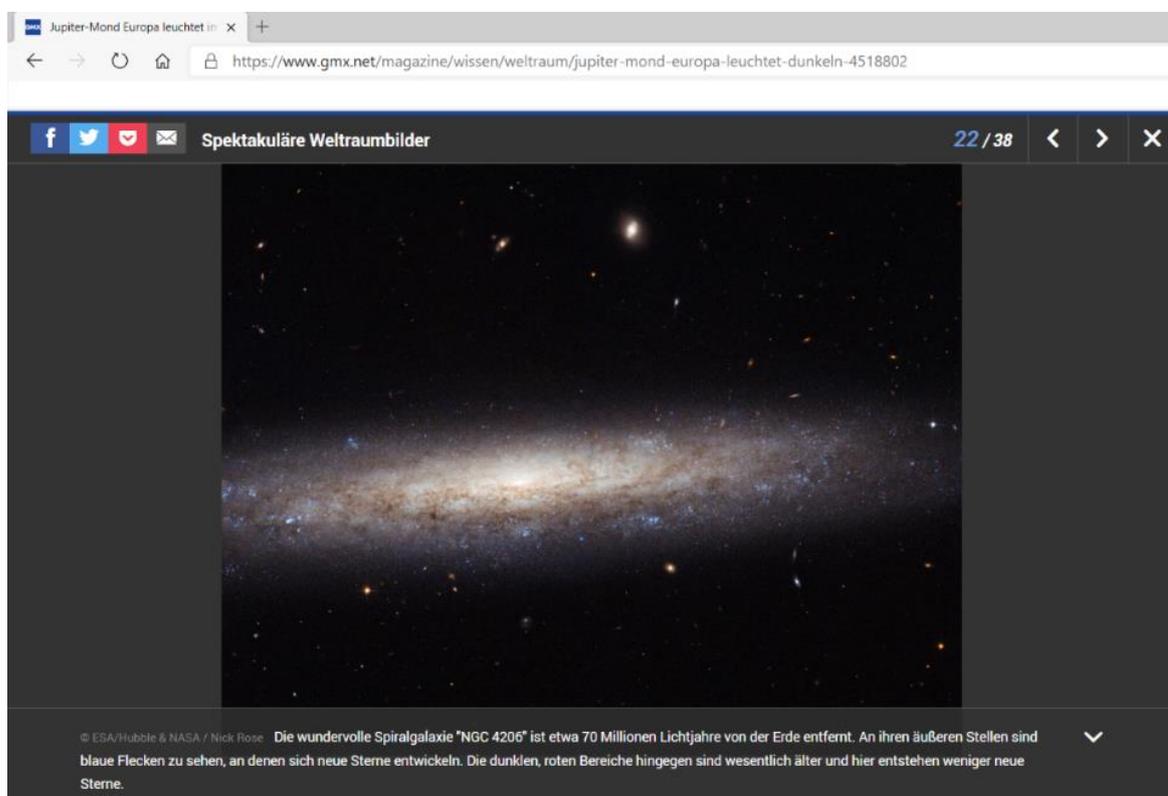
One observes very hot gas externally the sphere or the ellipsoid. What does it do there? Either it comes flying in from the secondary collapse processed (which is condensation of matter to PK the opposite of evaporations) soon evaporated again. Or it remained from the beginning in the past. And now it is heating up. These elliptic giants can usually be found in the centers of galaxy clusters, so you're told. Well, why do they? It seems to be clear! This is a central first rate primary protocosm of the universe, which is still larger creating a Hubble Bubble!

In the ellipsoids, the stars run criss-crossly just like the SPK in a mass block of PK (spatial quantizations of the secondary levels in the orbitals of 2p, 3p, d, 4p, d, f ...), which was the first changing to stars! So next galaxies run around the center of the galaxy cluster. The centers are really the oldest relatively to the rest opened far away. They hardly have chances to renew with gas. Actually, they can collapse and create new stars what we still have to observe yet.

Coiled up in this net of errors, one has found many explanations for riddles in universe. Funny is the explanation of the GMX scientific editors, you will find in the screenshot in the end of this section. In this cohesion, I tell you: one clearly observes that the density of matter just is less in those regions where new stars are arising. In the other regions where are many old (red) stars, the density is higher. So why don't the new stars form there? This question is justified, because science claims that new stars are purely formed by themselves by the concentration of matter preferring small particles. At the edge of the galaxies, these particles of matter are much more thinly distributed.

My model gives a different answer: in the center of a DS, old stars will be absorbed, tattered, reconditioned and emitted as new secondary protocosms sPK. These sPK come back again into the environment of the center dependent on their energy. There, at evaporation locations, they open up their new star life. Certainly, next to the center, new stars will be set free into the quantity of the older SPK stars. Just there, in the glaring light of the other stars, you hardly can identify them. In the central area of a celestial object, definitely there are possible more than one single DS.

You also can see that the blue locations are real clusters. The new stars aren't born finely divided but portioned well. That fits directly to my model of quantization of rotation systems of galaxies, star clusters, stars, planets, satellites, subsatellites etc. Everything in universe appears by intended portions never flowing continuously, neither the Time nor the Way, nor the Speed, nor the Temperature, nor any Object, nor any Subject, nor something else!



5 Does a Mass Actually Attract Photons like it Attracts own Masses?

No, it does not!

According to reports, Albert Einstein had found out that photons would “gravitate” to one another. What does it mean? The e. m. wavequanta would attract to one another and compress themselves. I think, they would “electro-gravitate”. Seems to be not bad!

In „TBA I“, pp 327, I constructed the equivalence of mass and electric charge. From this, I translated all the Maxwell equations and all the further equations into gravitational equations of the Electrogravitation. In the end of the section 2.5, I draw the conclusion analogously:

The capacity of a cosmos is its internal mass M_0 . Inductivity of a cosmos is its radiation γ_0 arisen from the annihilation. The following sentence is the end of the chapter:

“The universe is a primary, complex programmed, harmonic and **ideal oscillator!** It oscillates between the states of gravitation and radiation cosms.”

The same applies to every internal cosm and every microcosm.

I think that e. m. wavequanta can make a locked cosm, a close spacetime or a quantum that behavior is the same as a Black White Hole to its mass. Yeah, and then I found my daring idea. It was a help for me, too, explaining vacuum and annihilation:

Black-White-Hole Principle is valid for three cosms: For a pure gravitomagnetism, for the mixture of gravitomagnetism and electromagnetism and alone for the electromagnetism. Well, it is just a math solution with variants! What would reality look like now?

From my construction, every protocosm consists of gravitomagnetism G. M. and electromagnetism E. M. So our universe, too. I mean, in vacuum the light cosms are located, which are purely e. m. radiation cosms. Because of their annihilation, even from equal parts to close the BWH, it consists of gravitative and electric states. A mass cosmos “attracts” masses. And an electro-cosmos – the internal radiation cosm – „attracts” itself between its partons reaching a close state. Nothing is able to escape. So it is better explained by these premises: A mass takes a curved way at another mass.

With the same behavior, a light beam seemingly takes a curved way at a “mass” (but this is wrong!). You would think, too, that a light beam will be shifted to the red spectrum while it is escaping from a “mass”. One thinks of a gravitationally caused red shift of the e. m. spectrum. This is also wrong. I know that since the year 1998.

EVERYTHING is very different. I tell you, this is the electro-gravitationally caused red shift of the e. m. spectrum, because photons interact with themselves. Contrarily, pure mass on photons or photons on pure mass don’t interact. Each thinning of the density then would reflect smaller effects as it was correctly measured when a light beam passed the Sun.

So I draw this conclusion:

A light beam seemingly passes a curved way at an “electro-mass”. So a light beam will be shifted into red when it is escaping from an “electro-mass”. This is the electro-gravitationally caused red shift of the e. m. spectrum!

Today, we have tried to explain all the effects with the attraction between some partons. Is this really correct? In the past, I said **attraction is the effect of a separation**. So I always think of a dialectics. Now I say, the compression into a PK is the result of external pressure. If a PK should become stable directly then only because its internal and external pressure are an equilibrium.

Consequently, a purely gravitational BH just is stable if the same amount of wavequanta are falling into the object as coming out from the inside. The same behavior, I expect with an e. m. cosmos. That makes sense that its secondary photons cannot come out. In this respect, its primary photons of its electrostatic charges and its magnetons are able to come out. The reason is, there are not enough primary photons to **pressure against** the outside. Expecting a different behavior, the space is thinned too strong. Realizing the gravitation with primary fallons and electritions with gamma quanta, it is much

denser. The denser, the smaller is the density until the phase transition happens between interior and exterior at the radius r_0 while formation of a new cosm type called protocosm PK.

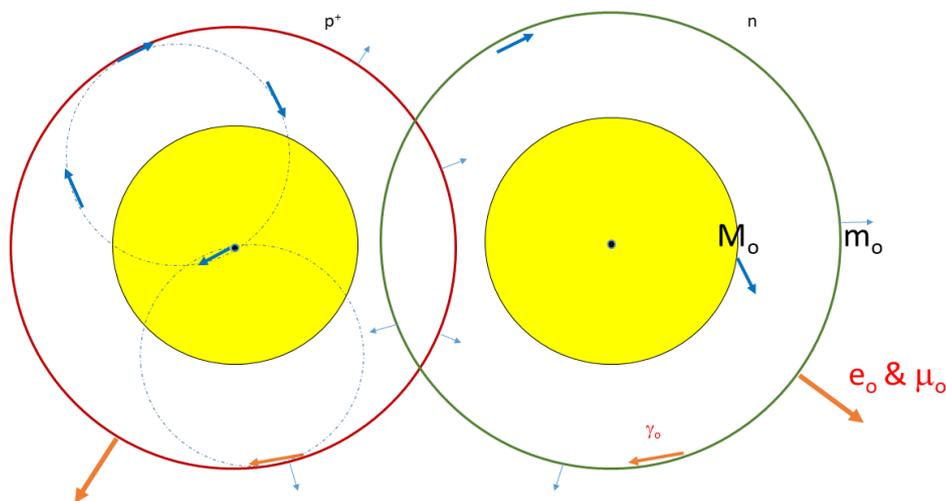
So I can explain to myself that neither internal mass M_0 nor internal annihilation's wavequanta γ_0 (photons) are able to escape from this mixed cosmos. The internal static charge e_0 and its magnet fields μ_0 can directly act to the outside. Spacetime demarcation is not valid for them because their own borders are far away in the outer coordinate system.

Only this is a possibility that I'm able to explain the annihilation. Hierarchical radiation cosm arise forming a part of the vacuum. So I called them **magons**.

Without external pressure, every kind of cosm would burst. Never it would be stable. It would never exchange something with the external system. Actually, how I solved everything, a real system of cohesions could be born.

Still before 1998 I discovered like God made the very first particle of matter. I had an inspiration of Him taking two gammagravitons q/q and two gravitons g/g . This gammagraviton was the electric elementary charge $\pm e_0$. The graviton g was also given as an antigraviton \bar{g} . Both made the gravitational elementary "charge" as positive and negative.

Illustration 5.1: Proton and Neutron Coupling



Then He locked each one gamma q and \bar{q} (being e_0^+ and e_0^-) in a graviton and an antigraviton. After doing this, He separated both from each other in movement. Since then, g and \bar{g} strive for unite ("mass attraction"). The other \bar{g} and \bar{g} also strive together. Now they are electrically charged yet. The g^+ and \bar{g}^- come together and also the electrically charged antigraviton minus and plus, \bar{g}^- and g^+ . From these, so I think, He made a further pair of primary elementary particles – the subtrons s . Using the charged subtrons and the charged gravitons and their antiparticles, He created the known particles protons, neutrons, electrons and neutrinos. He packed them into each other. Our particles are packed in universe what is the package and the second and last stable hierarchy area. Between there are innumerable hierarchies of protocosms and energy cosms especially.

Each of these elementary particles is a resonator. It emits and receives wavequanta. It is an emitter and a receiver at the same time. From such resonators, the Creator's world is radiating our world.

I want to see each resonator as if it was a pixel of the giant hierarchical and spatial hologram – what is the Creation. Every pixel is flexible and movable. We are permanently separated from this first hierarchy area that we are not allowed to contact the origin force of the Creation directly. We cannot come into our elementary particles directly to interact there with g and q . On the other side, we aren't allowed to leave our receptacle called universe. So we are locked in it. And we are forced to move following the laws. Only tiny limits we can determine ourselves. All what remains is destiny. We are holographic marionettes in a giant game!

The amounts of the elementary forces of gravity and electricity are equal. Since their existence, every electromagnetism has been **locked** equally in any mixed cosm (from e. m. and g. m. effects)! **This is why photons electrogravitate with photons.** Therefore gravitons gravitate with gravitons respectively masses with masses.

I always asked myself, how should this run that a mass attracts photons? It only would be possible if photons would be separated from a mass in the beginning of all. Contrarily, they aren't. Really, they were locked inside of a mass cosmos. Only while an annihilation process, their external equivalents come free. Their internal photons remain locked in their magons.

A light beam is not deflected by a mass but by the gamma-gravitational effect of its radiation cosm locked in it.

Can somebody understand this relativity? Or is this also too much for common sense?

Briefly summarized in a law:

In a cosm, protocosm or radiation cosm, there is only mass or radiation if the corresponding resonance object gets enough counter-pressure from the outside that is larger on a minimal volume and smaller on a maximal volume so that an equilibrium arises forming a limited sphere (determined on the horizon r_0).

In my book "TBA I", I developed electrogravitational equivalents. This way, I am able to transform Einstein's mass equation (1, eq. 2.8,3, p. 345)

$$r_0 = 2 \times G \times M_0 / c^2 \quad (5.1)$$

as if M_0 also were the electrogravitational effect of all the photons there among them. Neither $2G$ nor $2/c^2$ have a meaningful sense but rather $M_{0(\gamma)} + M_{0(g)}$. There is the same amount of both. It may be.

So I could draw the following conclusion because of eq. 2,5.1 from "TBA I" (1, pp 327)

$$r_{0(q)} = 2 k_M e_M / c^2 \quad (5.2)$$

with the internal mass constant $k_M = 106.1325 \text{ m}^3/\text{Cs}^2$ arisen from the product of

$$G_v k_q \text{ and } 1/\alpha_{gq} = 137.036 \text{ (1, eq. 4.6,5; p. 513 and eq. 2.11,25, p. 384).}$$

Now you can calculate the internal e. m. charge e_M of a cosm using the following equation

$$e_M = r_{0(q)} c^2 / 2 k_M \quad (5.3)$$

One spoke of the "attraction" of the same masses among each other. What about this?

Mass attraction and gravitomagnetic attraction are **reunification** of the same masses or poles.

Electrostatic or magnetic attraction are **reunification** of unlike charges or poles. The same poles lead to the escape of each other.

Mass repulsion is the effect of reunification of the masses of the same name on the one hand and of anti-masses of the same name on the other.

If unlike masses are unified by unlike charges then the oscillations of masses are directed to the oscillations of the anti-masses. Their energy will be radiated by both photons. All the internal matter of the particles is annihilated, too. Their internal photons together make a magon.

Again it's finest relativity! And philosophy! I always meant as follows:

Things attract because they have been separated from each other! This is why they converge, each system in its own orbit. Each orbit moves away from the other. In his wise foresight, Einstein understood gravity as an effect of FALLING. This fits my ideas.

Our world is a divided world – an inflated, foamed appearance within a world where, strictly speaking, everything is united. In contradiction, we are not united here. We are separated. And we strive for unification.

If you haven't understood it yet, this illustration 5.2 may help:



In the world to the left, there is the "attraction force" in blue color. Looking into the anti-world on the right side, it will be the same. Between both, the expression results of a "repulsion force". Consequently, it is a **leading together** in each of both worlds while between both the **separation** is running.

This is crazy, isn't it? Albert Einstein is told about an IQ of more than 200 (he was a specialist on an extremely small limited knowledge). You surely know that always these people who have deficits in their knowledge must give a gigantic IQ to the special discoverer for that their own IQ may not slip below 100 or even deeper. This is relativity, too!

As long as there is no "clever" person who devices an experiment with which he can clearly demonstrate the repulsion of ordinary matter and antimatter, as long as one will doubt such considerations as mine. Other models would remain. And I will conserve my own universe that I call "**Arcsuniverse**" (that's my word creation).

I am 100% convinced that it works with my basic ideas. On this base, I offered my models. It was at a time period during the others still were waiting for the certain experiment. Einstein hasn't measured the deflection of the light beam and then something constructed for explanation at all. First, he created the model. After this, the detection experiment followed. This is the way I'm going, too.

By the way, Einstein gave all the things fitting together, geometrically. For example, the rosette orbit of a celestial body. This body had to wander on its immutable ellipsis eternally following the laws of Kepler. Following Einstein's theory, but this ellipsis is changing in its space. Why does it? Its central body curves the space. Every repetition passing by additionally curves the orbit once more. So the orbit is wandering and creating a rosette. This is actually quite simple. What's so complicated about that? Space is curved by the feature of masses to be united. Additionally, it is curved by the feature of the antimasses to be united. It becomes uncurved when masses and antimasses are distributed while they disentangle.

Space also is curved by radiation cosms, which have to unite themselves. There aren't anti-radiation cosms. Each radiation way is curved by radiation cosms in the same amount as a mass is curved at a mass cosm, for example, at a black-hole state of exact calculation by GRT. This is the reason, why no difference between mass and antimass can be detected by radiations.

An inert mass, theoretically moving on a straight line, is forced onto a curved path and thus, it receives an electro-gravitationally caused orbital angular momentum.

6 About Milky Way

Let us have a look at some observations of our galaxy, of the Milky Way as it is called especially. One Black Hole would be there next to the other. I think, these states are just next to a BH. They are DS states. Comparing to information of the Wikipedia, one finds measurements as followed:

Sagittarius A*, Sgr A*, alone about 7.363e36 kg.

The complete area would have 4.1 million m_{\odot} , about **8.159e36 kg.**

Ten thousands of BH would rotate around the main BH “Sgr A*” and fall in. To this theme, I say: there are ten thousands of DS areas, high concentrations falling down to the location of the main DS.

In this respect, you don’t see the sPK coming out from the centers having new material and taking new positions as young hot stars! They are locked and too light.

Radio spectrum is running high from wavelength of 1m to submillimeter, around 10^{12} Hz, 1THz, 1000 GHz. You can expect a lot of interactions there.

A BH should be in this area of Sagittarius A West. Calculating a static theoretic BH of GRT, this would be a mass of 3.7 million masses of the Sun, about 7.363×10^{36} kg. This is less than the mass of the Milky Way of 1500 billion masses of the Sun, about 3×10^{42} kg with ten times of “Dark Matter” (cf. Wikipedia). Contrarily, **I tell you, there are just 3.6×10^{41} kg**. Although, there is no proof of “Dark Matter”, one already add this feature.

Masses do not fall into the center continuously. They aren’t be pressed by falling masses continuously. Just when the DS has been generated and emitted an sPK pair, there is a variation of density of the external matter. This is hardly measurable, because the gravity center is made of 40,800 times more mass than above mentioned DS-mass pulsating. I think, there is no chance to prove this pulsating effect I predicted. Therefore, the gravity center is the cause for that falling, falling in, more in outer areas than next to the direct gravity center. Finally, everything is dependent on the inertia falling into the DS. In the proximity curvatures cause successively smaller orbits.

While opening of the PK and also after this, external masses and radiations are falling to the DS, which is eating them. After this time period, it emits sPK into the environment where they evaporate and produce young and hot stars in the environment of Sagittarius A*. This is that certain fountain of youth that I always talk about. Therefore, the formation of sPK is not linearly continuous. It depends on the amount that the DS is overfeeding with one close portion so that the secondary PK pair is arising from this center. In this respect, sPK of multiple sizes are sent out into the environment to rejuvenate that matter. In universe, everything is running by the same laws. Consequently, the interior of the stars is successively regenerated in the same way. This problem actually led to the so-called Sun Crises of the science who had no chance to solve it because of ignorance of my model. The Sun is essentially younger than calculated on basis of nuclear fusion.

7 How did I find the Internal Structure of Black Holes?

By discovering the whole universe as a system of oscillators and of wavequantum exchange between those oscillators – these are cosms and the exchange of their wavequanta – the interior of the oscillators naturally must be portioned by the integer number n using Planck’s constant h . So what could be more natural than to use Niels Bohr’s model of the atomic shell? He had still seen the electrons as particles, which is correct, and he assigned orbits to them, which is also correct using my assumptions. When this problem appeared that electrons exchange wavequanta and one couldn’t explain it, Schrödinger let his cat out of the bag. From this time, physics was fooled for more than one century.

I was aware that Bohr’s atomic model of electrons in the atomic shell would exactly match the internal quantization of my non-stationary black and white holes (BWH), exactly it would match the internal structure of all cosm features. Let’s look first into the electron shell. At $n=1$, this is $1h$, there is the first electron rotating on its orbit next to the atomic nucleus, what is a proton. This is hydrogen. We speak of the electron is in the orbital $1s$. In Helium atom, the orbital $1s$ is filled with 2 electrons. More of them do not fit there, because there are no positively charged electrons. This way, it goes on by orbitals $2s$, then by three spatial orientations of $2p$ (6 electrons), $3s$, $3p$ and $3d$ (10 electrons) etc. There are more and more in the spatial orbitals f , g ... to m and who knows where else if the periodic table of the elements would not find its meaningful end. The orbitals upwards are successively closer to each other. They include more and more electrons respectively electron pairs.

And now we are doing exactly that what came from my bold mind. Creating the structure of a BWH, we simply turn around this system of the shell. We turn it upside down at the horizon r_0 from the outside

to the inside! This is crazy. Why does it work? Thanks to our dear Albert Einstein, this is possible. He realized that God created the system of the **Special Relativity** so that his universe would work at all.

Now it starts reversed. It doesn't work from the center but from the horizon where is $n=1$. In this position is the orbital 1s. What for things are there? Ideally structured, there are 4 BWH (protocosms), which are closed in one receptacle BWH. All the subs consist of subs. These are again made of subs, and so on. We find a hierarchy of packages. That arising has happened this way, because the system was made this way. Let us look like it goes on. To the inside, to the center, more and more spatial orbitals lay next to each other. Every orbital is filled of 4 sub cosms.

You will ask me, why are there just 4? I think of 2 positively charged and 2 negatively charged sub cosms. There can be multiple charges equalizing themselves. It is why we have the chance for such a structuring. BWH aren't electrons but compound cosms of all the charge features. In the proximity of the center, there are so much subs that they lay extremely close to each other. Contrarily, they simply don't fall into each other like a singular mash. They are flying next to each other on their curved paths. If they all would be stable like electrons in their shell, my model would not be successful.

Really, the subs are unstable. If all of them would have the same speed and all of them were the same type of PK, they would decay and evaporate at the same time. All to the same time, this would be nonsense. All of them really different of mass, this would be meaningful. Lighter PK should decay slower, heavier PK should decay faster. Let us give a momentum to a different amount of unstable particles as PK that they all are flying from their center with the same speed. What will happen then? I think, the heaviest of them evaporate first. All the others in turn of their series will climbing up until the lightest of them has been evaporated at last. The heaviest next to the center are the most. They mark such a feature like an Origin Bang, because this uniform amount designs homogeneity and all-roundness.

So I called these unstable subs simply **Protocosms**, PK, and their order is a "protocosmic quantization". All the SPK of a stable cosm "want" to climb up to $n=1$ and higher, but they cannot reach it, because they decay before reaching their expected height. To explain this cohesion, I especially wrote the following section in my "TBA I, pp. 404", from which I quote in excerpts:

"2. Secondary angular momentum $I_B = \text{wave quantum spin}$

... These are all external momenta, which come from a curved movement. Describing a subordinated orbit, they are orbit angular momenta I_B , in principle also in the shape of inherent rotations. "Pulverized" charges don't exist really. They are only the object of statistics.

When an electrogravitational cosm gets a momentum Δp_w , then it moves on a new curved orbit. During this event, its gravitational primary spin I_p and its gravitational orbit spin I_B as well as its electrogravitational orbit spin complex $I_B -$ because it carries an electromagnetic charge – are adjusted to the field directions of its environment ...

In the cosm, a return of protocosms to the origin is possible after an extremely dilated movement in such a divergent situation. So the oscillation of the cosm is dilated or decelerated. Therefore, the special relativity is shown in the outside. And this way, too, it is shown that the isolated mass is transported by the external mass. That's an unbelievable phenomenon: an externally light mass m with its outer momentum (3.2.4,1) transports an internally gigantic mass M with that inner momentum (3.2.4,2) at the same time.

The force couplings of wave quantum spins I_B are reversible and able to separate into both sides of those poles with their non-relativistic dipole behavior. That wave quantum spin is measured in $\pm \hbar \times \mathbf{n}$ or also calculated for electric wave quanta in $\pm \bar{\mu} \times \mathbf{n}$ (\mathbf{n} as main quantum number; integer number). From $\mathbf{n} = 2$ the secondary quantum number \mathbf{l} and the magnetic quantum number \mathbf{m} appear (today without having a solution for gravitation single-sided seen as electromagnetic quantum number m , but now also the gravitomagnetic quantum number). Because of the suborder of magnetic momenta, they are to add vectorially. Here, physics adjusted the inner quantum number \mathbf{j} for coupling of e. m. spin and orbit spin. Instead of wave quantum spin and orbit angular momentum, we use the shorter concept orbit spin in the following text. We distinguish the quantum numbers as followed:

1st Primary spin quantum number $s_p = \pm 1$ as absolutum being of subordinate importance for the isolated quantizing but essential for the sum of electric and gravitational rest masses in quantity m , Q (**quantum numbers: g , q**). Here is the additional grafting onto vectorial character.

2nd Secondary spin quantum number s as orbit spin quantum number for electromagnetic Momenta $\bar{\mu}_B$ of a particle, which is made most as half-number components of an integer number: $s = \pm 1/2 \dots$, the gravitomagnetic momentum $l_t = 1/2\hbar$ is behaving analogously (**wave quantum number s** , Pauli principle). This is the additional grafting onto of the vector character!

2a. Main quantum number n , (main orbit)
 2b. Secondary quantum number l , (secondary orbit, orbit order)

2c. Magnetic quantum number m ,

s_p -- Primary spin $s_p = \pm 1$
for electrocosms and for gravitocosms and those order $\mu_{(1)}$ and $h_{(1)}$,

s -- Secondary spin $s = 0, \pm 1/2, \pm 1, \pm 3/2, \dots$ extreme
for the electromagnetic order (electromagnetic momentum $\bar{\mu}_{1/2}$ of the particle itself);

t -- Tertiary spin $t = 0, \pm 1/2$,
 the tertiary spin causes the **gravitomagnetic order** in $\hbar_{1/2}$,

n -- Number of main level: $n = 1, 2, 3, 4, \dots, n$
for electromagnetic and for gravitomagnetic order,

l -- Number of secondary level: $l = 0, 1, 2, 3, \dots, (n - 1)$
for electromagnetic and for gravitomagnetic order,

j -- Inner quantum number for coupling of e. m. secondary spin and e. m. orbit spin as well as the following g. m. tertiary spin and the g. m. orbit spin: $j = s + l$
for electromagnetic and for gravitomagnetic order,

m -- Spatial position of orbit: $m = -l, \dots, -3, -2, -1, 0, +1, +2, +3, \dots, +l$. (2.13.2,2)
for electromagnetic and for gravitomagnetic order,

Number of the spatial positions for each l : $m' = (2 \times l + 1)$ (2.13.2,3)

A rotation system, which vectors lay in its rotation center, for example with electron shells of atoms, has got the term:

$$m = l \times \cos(\mathbf{B}, \mathbf{l}) = l \times \cos\zeta. \quad (2.13.2,4)$$

ζ is the angle between the vector of the main level wave quantum („main field direction" \mathbf{B}) and the respective vector of the second level wave quantum (orbit angular momentum \mathbf{l}):

$$\zeta = \arccos(m/l); \quad l \neq 0. \quad (2.13.2,5)$$

For $l = 0$ the angle is not able to define. We therefore think that there is no angle. In this respect, we define all the levels, which value becomes $l = 0$, located in the same plane. These are for example $1s$, $2s$, $2p_0$, $3s$, $3p_0$, $3d_0$ etc.

In opposite of the present opinion of the distribution over spatial angles, we noticed:

In our system of protocosm magnets of parity orbits are turning themselves on the perimeter of a tube line thought as being circular. At a cosm, the tube radius has an amplitude of $1/2R_0$. Its perimeter on the middle line takes πR_0 . In a protocosm, the divergence is valid therefore it is larger than $1/2R_{0(PK)}$ or

also larger than $\pi R_{o(PK)}$. Ideally seen, the protocosmic orbits of a common mass level distribute themselves uniformly in the course of the compensation of repulsive and attractive e. m. forces. For example, they take about the angles of 60° in the six 2p-orbits....

Inside of one single level n , the number N_{PK} of positions is calculated in the electrogravitational cosm sentence:

$$N_{PK} = 4 n^2. \tag{2.13.2,6}$$

If anticharges are missing bound at charge-carrying masses like in electron shell, a cosm sentence only can be filled with half the position numbers:

$$N_e = 2 n^2. \tag{2.13.2,7}$$

We must add calculating the total number Z_{PK} of all protocosms in a receptacle cosm:

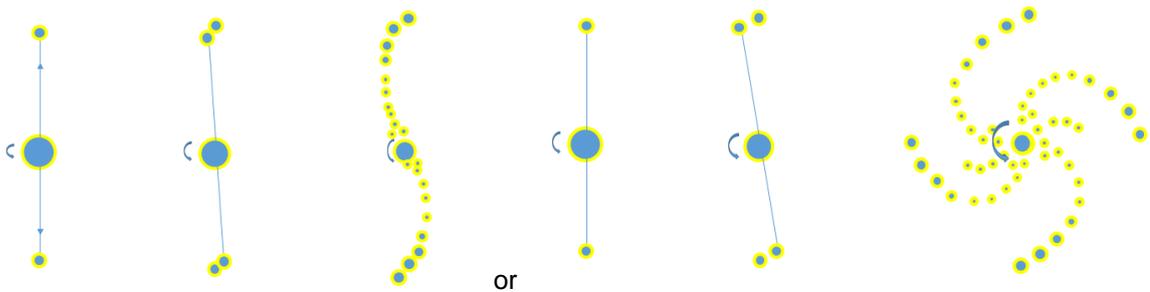
$$Z_{PK} = 4 (1^2 + 2^2 + 3^2 + 4^2 + \dots + n^2) \tag{2.13.2,8}$$

$$Z_e = 2 (1^2 + 2^2 + 3^2 + 4^2 + \dots + n^2) \dots \text{(End of quotation)}$$

So I turned the banality of the electron cosm, which is above the atomic nucleus, into a primacy of the cosm structure. Here I wasn't very careful to differentiate between stable and unstable. When stable, the whole thing inside is locked. If unstable, then it is a PK or EK. The top SPK fly away from it, while secondary PK are built, which – emitted all around – first rather as barred spirals, later more as spiral forms. They fill their gaps, too, especially the areas in the proximity of the center. Such a center becomes impoverished while increasing speed of rotation.

Those external structures successively escape or move away. The results should be the following: An almost standing center creates a bar; a faster rotating center fires to generate spirals.

Overview 7: Barred spiral and Spiral Galaxies after Emission of secondary Protocosms sPK



For example, a giant pPK of universe area emits such a feature of big SPK into the far environment that further galaxies are born from it while the original center itself generates numerous sPK in its center DS, which in the same way also generate further galaxies in the space but more in a plane. In the end of all force, but the central elliptical galaxy will change itself into a spiral galaxy.

For another example, a small SPK, which is followed by some sPK, makes a sun system. This includes the further gradations to sPK, which form protos of all features, so of clouds, minor planets and ordinary planets down to the satellites.

In all appearances, there are further deep hierarchies, so that everything down to the smallest detail that is rotating and coupling with one another, is created from the first start including organic life.

So, in the beginning, there was the program – “The Word”. That program became matter – “flesh” – and with it the life of the entire hologram.

8 How can Matter be Created from “Nothing”?

Dear reader! Just now, I had to explain you something else, much more than I already wrote in my work “The Book Arcus I“. This is absolutely necessary but unfortunately very extensive here. If that becomes too much for you, feel free to read first the next few sections, please.

What is the electromagnetism E. M.? We speak of photons γ , almost called gammaquanta or electromagnetic wavequanta, e. m. WQ respectively their energy e. m. (angular) momentum energy or wave-energy ϵ_{wq} . So I follow:

Elementary charges q are relativistically irreversible elementary magnets. Between them, primary photons are exchanged all-round (sent, emitted and received). This is the origin of the electrostatic force. Elementary charges in motion generate secondary exchange relationships. The shift of a primary exchange field has to be sent and received. Secondary photons exchange themselves while they are forming secondary dipoles of electromagnets. So, these are much too much concepts for one and the same!

Parallely to this, I created my own word conception for the “gravitomagnetism”, G. M.:

Fallons γ_{gm} (gravitational or gravitomagnetic WQ, g. m. WQ, their energy ϵ_{wg} or ϵ_{wg}): Between masses, so between gravitation charges, primary fallons are exchanging themselves all-around. They form the static gravitation resp. their force. As soon as masses are in motion relatively to one another, in comparison to the E. M., gravitationally caused dipole fields arise, which are gravitative magnets resp. dipoles in secondary shape reversible because of its speed below the vacuum light velocity.

This is an “original interaction”, which doesn’t consist of pure geometry. So I think, Einstein’s geometrical General Relativity Theory GRT gives us just **snapshots** but no motion pictures! Such snaps of the world, I summarized (1, pp. 452-473). The exchange of primary photon wavequanta causes the exchange of primary fallon wavequanta. Both forces are coupled together, even then, if there's just a fallon exchange. In the background photons were active forming the whole appearance. This means that the elementary particles were charged electromagnetically from the beginning of all. After this, it was allowed to equalize these e. m. charges followed by a purely g. m. interaction as we know at neutrinos.

There are no other forces in nature. Although, they have got idiosyncratic names to differentiate them into such as “weak” and “strong” force. Contrarily, they always cause on the **electrogravitation**:

1. The electromagnetic interaction (e. m. interaction) means attraction/ repulsion as well as formation and annihilation of particle pairs with electric or/ and electrically caused magnetic charge.
2. The gravitomagnetic interaction (g. m. interaction) means attraction/ repulsion as well as formation and annihilation of particle pairs with gravitative or/ and gravitationally caused magnetic charge (purely gravitationally interacting particles).
3. The electrogravitational interaction (e. g. interaction) means attraction/ repulsion as well as formation and annihilation of particle pairs with electrogravitational or/ and electrogravitationally caused magnetic charge (both e. m. and g. m.).
4. Weak interaction already causes on the e. g. interaction, because charged and uncharged particles participate in the shape of lepton shifts.
5. Strong interaction (nuclear force) causes on the e. g. interaction by e. m. forces inside the nucleons, and by g. m. forces – this is to say, by the cohesion of an internal gravitation.
6. Hyperweak force causes on the g. m. interaction by support of g. m. energy to the neutrinos while they are changed into heavier neutrinos, they lose g. m. energy changing into a lighter feature of neutrinos down to the end state as electron neutrino.

Explicitly, my real particles are spatially oscillating systems being senders and receivers (resonators) of wavequanta (WQ). I found that the idea of “mediator particles” is too short. Additionally, it is too much simple by equalization of wave and particle. **I think, the so-called Wave-Particle-Dualism is a fundamental mistake in the history of humankind!**

Why do I think so? It is the logic that helps me to move in reality. In our macro world, no sender is thrown to its receiver and back achieving an exchange or an interaction. You know, there's no mobile

telephone that you would throw to your partner! Nevertheless, it can be moved by car, however. I say no. Wavequanta (WQ) will be sent (emitted) and received. The particles aren't! Therefore, in my theory, waves aren't particles, because particles are spatial microcosms. They form primary bodies. From them, secondary bodies are made as even mobile telephones or TV-Stations. You cannot equate waves with oscillating spacetimes.

Pulsating spacetimes (spatial bodies) are sending and receiving their wavequanta, which are the transformers of (angular) momenta. So to speak of (angular) momentum energy and (angular) momentum mass! Certainly, you are allowed exchanging information while mobiles are in motion. Or they exchange things when doors are open to do it. Just this thought is important for me. It is possible that one particle has a location, which is open temporarily. While this moment, internal particles and waves can be exchanged. That would be the case, if we were to connect two mobiles with a wire directly.

My packages of matter inside the elementary particles need more than three partons in contradiction of quarks theory. Just five of 18 protocosms are electromagnetically effective in the foreground, five integer charges, five magnetons, three empty orbits. All the other orbital areas are equalized forming an internal mass block of 12 central protocosms (cf. TBA III). This way, they give internal mass to the proton, which is externally reflected reciprocally being the external mass. It is unimaginable that such a light proton of about 1.6726×10^{-27} kg (these are 27 digits after the comma!) has packed 283 billion kg inside. I had this idea in the year 1986. Still today, I assume that protons, electrons and neutrinos already are micro-black-holes because of an equilibrium between inside and outside. Nothing gets out of a proton if you do nothing to change this stable state. Only with collisions, something is given into the particle that is coming out in portions (or in quantized amounts) later, restoring the stable state.

These internal electric charges are integer. In this respect, I cannot call my partons "quarks", because my partons are microcosms with substructures. Therefore, I called them "**protocosms**" (in the sense of pre-state cosms, pre-conditions for cosm formation). I abbreviate them with the symbol "PK". It comes from the German word "Protocosmos". If I would say PC to them, you could mix up the symbol with the personal computer sign.

In the end, I found that the proton in reactions will never be destroyed but just **charged with energy and subparticles. If necessary, it is discharged from these surplus.** Therefore, a proton cannot spontaneously decay according to my Unified Theory. Using the quarks theory but it can. To now, nobody was able to prove that a baryon proton could really decay into a positron lepton.

In contradiction to my model, in the quarks theory, one quark will be exchanged at proton-quarks. My model says: The proton remains as it is, just energetically higher supported and with additional lepton partons loaded. Consequently, the proton takes mass and energy becoming unstable temporarily until the "unloved" load can be emitted. The proton can be changed into an energy cosm, EK. It falls back into the state of a stable BWH. Unstable particles, which you detected while collisions, I interpret as intermediate states before they "decay" by energy output, pair formation, and output of those stable particles from them the unstable were made. It remains the question of energy cosms. My conception of the elementarity of the particles consists at the other end: **The stable particles like protons and electrons are the elementary particles, really.** I also include the **electron neutrinos**. All the unstable particles are stable particles, which were destabilized, and which "decay" back to stability, to the elementarity. They are "packets" resp. packages, which have the task to be "unpacked". And this is the moment, we are now in the proximity to my **Packages Theory**.

I cannot accept that the electron shouldn't have substructures looking like quarks. Yes, really it has no "quarks". The electron is just a cosm, 1836.15 times larger than the proton, therefore, in the same size lighter than the proton (1, cf. eq. 2.7,1). In this cohesion, it has to be substructured finer than the proton. Actually, why do you think, the electron wouldn't have any partons? You know 3 leptons and their antis, together 6. **The reason is that the bodies, which are equalized internally, cannot be indicated! Just differences can be detected!**

I think that the so-called "Higgs particles" do not collect the mass for generating a particle. No, the internal mass M of a particle is made by the sum $\sum nM_{PK}$ of the masses of each single mass M_{PK} of the partons called PK. This mass M doesn't act to the outside with their sum but along their oscillation number, which is the frequency f as long as the object is locked. In this respect, the external mass m is a result of the oscillation according to Planck's equation as follows:

$$\mathcal{E} = h \times f \quad \text{cf. (1.1)}$$

In unity with Einstein's equation:

$\mathcal{E} = m \times c^2$ forming this result:

$$\mathbf{m} = \mathbf{h} \times \mathbf{f}/\mathbf{c}^2 \quad (8.1)$$

Mass is equal to Planck's quantum h multiplied with frequency f divided by light speed c squared.

This eq. 8.1 for momentum energy, today is only used unilaterally. Planck's quantum multiplied with frequency is external energy \mathcal{E} of the system (in my IOT, I marked the symbol \mathcal{E} with E_A , too). In contradiction to Werner Heisenberg, my interpretation of that equation is like follows: **The massive particles and the electric charges are exchanging spatial wavequanta**. That axiom is valid for cosms and protocosms. In the sense of BWH, cosms are the universe itself, the protons, electrons, and electron neutrinos. Protocosms and their special feature, called energy cosms, are made by internal energy E and internal mass M .

The whole system is based on the oscillation of the internal mass M_o , where the elongative mass M is a function of $\cos^2\phi$ of the amplitudical mass M_o .

$$M = M_o \times \cos^2\phi \quad \text{cf. (1, eq. 4.1,7)} \quad (8.2)$$

$$R_{I,II} = \pm R_o \times \cos\phi \quad \text{cf. (1, eq. 2.10,2)} \quad (8.3)$$

As well as their quantizations (1, pp 496).

Since the year 1986, I continuously try to rearrange the model of so-called "quarks". There were no meaningful results for their inclusion to my models. In the end, in the year 2020, I was successful with an absolutely different model of my **Lepton Shifts** without any quark.

In the meantime, my prediction was experimentally proved that "there are no monopoles, but only relativistically shifted dipoles" (Jean de Climont's e-mail to me from 2018: The origin of magnetic fields). "Quarks" and their "third-charges" were neither isolated nor clearly detected or proved. This was the reason that I stayed true to my **Electro-Gravitation-Theory of 1986**, their solutions of 1987 and further hypotheses. I've discarded some inapplicable hypotheses like the "proton neutrino". Simply, I was mistaken by an incomplete solution, which I corrected the last time. Don't forget, I stayed true to my trend-setting solutions of my theory.

What is an interaction in my theory?

My particles are oscillating spaces. Every double pulse is a building block of philosophical and physical matter. That building block, Max Planck found it in the year 1900 in the shape of the elementary quantum $1h$. I interpret this discovery as followed. A spherical wave of two cosm pulses generate a complete period, which is exactly this $1h$. ACTUALLY, one cosm pulse is completely running along one half a period with $\frac{1}{2}h$: **elongating (building up) and braking down**. I also call this: Layer up and layer down. Unpacking and packing in. Hanging on and hanging out, alluding to "God hung the stars in the sky".

Actually, one integer Planck's quantum $1h$ corresponds to an integer period time τ or to a complete oscillation length λ of both pulses. One single pulse corresponds to half a Planck's constant $\frac{1}{2}h$. Because I connect it with the amplitude R_o of the spatial oscillation (it is not the wavelength λ_o), I divide it by 2π , from which $h/2\pi = \hbar$ follows. The result is now a **pulse of $\frac{1}{2}\hbar$** . **Every cosm, if stable or PK, EK – they all have the primary "spin" resp. the pulse of $\frac{1}{2}\hbar$. All of them are fermions. Just unstable particles and PK, which are temporarily mixed up by different partons, can have different momenta than fermions of $\frac{1}{2}\hbar$.**

You see, that the radical reduction into \hbar veils the angular momentum. Nevertheless, this half \hbar is of great importance. It is the pulse of the primary and stable elementary particles like protons, electrons, and electron neutrinos. They are called fermions. How did I found the idea of oscillating dark-gray holes, of non-stationary BWH?

I looked at the equations of the original quantum mechanics, and at the same time, I watched the equation about the ideal Black Hole. I considered: When the universe is pulsating then each Black Hole should vibrate, too. So I turned the eq. 8.1 around to the wavelength dependent on its frequency

$f_0 = c / \lambda_0$. A pulsation of a sphere would reach a maximum of elongation, which is a radial size of $R_0 = \lambda_0 / 2\pi$. From this, I found $m_0 = \hbar / (c \times R_0)$. Then I set that amplitude $R_0 = \hbar / (c \times m_0)$ equal to **half** the gravitation radius of the GRT of Einstein $R_0 = r_0 / 2 = G \times M_0 / c^2$. The strange factor of 2, I interpreted to be a double amount of mass. This was the moment, when I found that equation 2.7,1 of my work "TBA I". It means that an internal oscillating matter of the mass M_0 or E_0 generates an externally measurable mass m_0 resp. their rest energy \mathcal{E}_0 by eq. 4.1 (1, eq. 2.7,1, p. 338):

$M_0 = \hbar \times c / (G \times m_0)$; $M_0 = d / m_0$. This eq. is valid for stable BWH. It oscillates on half a radius R_0 of the gravitational radius r_0 , so on the amplitude $R_0 = r_0 / 2$. The pure radiation cosm is in the upper half radius. To arrive the gravitational radius r_0 inside a protocosm, relatively, now the double amount of the mass M_0 is necessary: $2M_0 = M_{PK}$. If it is an energy cosm EK, then the given mass is accelerated by kinetic energy overcoming the horizon r_0 a priori. Everything remains relative as you can see it in the overview 8.1.

From double M_0 , half the external mass m_{PK} results dependent on half the frequency. If a PK would have the same external mass m_{PK} like a stable BWH with m_0 , then this PK with its internal mass M_{PK} already had reached the amplitude on r_0 that now equals R_0 . This means that a PK with the same mass m_0 as a BWH has the same internal oscillation mass M_0 , but its radius R_0 is already r_0 . Later, I arbitrarily added an "inflation variable" ϕ into my equation 4.1. Actually, this variable only is meaningful as a **mass shifting variable**. If it even was zero, a pure radiation cosm would result.

These are theoretic considerations, which remind me more of the solutions of Einstein's GRT. There are all of my cosms, too. Actually, I filled them with phantasy by which they became understandable. I'm sure, you'll recognize it watching my overview 8.1.

Every oscillation of both half pulses always yields the cohesion of a complete Planck's quantum $1h$. What's this quantum h , however? I think, it is the smallest building block of matter. In this respect, $1h$ is the product of an elementary mass m , its oscillation length λ and of light speed c . Simply said, it is here the multiplication's product of a resting mass, a primary wavelength and the light speed:

$$1h = m_0 \times \lambda_0 \times c \tag{8.4}$$

This is the primary building stone of gravitation in rest. Matter can only be expanded over integer h , over $n \times h$. This is the way, it will be built up.

One h is like a volume of three coordinates (dimensions): $V = a \times b \times c$! Three factors have to be multiplied. We find three factors at $1h$, too. That quantum h is a constant. This is why mass, oscillation length and speed are variable to each other, if the speed is slower than c . Additionally, they have to hold the result of $1h$ absolutely constant. That first "Cuboid of Matter", consequently can be formed arbitrarily. Admittedly, the cuboid of a stable elementary particle isn't deformable in relative rest. Summarized, it is the result of three constant sizes (1, p. 392, eq. 2.12,6). Just in motion, the sizes can be shifted after the laws of Einstein's SRT, his Special Relativity Theory. This is no theoretic shift but the reality.

Look closely, please, nothing means that the quantum h would be an angular momentum. No, just then, if an angular momentum is given, this momentum must reflect that elementary quantum h , too. It may not dance out of role. Consequently, it also had to take multiple integer amounts of h into $n \times h$. This is the reason why I speak of the pulse of a cosm while it **still does not rotate** being alone in this world (1, pp. 325). Admittedly, in its interior area, all the protocosms are rotating in their orbits.

The pulse or the spatial oscillation leads to an innumerable amount of primary dipoles (to primary wavequanta or said differently, to e. m. and g. m. primary magnetons) by which matter and antimatter are coupled. Each e. m. magneton, I symbolize with $\bar{\mu}$. The g. m. magneton is called \hbar , related on each a double pulse of a cosm. Why do I derive the quantum h gravitationally? Is this a rigid assertion or sense of reality? Please, look above at the equation 8.4. The constant h is in connection with the mass, not with the magneton!

Notice, please! Half the pulse cuts the wavelength in half. Divided by 2π , the amounts will be reduced to $\frac{1}{2}\hbar$ resp. $\frac{1}{2}\bar{\mu}$. This is in connection with Bohr's magneton μ_B , I want to tell you about later.

If there are e. m. actions caused by an elementary magneton, a cosm doesn't rotate. Only its internal electric charge is rotating and projecting its own electromagnet to the outside. Observing it from the

one side, you get relatively $+\frac{1}{2}\bar{\mu}$, and from the other side $-\frac{1}{2}\bar{\mu}$. More, I don't see behind this behavior. However, in no case do I recognize an inherent rotation of the externally observed cosm. Something is rotating there, but not the particle itself. There is the projection of the internal movement of the asymmetrically ordered and of a single number electrically charged protocosms PK^+ or PK^- in its closed orbit. They are rotating!

Just then, if the particle (like a BWH) is moving on a curved orbit (evermore) with its electric charge and a magneton, an orbital spin results from the charge effect as well as from the mass effect. So, in the center of the orbit, we find an e. m. and a g. m. wavequantum generating the orbit spin. This spin now couples the moving particle so that it begins to rotate itself from its motion (like the Moon around the Earth in bound rotation). Because there are always elementary sizes, in microcosm are movements around the elementary constant $1h$ and more up to $n \times h$. Contrarily, in microcosm, there are innumerable amounts of $n \times h$. This is why we think, our world would be analog (continuously running), even though the signals of the exchange processes remain discreet.

Actually, if gravitation prevails before electrification, the particles would only arrange themselves to one another gravitationally; some mass at masses all-around. There is no dipole to be detected, just as an elementary charge is coupled with another electrical elementary charge is effective all-around. This is why both primary charges have a primary origin. During an electric charge was never divided – it remained conserved as an adjunct – the gravitational and original load was divided by constructs of further gravitational cosms, in which the only first cosm of the elementary electric charge was locked.

This is the reason why cosms as the protons, electrons, electron neutrinos, behave like the original gravitational load, explicitly, like a spatial monopole. What's now? Is it really a monopole? No, it isn't, there are innumerable dipoles in the space coupled together in such a feature that they appear as if they would be monopoles. Coupling speed is light speed. Inverse is not possible.

Present interpretation of Heisenberg's Uncertainty Principle means that the location of a particle and its angular momentum together are not measurable with arbitrary precision.

Actually, is the location of a particle in general the subject of consideration (1, pp. 373 - 391)? My answer is as follows: I found a different opinion since I don't throw my mobile telephone to my communication partner. So we don't exchange our mobiles (the particles) for contacting. In reality, we exchange the wavequanta (the carrier of the information).

My opinion, consequently, is completely different to the present quantum theory, which is simply equating **wavequanta** and **oscillators** (the producers of information carriers) as well as **resonators** of waves, statistically. From this premise, the proponents draw "magic" conclusions of quanta (Schrödinger's cat). Albert Einstein had already displeased that. Admittedly, he himself "trusted" this quantum-mechanical contradiction, and he developed it.

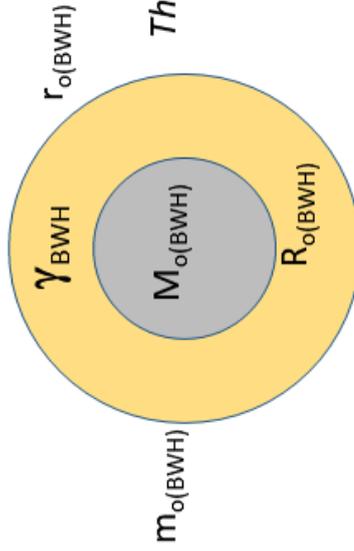
By orbit and spin, and in it again, an orbit and a spin etc., spin-orbit-coupling is arising, which other people understand better than me. Because I think, if there is no orbit, then there is no spin of particle, for example of an electron. Resting electrons just would move on. Primary wavequanta are resting.

In my model, there are oscillators, which generate and exchange the wavequanta acting like emitter and receiver at the same time (so all the oscillators are resonators). In this respect, "exchange particles" as well as "virtual" particles aren't necessary in my model. Consequently, there are urgently exchange quanta, which I call wavequanta. These are the photons and fallons. Both fields, conserving and passing on the angular momenta, consist of real primordial substances moved by the Creator's World as intended. These movements are completely stored to be the first conservation law. Without neglecting this fact, of cause, particles are able to exchange themselves somehow, but then in reality, not in virtuality.

Where does the oscillator/ resonator (transmitter-receiver) come from? This is a cosmos! I expanded this concept to include microcosms, protocosms. Universe is the top receptacle cosmos. Excerpt it, all the others are oscillating, emitting movement pattern, generating photons as electromagnetic mediators of e. m. force, and fallons as gravitomagnetic mediators of g. m. force. Consequently, they are mediators of angular momenta. Contrarily, they are **not** particles.

The Black-White-Hole, BWH

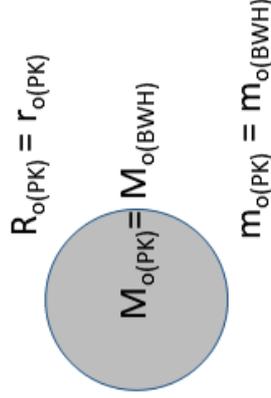
$$m_{o(BWH)} = d / M_{o(BWH)}$$



The same oscillating frequency

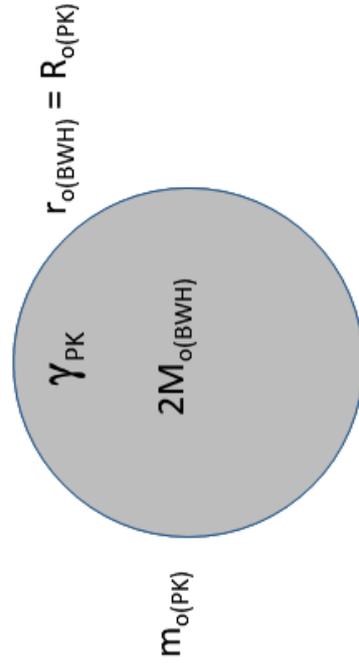
A Protocosm, PK in relation to BWH

$$m_{o(PK)} = d / M_{o(PK)} = d / M_{o(BWH)}$$



The BWH growing to PK by including mass

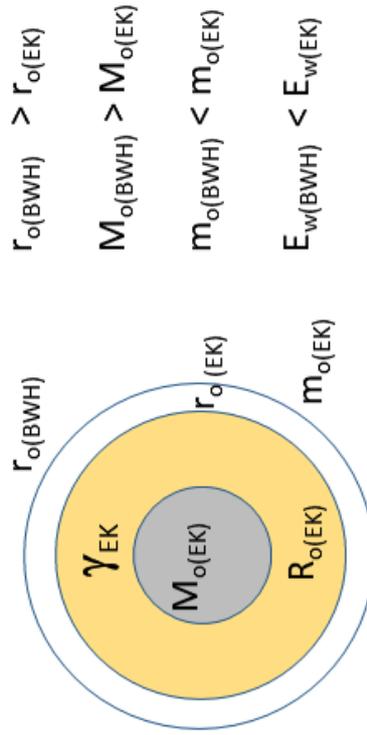
$$m_{o(PK)} = d / 2M_{o(BWH)} = d / M_{o(PK)} = \frac{1}{2} m_{o(BWH)}$$



Half the frequency than above

The BWH including energy to Energycosm, EK

$$m_{o(EK)} = d / M_{o(EK)}$$



Higher frequency than above

$$r_{o(BWH)} > r_{o(EK)}$$

$$M_{o(BWH)} > M_{o(EK)}$$

$$m_{o(BWH)} < m_{o(EK)}$$

$$E_{w(BWH)} < E_{w(EK)}$$

As the cosmos as transmitters & receivers exchange these primary photons and primary fallons with other cosmos, the primary e. m. and g. m. forces result. These are the static electric and the static gravitational forces of resting objects. Simply said, these are the electric charges, the primary magnetons, the gravitational loads (masses m , antimasses \bar{m}). If they are moving, the gravitationally caused dipole fields and, for example, also the electro-magneton μ_{EB} of the electron result. According to the scientific understanding, however, the particles rotate like spherical surfaces (but science means particles would be "dots"). The charge that one imagines smeared on the surface of the "point" would rotate with it and thus, it would generate the magnetic field. Actually, if a single electron does not rotate, where should its magneton come from? One tries to solve the contradiction by imagining a vacuum polarized around the particle's point, which can then have a rotating surface by vacuum.

I ask you: Why can't electrons just be stopped in a charged vacuum, or why can't their rotation be decelerated bit by bit? After all, compared to an observer who is spatially differently localized, the electron should be a certain bit different. But it is not. So one means, it rotates inside its elementary quantum, consequently, with its discreet Planck's constant. Nevertheless, I should be able to look at the electron from another side, from that side where it is different rotating. Has there ever been an experiment to outsmart this rotation?

However, I think that the seemingly rotation is an effect coming from the inside of the electron (that's my hierarchy model). And this movement, you cannot stop from the outside. I say: Standing electrons do not rotate! Inside of them, something is rotating, especially, a sub-particle (a protocosm). Such protocosms, which carry each an electric charge and which reflect these effects of elementary magnets out of its orbital magnets (orbital spins) and of its resulting intrinsic spins to the outside. This way, you can detect and measure this magnet from each position. So this whole thing also reflects Planck's quantum in both consecutive spatial pulses. If now the electron should reach an external orbit, however, just then an external spin is arising. Then, you can see it as a feature of handedness, if you have to take into account symmetries of angular momenta of matter (1, p. 326).

In no way, my model refutes the Stern-Gerlach experiment. One found 1:1 electrons with positive and negative orientation of the magnetons. How to flip a coin, it is pure probability. Based on this experiment, the idea was born, electrons would rotate around their own axis, what is ultimately a mistake. Electrons reflect an e. m. and elementary dipole arising from something rotating inside. At the same time, they reflect a g. m. primary dipole, because a lot of mass is moving inside and generating the primary oscillation. In addition, the neutrino is just a g. m. primary dipole without any e. m. charges or magnetons at the outside.

By parallelism, you can assume the conservation of the angular momentum. For example, because electrons are moving, their elementary magnets arrange themselves according to the sense of the orbital magnet. As if they rotate in an orbit, they arrange themselves generating a dipole, which is formed by the orbit.

That means: The oscillation length λ of my particle, which is an oscillating cosm, relates to an integer Planck's quantum h . Division by 2π gives both, the amplitude R_0 and the reduced Planck's constant \hbar . As the internal electrically charged protocosm rotates on the amplitude, which is a rotation diameter, it becomes $\frac{1}{2}\hbar$, the "notorious half spin".

Precisely, this mathematical reduction behavior is a problem. A non-rotating particle is thus brought to the illusion of "self-rotation". And a parton of the proton is thus brought to the illusion of partially charged "quarks". Planck's constant divided several times as well as the divided elementary charge do not exist anymore. The integer h only made sense on two half wave periods of an oscillation.

When I found the idea, thanks to Albert Einstein, that the cosmos are moved relatively and no longer rest to one another, a whole lot comes to the game: Everything has to turn on curved paths. The world is full of rotation systems and their hierarchical subordinations. In this respect, there aren't only secondary wavequanta WQ arising from motions, but also effects of the relativism. That means: Science uses Einstein's Special Relativity Theory SRT to calculate and explain effects. Additionally, I found something different: Without the Special & the General Relativity (GRT), there is no world at all! Every cosm is a spacetime. Spacetime is mass! Every spacetime only can exist with the laws of Einstein, whose solutions are punctual images of reality (geometrically caused pictures). This in turn means that my theory couldn't even exist if I only incorporated effects of SRT and GRT afterwards. My theory is the **embodiment** of SRT & GRT in the form of moving images, while Einstein's images of universe in his GRT still are standing still.

Let us have a look at the secondary effects. Moving particles electrically charged, which I assume to be real primary microcosms, generate **photons** and **fallons** from this motion. The shift of their primary magnetons forms secondary wavequanta, which are secondary photons and fallons now. If those cosms are uncharged and don't carry any magnetons, they only can interact over fallons. These are now the secondary effects, which are made by primary effects. Summarily, moving mass and/ or moving charge (which really exist in form of a measurement because they exchange primary photons & fallons) generate secondary dipoles, for example, a g. m. dipole and/ or a g. m. dipole as wavequantum. There are so many names for the same thing:

G. m. dipole = g. m. wavequantum = gravitomagneton = its shift: Fallon γ_{gm}
 E. m. dipole = e. m. wavequantum = electromagneton = its shift: Photon γ_{em} .

The radius R of the spatial motion is larger than the particle's extension. The particle's path is curved less. You measure the amount of R beginning from its orbit center to the macro particle on which center. There, **at the location of that particle, you detect the path radius R**. But where is the **center of action** of that secondary and open analogon of a cosm – of the magneton?

It is really crazy. The expected center of action isn't there however where the particle just is moving causing the action (it is not at the particle's location, or it isn't at the charge location R). Contrarily, with the amount of the amplitude R_w it is a bit far away from the particle in the center of the imaginary circular arc with the distance called amplitude. Let's say it more clearly. We observe the radius of the orbital track R, which is a positively arranged vector +R. We started measuring in the center at $R = 0$. After this, we went to the center of the particle in +R. Now we must accept that R_w is negatively starting from the particle's center where $R_w=0$, down to the center where $-R_w$ unfolds its greatest effect as if it were a newly formed "focus", the new action center.

Both vectors are directed in **opposition** to each other, the first of the position +R of the moving particle, the second of the action position $-R_w$ of the arising photon, fallon, wavequantum, magneton, or of the new angular momentum! They cannot both be equated, because the R_w is also dependent on the SRT. That means: Although the particle continues to move on the same rotation's radius R, but now with the relativistic speed v against c, the amplitude R_w changes relativistically, it becomes smaller. Therefore, the unsigned amounts $|R| > |R_w|$ can never be the same. Expressed differently: The particle is a primary quantum in its own gravity center. Its movement generates a secondary quantum, which is elsewhere, away from its own focus with a new focus (1, p. 381).

Once again if you haven't yet understood it. A particle (a cosm) is a primary oscillator/ resonator. It exchanges primary wavequanta (what's the static gravitation and/ or the static electrition). By moving it generates both secondary wavequanta – those secondary magnetons. If this magneton (the one or the other or both) is moving, then it generates further wavequanta in form of magnetons, so e. m. or g.m or both, and so on until the beginning of the matter in the tiny states.

Oscillators/ resonators, wavequanta or magnetons exchange angular momenta and information, in vacuum with light speed, in media with reduced light speed. Photons and fallons realize that exchange. Information and angular momenta are running along the vacuum to another magneton. They are photons resp. fallons. Vacuum consists of **magneton pairs**. Explicitly, the whole process runs over those **magon pairs of vacuum** continuing the close-up effect. Today, one still speaks of "virtual e. m. particles". Everything, we detect as secondary photons or fallons, is nothing more than primary photons or fallons shifted. The complete universe is connected like absolute glue. No gaps can be seen and of cause no openness. All the appearances have to complement and exchange themselves. Such an exchange must be limited, otherwise it would pour itself into infinity and die. Therefore, the universe is an ideal oscillator and just finite inside!

It would be nice, if the movement of microcosm, of a particle, of a transmitter, could only be changed in one single direction. It's hard to understand because of the relativistic Doppler Shift. So I think, a particle is oscillating like a spatial vibrator. Consequently, while exchange of wavequanta like photons & fallons, it then has a behavior of red and blue shift. At relativistic speeds, the exchange quanta are shifted essentially. Such extremely blue that the energy diverges against infinite (Einstein's relativity of a crash). Contrarily, in front of an observer escaping with approximately light speed, it will be shifted to extremely red so that the energy diverges against zero.

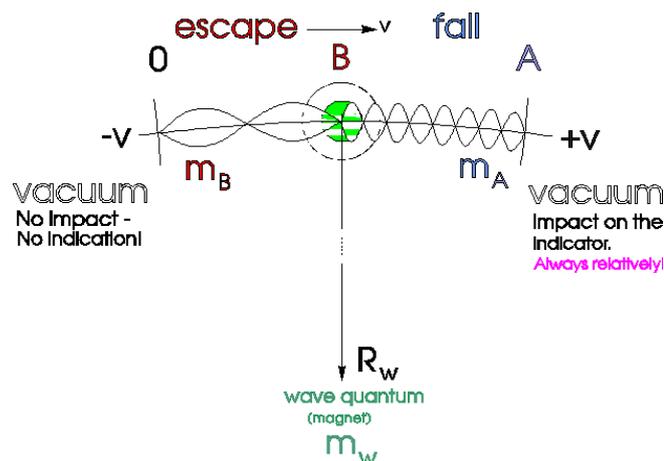
The following three relativistic masses are essentially important for me inside the cosmos. At point B, we had the resting mass m_0 of a protocosm of $9 \text{ GeV}/c^2$. Using a factor f_{SRT} of 10, the collision mass m_A (braking mass) would have $90 \text{ GeV}/c^2$. Vice versa, the resting mass m_0 would be dilated onto m_B of $900 \text{ MeV}/c^2$ with the same factor. The SRT-factor marks the speed of the rest mass used. You only are able to derive a resting mass but not to identify, because you always are in need for a collision. While this, always is detected a braking mass m_A . The moving mass m_B , nobody is able to indicate directly. This system of relativity has sense for calculation or estimation of the protocosms in their receptacle cosmos.

That is important: If a mass were a static thing, then it remained inexplicable how its dimensioning could have shifted by velocity relation. The doubters do not become less because, in their limitation, they still compare mass to volume.

However, since the mass of my model is an oscillating spacetime exchanging via wavequanta between all the other oscillating spacetimes, its shift dimensioning can be explained by the relativistic Doppler Effect. It is the same like at a speed change of a e. m. transmitter. This is the way, how I built my construction of SRT finding a key explaining the world by wave transmitters and wave receivers.

What do we really know? A simple example explains why that SRT is the most important thing in universe, why braking mass of approximately light speed diverges against infinite and why nobody really has thought about like an escaping mass actually behaves with their exchange quanta diverging against an energy of zero.

(2, S. 22: Illustration 8.2.5;1) Relativistic Masses in Relationship to the Vacuum



The car whose engine you can hear, dear reader, sounds higher when it comes towards you and lower when it drives away. This is the classic Doppler shift of wavequanta, here of the sound. It is dependent on the speed. Law is valid for the classic view of slow velocity. Additionally, with Einstein's solution but is this shift of the resting mass m_0 up to a braking mass m_A valid (1, eq. (2.4,1a), p. 312):

$$m_A = m_0 / \sqrt{1 - v^2/c^2} = m_0 \times f_{\text{SRT}} \quad (8.5)$$

As the speed v approaches the speed of light c , the term below the root becomes extremely small. The reciprocal results in an extreme multiplication of the rest mass by f_{SRT} . However, there is no indication of a frequency shift in this equation.

In addition, I equate both equations, the eq. of Einstein $E = m \times c^2$ and the eq. of Planck $E = h \times f$ getting the following eq. $m \times c^2 = h \times f$. And just a had a mass m , which is dependent on the frequency including the constants of h and c (1, eq. 2.4,26, p. 319):

$$m_0 = h \times f_0 / c$$

Now, it should be understandable in order to explain why a mass (resting mass m_0 , momentum mass or wave mass m_w) or an energy (resting energy E_0 , wave energy E_w), which in my model is always the result of an oscillation, behaves so extremely according to Einstein. In addition, it becomes clear that the position of the particle and its interaction-amplitude are not one and the same.

This is the decisive factor in dealing with Heisenberg's Uncertainty Principle. *It's not about the position of the particle at all! It is about the amplitude of its interaction wave!*

According to my solutions, no virtual particles interact to transmit forces. Contrarily, the cause of forces is an exchange of angular momenta in use of photons and fallons. These wavequanta exchange themselves with one another. While this exchange, the moving particle itself is not becoming noticeable in its indeterminate path. Particles could move somewhere in the world, where common sense would have thought that the particles would have to "tunnel" for it. However, particles do not tunnel. They themselves do not interact in their movement. May be, they come very close, but they do not in normal situations. Consequently, they are wandering on hidden ways:

1. Movement generates energy, by which the interactions are led to the particles directly or even into the particles. This is not as simple as you think. Before each interaction of the highest energy, those interactions of all the smaller energy are still standing. They lead just to the multiple number of pair formations of multiple features of particles located below the expected energy threshold. That means: particles are "inaccessible". They never interact directly, and they have something like **arms** by which they are interacting. Vectors of wavequanta with their force centers are their arms. These are the photons and fallons. Such angular momenta are the arms. They work on each other, but never on the particles directly.
2. Those angular momenta are far away from the elementary particles, partially proximately to them, partially below their horizon at all. They are only then part of a body, if they are interacting inside a mass. You know this from the European football. Angular momenta of all the particles are located in the ball. The common sense of man has learned it by practical knowledge. Now he thinks like Heisenberg and Born: it always has to be that way. But no, in microcosm, the movement radius and the amplitude of a moving particle are not the same because their vectors are reversed!

Let's have a calculation example. The primary oscillation makes an electron from m_o , R_o , c and $1\hbar$:
 $1\hbar = m_o \times c \times R_o = 9.109e-31 \text{ kg} \times 2.99792458e8 \text{ m/s} \times 3.8617e-13 \text{ m}$. R_o is its amplitude in rest.
 We are now moving this primary field twisting it with by the following secondary sizes, non-relativistically. Then, braking mass m_A and motion mass m_B are almost the same size:

$$1\hbar = m_{A,B} \times v \times R_{rot} = 9.109e-31 \text{ kg} \times 10 \text{ m/s} \times 1.1577e-5 \text{ m} = 1.05457e-34 \text{ Js}.$$

The rotation radius is 0.000,011,6 m. It is far away from the particle's primary amplitude R_o . If it hits a screen, you think, the electron has made the shining point, but it was the secondary wavequantum with $R_w \approx - R_{rot}$.

Now we move it on that radius R_{rot} with relativistic speed of the f_{SRT} of 102,809.72 and bring it to collision interact. A braking mass m_A will be detected. The shining point is next to the flying electron:

$$1\hbar = m_A \times v \times R_w = 9.365e-26 \text{ kg} \times 2.99791e8 \text{ m/s} \times 1.126e-10 \text{ m} \quad (\text{cf. 1, pp. 316}).$$

Interacting wave amplitude R_w became much smaller, next to the electron's path. It is possible to arrive the resting electron's amplitude R_o and deeper by higher relativistic speeds. $R_w \ll - R_{rot}$. If now $1\hbar$ is extended to $n\hbar$, more than one wavequantum arises, and more than one shining point will be detected. Motion mass m_B cannot be indicated: $1\hbar = m_B \times v \times R_{rot} = 8.86e-36 \text{ kg} \times 2.99791e8 \text{ m/s} \times 3.97e-8 \text{ m}$.

The exchange of angular momenta is running via a medium, which consists of **magon pairs** in which pairs of particles already are created. So, the magons could be called "virtual e. m. particle pairs". In contradiction to this, they don't revive because of an extremely short time window (by credit from vacuum). No, they just revive by the movement mediated by photons and fallons. Their fluctuation only let revive a part of the particle pair, such a partial area, which is located inside the magon pair. This way, it is possible that one or another sub-cosm inside a particle or a sub-particle in the particle is oscillating smaller and faster with more energy than its receptacle particle according to my model. So in comparison to the oscillation period of the receptacle cosm, we detect a shorter time period or a higher energy etc. Here, the reciprocal state is just valid again (1, eq. 2.7,1).

One or more of the inner particles were imaged (but always via pairs; easy come easy go), which are still heavier than its receptacle cosm. It seems as if they are precisely these much heavier sub-particle

pairs, which can be formed from very little external energy under the condition: just interacting while a certain short time period. This analogon of Heisenberg's interpretation does not really exist here in our hierarchy area at the outside of all the particles. No, it just exists **inside** all the elementary particles. Inside! This is the reciprocal relationship of interior and exterior of my model – the package system – a spatially hierarchical system. The fact that there's no continuously developed coordinate system between inside and outside must also seem to be very strange. It is better to explain that high-energetic particles are really sub-particles. They are **locked** inside of the massive particles.

The mass field of a cosm cannot act to the outside. It is **locked**. A perfectly symmetrical and static inner life would have disappeared externally. But how can the inside still work outwards and thereby be noticeable? This is only possible with the oscillation of that system, with the principle PULSE, which is related on plus $\frac{1}{2}\hbar$ (at an integer period naturally on plus $1\hbar$, half a period in the antiworld is minus $\frac{1}{2}\hbar$). In addition, internal sub-particles or more of them still are charged electrically, so they reflect an elementary magneton to the outside like observed at the electron with around $\frac{1}{2}\mu_B$. This is Bohr's magneton:

$$\mu_B = e_0 \times \hbar / 2 \times m_e = \frac{1}{2}\mu_B \text{ with } e_0 \text{ as elementary charge, } m_e \text{ as electron rest mass.} \quad (8.6)$$

Using Heisenberg's ideas, it remains with the interaction via phenomena of wavelength, without particles really having an interior, a micro-cosmic interior. In this respect, I get completely different results than his models. Naturally, I found completely different interpretations as follows.

All the protocosms of any cosm are running with the same oscillation time in its orbit. It is half the wavelength of this oscillation. Even if they take breaks for their own development, it is indeed a break of their possible path, but it is no change of the total time in cosmos. Therefore, they all form their e. m. magnetons in such a way that they reflect the oscillation of the space. We always think of radii, reductively. ORBITS are the reality! Without radii, without π ! The orbits are features of movement. Time and Way, bound by speed, are OUR concepts. The whole thing is **movement**! This movement is projected as if the surface of a sphere would rise and fall. From this, the spatial original force is made. Who does it that the spheres rise and fall? This only can be the Grand Engineer. It is not the accident, because the system is created ingeniously.

The primal force in this world is based on the interaction of both forces, that have known for a long time – on the "electrition", which is the **electromagnetism** & on the "gravitation", which is the "gravitomagnetism". I call that unity with concepts like **electrogravitation** or the force of the "Light Workers" and the "Gravity Workers" supported by "Light Workers"; otherwise they would do nothing at all.

Einstein was faced with the question: "What exactly are photons?" He could not answer it. The more confused the Quantum Dynamics became, the more things were expressed with artificial structures of mathematical equations, the more the clarity of matter was lost. Nobody knows what a photon actually is, but it said the following up here:

A photon respectively a fallon is that signal running along the shift of the position from an e. m. or/ and g. m. wavequantum, from an electromagneton or a gravitomagneton. Alongside all magnetons, whether real or in vacuum, the formation and breakdown of secondary magnetons continues.

Admittedly, there are many explanations and experiments helping to generate photons and also to form a single photon to cause it to rest. I will forego examples now.

And what is vacuum, actually? I assume, in vacuum, the properties of elementary particles are equalized, for example of electrons and positrons. The external energy \mathcal{E} according to Planck's equation, which particles once carried while their spaces were pulsating with just that frequency f making primary magnetons by the rotation of internal primary charges. Sub-particles carrying a charge rotate one time for annihilation. Then, they set free both photons as if it was a braking radiation. The magnetons remain at these both photons emitted. Where is the interior of those particle gone to?

Elementary particles consist of protocosms. PK consist of sub-protocosms. Those sub-PK consist of sub-sub-PK, and so on until the last sub-sub..... PK decays into the very first stable particles of the whole world. Because of the coarser quantization within the particles, this works a little differently than here.

Here, where we men are existing, the stable elementary particles store energy and mass. By that process, they first become heavier before they form themselves into protocosms becoming lighter dependent on the amount of protocosms. Therefore, in my theory IOT, I did not call that state becoming heavier simply “*protocosm*” but “**energy cosm**” EK. (1, p. 351f). When they fall apart, they sow pairs of cosms and radiation. Particle physics hasn't yet advanced so far at its colliders to find protocosms. Die Teilchenphysik ist bisher an ihren Collidern noch nicht soweit vorgedrungen, PK zu finden. Still only energy cosms are proven. If sometimes protocosms should arise then it will become dangerous. They are essentially lighter flying quickly relativistically, lose the collider and evaporate somewhere, especially where nobody wants it. Such a behavior is bound with destructions. A protocosm synthesized becomes a weapon. This is why, I wanted to inform the presidents of Russia, China and the USA about my IOT, but was probably just ignored.

Let us see what happens next. So while at electromagnetic particles, e. g. at electron-positron annihilation into two photons, their sub-particles of all their hierarchies annihilate into their own photons of innumerable quantities. During this, they generate their own magons and this way their own vacuoles, too. Now I wonder. Where are they? We can't measure them here.

I think, they form a **light cosm** – a **magon** – an electromagnetic particle (no wave) that is made from those both particle interiors annihilated only consisting of all the internal photons (photon pairs). Their energy according to $E = M \times c^2$ is just as large as that energy, which was previously in both particles, regardless of whether it consisted of mass, antimass or already of a multitude of photons. The law of conservation of energy applies inside. For us here at the outside, it is also valid. However, the coordinate systems of inside and outside are separated (that's my Oscillator Solution of the GRT of 1987). Explicitly, there is a relationship between both, which I want to introduce to you later using my eq. (2.7,1, my solution of 1987).

While an annihilation, both remains, 2 photons, 2γ , and one light cosmos, that is part of the vacuum together with many other light cosms. In vacuum, the image of both annihilated particles is conserved. Sometimes ago, I called a parton of it Magon and the other parton Antimagon. Because they are bound with each other over their elementary magnetons, I later spoke of **Magon Pairs**. Briefly, I called them just “Magons”. My word creation comes from the word “magnet”.

If a photon now wanders through the vacuum, then a close-up from magon (pair) to magon (pair). For example, we assume a small angular momentum of a single photon. From this, in the magon there is an rise and fall looking like a particle pair wanted to be reborn by inspiring its interior to spatial oscillation by raising and lowering it on a curved path. But the energy is just not enough. Should the energy just reach the amount of one of both, the electron or the positron with 0.511 MeV, then the pair is just half created and has already disappeared again. Such fluctuations as “wobbling” in the vacuum are currently referred to as “virtual particles”. In reality, the real wave runs through the vacuum.

However, if more than 1.022 MeV come together, the angular momentum increases the magon (pair) to its earlier amplitude, just as the electrons and positrons had one. Mediated by this external angular momentum, the inner photons receive a boost and restore the inner particle pairs by support of the extremely higher internal energy. When the energy is at the tipping point, the coupled pair cannot separate or it cannot get far away. A little more than the above-mentioned external energy of pair formation is necessary so that both particles can separate with an excess of kinetic energy, which is an angular momentum of separation.

Pair Annihilation

I'm looking at an electron and a positron. My line of sight hits the positron first. The electron is located behind it. So the positron is closer to my eye than the electron. Both leptons approach each other through their e. m. attraction. From my point of view, the electron turns left-handed. Now it has the e. m. momentum of $+\hbar/2$ and the g. m. momentum of $-\hbar/2$. For the purpose of spatial congruence, the positron has to be left-handed, too. Consequently, it has the e. m. momentum of $-\hbar/2$ and the g. m. momentum of $+\hbar/2$.

They cancel each other out with this congruence as followed: the electric charge, the mass, the e. m. and g. m. momenta. The oscillation of the system changes into both e. m. wavequanta (2 photons) of that energy, which corresponds to the resting energy of the electron and the positron, 2×511 keV. Additionally, that system also annihilates internally because of the congruence of all the internal orbits

of those internal protocosms and sub-protocosms etc. This way, my light comes arises from electron and positron – a so-called **Magon** consisting of ordinary magon and Antimagon in connection. That combined magon, which I always called magon-pair, remains an e. m. storage of the image of both annihilated particles. Its gravitational components go into the vacuum as if they were the heavy and inert “primordial material” of matter from which particles have to be formed with the help of the e. m. kinetic energy.

As the charges of the opposites are slowed down, both photons are created, which can be easily detected. [By hitting of the g. m. “charges” what is the compensation of mass both primary fallons were changed into both secondary photons.](#)

When that storage meets an photon, both coupled parts, the ordinary magon (koino magon) and the antimagon, will be lifted supported by the energy. They are only be separated if more than $2 \times 511 \text{ keV}$ of photon energy is given. Lifting and falling down for lack of energy is the real expression of the continuation of the e. m. wave with the close-up effect. It is believed to this day that the vacuum fluctuation was found – the polarization of vacuum – which also can be demonstrated with Casimir’s experiment. In this cohesion, the photon energy also returns the fallon energy to the system.

But the whole behavior is not a contradiction to my IOT. Admittedly, the vacuum consisting of magons and of the gravitational primordial material is permanently in motion. It has to transfer all e. m. (photons) and g. m. (fallons) wavequanta. They give certain states to the vacuum becoming discovered by Casimir’s effect.

[Unfortunately, I contradict the following imagination:](#) All these appearances would be “virtual particles and antiparticles”, *which would transfer interactions*. It is said, the shorter the time period of their formation by small separation of less photon energy (or fallon energy), the stronger would be their effect on base of *Heisenberg’s Uncertainty Principle*.

According to my IOT, I think these statements are an inverted interpretation of reality. Admittedly, inside of the particles, there is an own world of internal particles of extremely high energy and of extremely small life time period. Actually, this internal world really exists! Not virtually.

By recognizing that it is not a question of identifying the position of the particle, but rather the location of its interaction based on its wavequantum, i. e. not by itself and not through its center of gravity (its middle dot), but away from the particle’s position at the location of its wavequantum, which is described by its wave amplitude and isn’t described by the rotation radius of the particle, so virtual particles for interaction effects absolutely cannot exist. The vectors of rotation radius and wave amplitude are contrary to each other.

That wrong construction of virtuality for physics was necessary. Until now, the real structure of the particles, as locked spaces like “Black White Holes including reciprocal worlds, was not known.

Using the IOT, you can imagine that those particles energetically higher really exist inside of their receptacle particles. You also can imagine that there are certain interactions absolutely realistic in the limited area of these spatial elementary particles.

Paar Formation

Now I look at the magon from the same position. A photon just separates both e. m. partons (koino-magon and anti-magon) and gives them the internally formed g. m. structures by forming the internal pairs. Under these circumstances, the arising positron is coming to me, and the electron is escaping. From my point of view, the electron rotates left-handed. So it has the e. m. momentum of $+\hbar/2$ and the g. m. momentum of $-\hbar/2$. Based on the spatial congruence, that positron coming to me also has left-handed rotation and the e. m. moment of $-\hbar/2$ and the g. m. moment of $+\hbar/2$. Those momenta seem to be contrary, observed from my position. However, the handedness of both particles is the same in contradiction to the present science opinion, because a mass rotating to the right is forming a positive g. m. momentum, antimass contrarily rotating to the right is forming a negative g. m. momentum.

Now I change my position in front of the lepton pair just arisen. I stand between both leptons, so that both are escaping from me. Again I watch the electron escaping with left-handedness, $-\hbar/2$ and $+\hbar/2$. Contrarily, I watch the positron escaping, too. Now it has right-handedness as I would watch an electron in a mirror. In contradiction to the expectation in an image from a mirror, its momenta now

are visible vice versa: $-\hbar/2$ and $+\hbar/2$. They don't fit to the image in the mirror! The mirror symmetry is violated that I am able to explain well here with my IOT. Already in the year 1998, I explained it. The behavior has to be as watched, because otherwise there would not be annihilation and pair formation!

Those crazy relativities arise from my IOT due to the contrary mass and the spatiotemporal and hierarchical structures of the cosmos!

So far, it sounds like a photon is a bundle of energy that can transmit an angular momentum on a path. If you describe it with field lines, then the angular momentum is in the center of concentric circles. That means, the force lies in the center from which it decreases by increasing radius r^2 . A static magnet does not rotate. It appears as a dipole without frequency. When a magnet is built up, a wavequantum hike is made in the space of vacuum by a photon or a fallon.

When the area of the interaction force of the photon additionally rotates around this center of force, so it changes. Additional photons are generated with each change. With this action, each other force areas will be twisted that are called to interact with these photons. They "interact". This is how photons interact with each other. They transfer their angular momenta to the angular momenta of the other partners of matter, to the magon (pairs) and to the other real particles, to their radiation areas.

STOP! They do not transfer angular momenta dot the microcosms resp. elementary particles, directly. They don't usually hit their "wall". One would like to cheat classic physics under relativistic physics! Well, Werner Heisenberg and Max Born had an idea that has kept humanity under its spell to this day. I have already reduced it to the absurdity above. There is no dual nature of matter! Contrarily, there is just the **unity of nature** by **Oscillator & Wave!**

I already gave you my explanation. *There where the particle position R_{rot} is, there is not its angular momentum R_w . There is not the action center R_w of its wavequantum. Consequently, **only** the angular momentum of a particle is allowed to interact with an angular momentum of another particle coming along. Never, never, the particle itself interacts directly by R_o on R_{rot} with the other particle (1, pp. 373).*

In this respect, the question of the particle position is no longer up for debate. You never can detect the correct position. The interaction of angular momenta and the amplitude of the certain wavequantum is up for debate. That amplitude is not the distance of the particle to the center of action of the angular momentum. Amplitude and radius are contrary vectors! Therefore, as previously done, they can simply be equated statistically. But this is not meaningful.

Move a particle, and you get an angular momentum! Unfortunately, that action center is not at the particle! If you move that particle very slowly, to its angular momentum is localized far away from it (1, pp. 310). Now that particle becomes successively faster, as fast that its energy is a high than the resting particle energy. Then, the angular momentum has come close to the surface of the particle. Becoming higher, it interacts with the interior of the particle, with the angular momenta of the internal sub-particles (but not with the sub-particles directly, not with the resting energy of them, but with their energy of angular momenta).

Now we roughly know what a photon is:

It is the continuation of the magneton formation and the magneton reduction over the magon vacuum. One photon is a single carrier of an angular momentum!

What is the photon made of? Probably, of moved primordial substances, which are still no matter and which we cannot prove or describe with our means from matter. For us, they are as well as nothing, because they appear spatially as dimensionless dots. But they are something, real substance making us. Consequently, we are real! That's why the word "dot" is just a crutch for it. That real first and primordial "dot" is the *real substance from the Creator's World*. In this respect, the movement of the "dots" from the origin by the real substances of "lightness" is the precondition of all the matter. So the electromagnetism is following. The layman says light, but light is just a small part of the e. m. spectrum.

E. m. energy of photons is able to move that primordial substance of "heaviness" from that seemingly "nothing". This movement leads to the gravitation. So the gravitation is not another result than work of electromagnetism. Therefore, I call my model electrogravitation". Many researchers already found parallel results.

I want to explain it very simply (1, pp 300; 2, pp 80). Before the Creation of the universe, the real substances (primordial substances) were already available. You should say about it: There is that world, where the Creators are at home. Was it one Creator or several? We don't know it. After all, there are several names like God, Allah, the great Manitou. Perhaps the great Programmers of Matter and Spirit sat together and developed this software and hardware in the meantime?

We know that we could only identify all the well-known "substances" as a "bubble" of "bubbles" again and again. In the beginning or the end of that "bubble foam" of our so-called philosophical and physical matter consisting of energy and mass, there is something that is no "bubble". This is Something we cannot measure with our means of measurement made from the "bubbles". Why is that?

You only are able to measure the features of the matter by material differences! Physical quantities cannot be captured with magic.

The primordial substances from "paradise" cannot be measured, because they are no matter as we know it. We don't even know how many such real substances actually exist in the outside world of the Creator. "With God, all things are possible." – more we don't know or believe it. The logic reason is as followed:

If the primordial & real substances would not exist from which our material foam is made as a feature of a spatial hologram, we would simply be nothing. We wouldn't be real. **But we are real!** This is the reason now why the zeroth dimension (where are the first movements, defining way, time and speed) in the beginning of all material dimensions is REAL!

Such primordial substances in the singular I called **the Unmoved**. I mean that which has not yet been moved as intended, but which is already there. It could also have been some kind of color in God's hands. One color for the electrition, a second color for heaviness and inertia for gravitation. To us, it may look as if the Creator or the Creators worked with helpers on a spatial painting. The result was a fantastic and unique hologram.

By moving the Unmoved according to the holographic program ("in the beginning was the word"), storage structures are created, you better could say, spatial images, or a certain big memory in the space – a holographic storage, rather just a holographic program of spacetime. Or, you can imagine an comprehensive mind.

Consequently, the open movement of the Unmoved is Spirit or Soul perhaps also Holy Ghost. What is Matter now?

Matter as spatiotemporal Creation is the closed movement of the Unmoved becoming the Moved by Program. Who does it move? These are rotational movements, which cause the internal primordial substances that they are rotating. **The first pulsating movements are „points“ going up and down of the primordial substance of the Creator. They create the first spherical dipoles respectively the very first wavequanta and their arrangements and their causal links.**

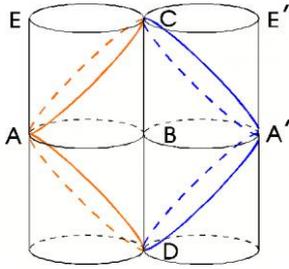
I think of a suspicion. Trinity of Father, Son and Holy Spirit, this is a constructed trinity. Now I think, it is the Creator of a Program, which arises in the space to be Matter.

Matter lets bodies arise like human bodies or human children, like God's Children. All matter appears to me as a Child of God. Everyone is part of Him. So if anyone is the Son of God, then we are all the Children of God. This is my opinion.

Let us take an example. The Creator take a "grain" of Unmoved. A grain is exaggerated. We can't even measure it. So we consider the grain to be a dimensionless point. It has no material dimension because that is the zero dimension from which the dimensions of our material existence are born. This "grain" is moved.

So how meaningless is that researchers want to find the origin of matter in higher dimensions. Practically and logically, they turn the principle of Creation upside down! By this headstand, the most meaningless is resulting, for example that God should have created Himself at the same circumstances with his matter that He could exist in these higher dimensions.

Cylinder Model (1, Illustration 3.2.4;1)



Therefore, God's „pen“ moves the point of primordial substance from A to B, not perpendicularly, but devolving into an arc that is finally tangential to a maximum radius. This radius R , you can assume as an amplitude $R_0/2$. So the bow is a quarter wavelength $\lambda/4$, because He now moves the point back to the starting point in the next quarter arc.

Once it is in motion with light velocity in vacuum c , it does not stop there, but passes through the starting point in order to generate half a wavelength again. According to my imagination, the primordial substances rotate at the beginning of the Creation on $1h$ programmed to be an elliptical 8 , and offset by 90° . So, an eight is the first gravitational dipole – the elementary gravitational dipole within the first material particle. The gravity is raised from a center, once moved as ellipse it comes back to the center.

If you only have a single dipole, nothing is spatially balanced. So there had to be multiple dipoles filling the space. However, all these dipoles have to give the quantum $1h$ to 2 pulses or $\frac{1}{2}h$ to one pulse. **All!** But that should not be. Wolfgang Ernst Pauli recognized it for the electron shell. I extend it for all quantum processes!

God had probably suspected that Pauli would come. HE has come up with something like this: He only drew the highest ellipse (with one of the pulses it is a parity circle) continuously with the the well-known speed v of the light in the vacuum space $v=c$. He drew all the other levels extended by integer number n to nh becoming shorter and shorter and let them rest in their open time. This is the time of life of these objects. No matter where they reduced their speed from c to $v \rightarrow c$ and less, for the rest of the time that lies on the primary ellipse, there followed a strolling time. After it reversed, the way of strolling went back. That process made it possible that **all** the objects fit into this system of $\frac{1}{2}h$. They form their own dipoles into each directions by $\frac{1}{2}h$. While that half oscillation period according to $\frac{1}{2}h$, they simply did not get higher than the radial ellipse limit!

Certainly, there are material “loops” as first movements of matter. Loops as **closed** movements. Ideally smoothed out, they are circles or bows as circles of $e. m.$ identity and bows being circles of $g. m.$ identity. On this way, $g. m.$ and $e. m.$ primordial particles are created in pairs and in the same period two features of them as g and s . I think, in the origin, both particles have the same movement size that they can generate an electric charge inside the graviton g and that an electric charge could be given into the subtron s (1, pp 420; 2, pp 125 and pp 100).

It is important to note, inside of our universe hierarchy area, inside of our environment with the well-known elementary particles protons, electrons and neutrinos p, e and ν , there are only those magon pairs of these just called particles. But neutrinos annihilate gravitomagnetically! We now go down into the next area of the hierarchy. Inside these particles p, e and ν , or their unstable descendants, there are only those magon pairs of their own sub-particles subtrons and gravitons s and g from which were internal protocosms and subs are made!

Explicitly, both hierarchy areas were separated from each other by separation of their coordinate systems. Please understand it! Here next to you never, never these sub-particles g and s are allowed to be formed. This is also valid for their protocosms and their unstable states. Here next to us, only our particles p, e und ν and their protocosms and their unstable descendants are allowed to exist.

By separation of the primordial substances while raising and lowering, the Creator made a contradiction of that appearance. Coupling is connected with vacuum light speed. Therefore, it cannot decoupled from the material objects by working subjects. This way, all the particle microcosms created together were (are) coupled between each other with that feature of attraction – with gravitation. At the same behavior, they were (are) coupled between each other with the feature of “light” – with the

electromagnetic charge. By Laser measurement of the frequency of the particles, you can draw the conclusion on their **qualitative** amount of mass, but not of the difference of ordinary mass and antimass. Both have the same frequency.

Until today, nobody was able to prove my theses that there are ordinary mass and antimass and so also gravitation and antigravitation. They have to experiment according to my suggestions.

Think at a parable as follows, please. We ourselves were moving images on a screen of linen and we would be able to realize it. Then we would have a question. Where do we come from and from what are we made? We wouldn't find an answer, 'cause we would recognize that we consist of "light" on the screen. We cannot detect how and where this "light" is emitted. Just we could think, is must come from a transmitter. We cannot explain the oscillator which is sending (transmitting), because we don't know from what it is made and how it is working. This "thing transmitter" is nothing for us.

By this example, I think that our matter is transmitted resp. emitted from a black body which features (qualities) we do not know. This transmitter does not radiate at one point but distributed over a giant field of transmitters, which are packed into each other. This is the giant structural hologram!

Now we assume that there was a Creator working to produce the first material particles (g, s and antis) and to couple all features of them that they were allowed to attract each other. So I think, in the first beginning, the Creator gave into the very first particles photons and fallons that they keep on moving the just created matter of mass and energy.

The Very First Principle of Matter: While the internal movement of ordinary mass is climbing (elongation is arising, sphere is becoming larger), it is sinking inside of antimass (elongation is sinking). Both movements set together make compensation.

While mass is falling, antimass is climbing. While antimass is falling, ordinary mass is climbing! These are mutually conditioned pulses in relationship of the oscillation. And this is the contradiction of falling and climbing in relationship of Albert Einstein's thinking. The present opinion is that "gravitons" would be wavequanta. But my gravitons g are real particles like protons. In contradiction to the present opinion, I call the very first particles of electrogravitation as follows: Gravitons g and antigravitons \bar{g} .

Which qualities could they have? First, I think at an asymmetry from the very first beginning. A scholar will immediately get excited again: that is as good as proven that there must have been a spontaneous symmetry breaking! What is this Ackermann crazy about?

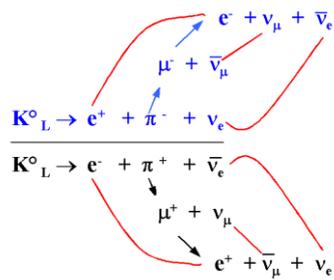
Well, I know that they need this symmetry breaking to explain how an asymmetry resulted as observed at all. It's a kind of humor, I think. Why do you need a symmetry to find a process that explains the real asymmetry? Why don't you take the apple without asking how the pear could have become an apple? Ha, but this is science! This science has found the following.

It is told, those K^0_L bosons should be their own antiparticles. Therefore, they would qualitatively decay through both opposite channels. Amazed, one observes a small quantity more in that channel listed in the numerator of the fraction (4, p. 108).

$$\frac{K^0_L \rightarrow \bar{e}^+ + \pi^- + \nu_e}{K^0_L \rightarrow e^- + \pi^+ + \bar{\nu}_e} = 1.0067 \pm 0.0003 \quad (8.7)$$

That is obvious. At 10,000 decays, the numerator is 67 particles larger than the denominator. My IOT says: Pions consist of ordinary particles and antiparticles. Neutrinos are extremely light. I will initially neglect both effects. First I think at the compensation of their electric charges. The internal positron is repelling from the Earth's gravitation. The electron is attracted by the Earth. Already inside the Kaon, between both particles a gravitational potential is arising. Therefore, all gravitational partons are closer to each other than the antigravitational partons above.

That means, the negatively gravitational partons leading to the positron already are separated a little more in relationship to these positively gravitational partons leading to the electron, which are closer to the gravity center of the Earth. Consequently, this asymmetry is caused by our Earth's positive gravitation. It is a naturally given reality, and it is not a spontaneous breaking of symmetry.



(8.8)

In the end of all decay, everything is qualitatively equalized, because numerator and denominator simply extinguish independently of each other into pure radiation energy! It is indicated by red connecting lines. So it doesn't matter if there is some more result quantitatively in numerator or denominator. This fact proves only one thing: In every unstable particle, ordinary matter and antimatter are installed together. So a K^0_{L} is nothing more than a combination of partons that amount to a complete annihilation. **Right from the start.** That means that there is already the possibility asymmetrically decay into the components, but no spontaneity.

I say: **Asymmetry is systemic from the very first beginning!**

Consequently, there are 2 primordial particles g^+ and \bar{g} in different amounts. These are my gravitons. There are also two other gravitational particles with an electric elementary charge, the s-particles, my subtrons s^- and s^+ , also with quantitative asymmetry. From g^+ and s^- a primordial atom is born that I called sub-hydrogenium. Sub-hydrogenium and anti-sub-hydrogenium consequently are given by an asymmetric distribution of their amounts. At an ordinary particle, the first are more, at the antiparticle the second.

That sub-hydrogenium is an analogy to the external hydrogenium from proton and electron. There is not sub-weak interaction because of missing sub-neutrinos inside the underworld. So there are only these sub-atoms and sub-anti-atoms and so just clouds of them. Clouds of sub-gas. There is no evolution of the sub-matter. Nevertheless expected, there aren't mini humans. Because of Planck's constant \hbar , quantization fineness of matter is limited in the depth where roughness of the "pixel" increases extremely.

In the origin of matter, gravitational and electrical forces (by elementary charge e_0) are the same! For this, I found the constant of calculation $k_q = 1.6e9 \text{ kg/C}$ (1.6 billion kg per Coulomb). Using this constant, I am able to calculate a graviton mass into an electric graviton charge. Fitting to Planck's constant \hbar , the elementary e. m. quantum $\bar{\mu}_{\text{gq}}$ is the result. This is the very first elementary magneton, just as \hbar . So I have to introduce multiple numbers of them as $n\hbar$ and $n\bar{\mu}_{\text{gq}}$. Already at the amount of the elementary magneton, you see that the multiplication factor n of the electron is extremely large. This is the reason why magnetons of our hierarchy area at protons, electrons and neutrinos are not elementary anymore, so also the magnetons of atomic nuclides. There are various settings of n , almost confusing many features that depend on the position of the phenomenal rotation areas in the atomic nucleus. Two angles change the position of the rotation areas, first to tilt the plane and second to rotate the plane. The binding energy of the nucleons depends on this adjustments (TBA IV).

In this respect, we can forget the idea that there would be electric third charges inside. We have to continue the line of unity by using integer electric charges and integer e. m. charges and integer g. m. charges (TBA III)!

If there are four microcosms on such an area of a path that I called cosm sentence KS and which Einstein caused to be a gravity quadrupole, then in the ideal case, all the quantum numbers are equalized, the orbit spin (rotation sense of the path in the orbit R or L), the magnetons and the electric charges. That cosm sentence remains just one different quantum number, the mass resulting from those four masses of this quantum area. It is meaningful that these four masses naturally should be the same size. Then it is correct according to Pauli. They still don't agree in all quantum numbers, only in one. It is also meaningful from the creation of gravitons that they have to carry integer charges. So I thought that the model of "quarks" is just a good model. But real „quarks“ do not exist. They simply have not third charges. The same way, there are no Higgs bosons in this present construction. But

there cosm sentences of their rotation sense to zero having a mass. When such an ordinary mass block is acting together with an antimatter mass block, the combination is a boson, spin zero and mass zero. Prof. Higgs' assumption is almost satisfactory. Later in honor to Higgs I called my kind of bosons Higgs Blocks.

If inside of one cosmic sentence both particles, two ordinary gravitons and two anti-gravitons, are rotating, every quantum numbers are equalized, even mass, finally each movements transferred onto photons. This is the reason why I predicted my model in that ordinary mass and antimass became reality. Every kind of mass itself is attractive to each other, repulsive against each other. For example, 10 g uncharged antimass would "fall" above from our Earth into the universe. Antineutrinos admittedly have so less antimass that they hardly can be deflected from their path. I think, you nevertheless could try to measure such a deflection on Earth or at other celestial bodies proving the repulsion. It is essential that a cosm isn't an angular momentum itself, but it doesn't exchange angular momenta by itself but by emitting and receiving them. Cosms are transmitters/ oscillators/ resonators & receivers.

Additionally, wavequanta by photons and fallons are exchanger, mover, advancer, conserver, keeper pusher. In my model, there aren't "mediator particles". For example, pions don't mediate the strong nuclear force or interaction. Rather this interaction is formed by the internal gravitation of the internal mass of the nucleons (TBA IV). And that gravitation is mediated by those special fallons super-strong only existing inside the nucleons. You don't want to be able to believe it that scientist think of glue in this cohesion calling these wavequanta simply "gluons". But my fallons are relativistically locked in the microcosm. They absolutely aren't able to free themselves.

My **fallons** are twisted states of gravitational force analogously to e. m. interactions of photons. The word concept I derived from the falling things. If all the e. m. effects are compensated in a quadrupole, cosms can be built, which explicitly are gravitational not electromagnetic and also not strong. At most they interact weak like a neutrino. And this is the joke that they are purely gravitational on their outside and also on their inside especially gravitomagnetic, g. m.!

During a fault of an e. m. cosm sentence, it projects this fault to the outside by one or more electric charges and one or more electromagnetic momenta. Converted, this process also can be seen as a "spin" although nothing is spinning on the outside. I assume that integer electric charges were generated in the elementarity from the beginning. In combinations, which can be clearly seen in the case of ions, multiple integer charges are realized. For protocosms of elementary particles, I draw my conclusion that they carry simple integer e. m. charges. The protocosms of the universe of galaxies, stars, planets etc. can carry innumerably many e. m. charges, which add their effects to an extremely strong magnetism by the added intensity. We can observe it on extreme magnet fields especially at the Sunspots.

On the other hand, if such a GS-mass (from sub-hydrogenium g & s) will be united with GS-pairs (from ordinary and antimatter) forming packages of them, temporarily microcosmic packages will arise. Light workers pack them as well as they do it with cosms of rotating partons. So every package of such a feature gets a programmed holographic structure. But this isn't a stable package anymore, which always was internally locked. Now it is a package that will be unpacked. If nothing is opposed to the effort to unpack (i. e. to shoot beyond the diameter of the rotation circle) by new energy of photons or very high kinetic energy, these packages open again. During the opening and the evaporation, the symmetric part of internal mass and antimass will be annihilated. That radiation shoots out in the form of two jets.

I called these packages simply **Pre-Cosms**, because they create the insides of microcosms, which are existing above g and s. For international understanding, I have chosen the concept of **Protocosm**, **PK**. Certain reflections of their existence were designated with "quarks". This was close to the reality. But researchers didn't recognize the many equalized (balanced) cosm sentences of quantum numbers to zero, except for **mass**. These missing links but are the **mass-giver**, they are the internal **mass blocks** of the particles.

So that it still matches the "quarks", the "Higgs bosons" should fix it. But those bosons are just a model. They aren't reality in the real cohesion! Usually, protocosms have integer electric charges of our well-known particles, or they are not charged. In universe they are multiple charged or not charged. Combinations have multiple charges or non-charged objects. If there is no charge, only a gravitational interaction is possible, mass by mass. It is a pure gravity. Our well-known neutrino is programmed to be purely gravitational. Its pair can be formed inside of stars. In the universe vacuum are too less

gravitational fields. Then in the inside of protons, neutrons, electrons etc., a neutrino pair can be built by fallons in the extremely density of internal mass.

Protocosms pack ordinary matter and antimatter of the same parts and extremely big amounts. A tiny amount of ordinary matter is programmed to be an imbalance remaining after annihilation of the balance of matter/ antimatter. In the antiworld it is reversed. I think that the given amount of ordinary matter and antimatter is the propellant charge. At the same time, it generates the ocean of magon pairs especially inside of its receptacle cosm, which is never outside but always inside. Additionally, the whole amount of those photons made by annihilations floats above the space of the resting mass. Time after time, they're turning back during the spatial pulsation of the receptacle restoring these protocosms from the resting masses and of the self-collisions of masses. Mark, please! **Protocosms do not arise from cold collapse. They really arise from concentration and condensation by support of radiation in heat and pressure!**

This was our view inside an ordinary particle or cosm. Inside an antiparticle, that tiny surplus of antimatter is remaining for the same time I call a life time. So I think, this is the real existence time of resting mass while loitering or strolling through the space of the cosm. At the same time, this strolling has its strolling way and time together, made true by Special Relativity.

Inside the particles, both forces electromagnetism and gravitomagnetism are given and separated of the external forces by the coordinate systems. There is hardly any point in using other terms for internal gravitation and electrification than for external gravitation and electrification.

I think I can rightly assume that the World is a Unit of its Construction and was not constructed accidentally. Universe seems to be a special cosm created of an ordinary and an antimatter body. All the other stable cosms and particles like protons, electrons, neutrinos and their antis are working analogously. They all have to follow the same natural laws. The laws give the qualitative fundament. What's now with the quantitative fundament? There is an unlimited number of differences how protocosms could be assembled.

Two important questions arise from my article.

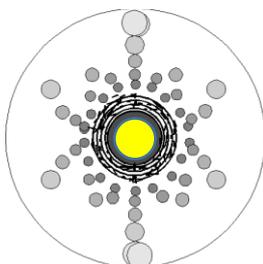
- a) How does a protocosm open through evaporation?
- b) How does a protocosm or a cosm emit internal partons to form external cosms?

Let's answer the first question. The protocosm grows metrically, because its sub-protocosms (SPK) climb up while the process of opening by evaporating is running from the start in the center. Now it depends on how the top-SPK are designed. As with genes, only a few base pairs differentiate between the species of living being. In the same cohesion (program), just a little different properties of the top-SPK are decisive about the system that will appear at the outside: mass, amount, order, kinetic energy, speed, electric charge amount, angular momentum, e. m. and g. m. momentum, internal structure of the sub-hierarchy down to the last sub-hierarchy of the hierarchy before. Everything in the complete depth is pre-programmed!!!!!!! But the mass block is balanced. Only the qualities of the top are important.

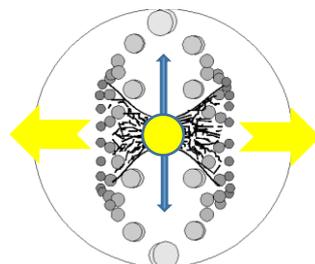
Those top-SPK are escaping above the horizon r_0 on quite long and already curved paths. An ideal cosm would have the following structure within the circle with its radius $R_0 = r_0/2$. Radiation and SPK remain inside.

Double Funnel (1, p 571)

a) Top View



b) Side View, idealized with all Quadrupoles



A real cosm inside the universe has on top just 3 or 1 SPK, but not 4. If that cosm is an energy cosm (EK) so a sensitive PK, then the top SPK are flying far away while opening of its receptacle, also those which form a Halo around the complete system.

On the left side of the illustration, we can observe like dwarf galaxies could be formed there or a Halo of star clusters. In the middle, very close to each other, the mass block is becoming an elliptic rotation body. But before, the annihilation's radiation will be emitted to both sides, right and left from the center forming so-called Jets (yellow arrows). At these positions, the most of matter/ antimatter is annihilated. In universe, figures like sand clocks or drops often are observed. This is why the starting jet is spreading like a cone.

Those galactic sub-protocosms, SPK, that have already flown far away have already installed their sub-worlds (dwarf galaxies, star clusters). These objects have almost no spin, because they are similar to the mass blocks. In such a mass block, all the quantum numbers are compensated. You can see it nicely in the sunspots arising in pairs and compensating their rotation fields electromagnetically and mechanically. Sunspots are the sub-protocosm's appearances. Next to each other, they climb up in pairs, supported by the energy running to locations far away, farer than allowed of their destiny. Also these secondary protocosms, sPK, those were flying far away in galaxies are close to each other. By a graphic experiment, I could watch how they can meet themselves. Surely, they would collide after rotations, but not free for compensation rather inside their plane. Then the magnet fields are compensating. Rotation planes slide over one another. By this process, celestial bodies arise, which are inclined 90° to the equatorial plane of the star. This kind of hits is certainly an ideal case. Surely, there is a preference but also another hit variant.

In this respect, there should be a list of planets with spin and a certain inclination of about 25° . Further, there should be a list of objects with less spin and a strange inclination. We also would find such strange inclinations in pairs of our galactic plane.

Where should the orbital angular momenta come from? One SPK, shot out on a slightly curved path and already opened, hardly turns. And then, it immediately falls like a stone, permanently accelerated, straight back to its producing center of gravity. But no, it doesn't! The curvature of the space of the central body forces the flying body into a rotational orbit although its own PK momentum was very less.

All the universal objects arising from protocosms fall down back to the producer center while they turn into elliptical orbits at first. Collisions can mediate angular momenta. Just this is the way that galaxies find their orbits rotating around an elliptic giant galaxy, that stars find their orbits rotating in the arms of a galaxy, that planets find their orbits rotating around their stars and last not least; that satellites rotate around their planets.

Further interactions of the objects will disguise the idealism of the process. Masses falling back into bow paths cause angular momenta in the proximity of the Divergent Sphere DS. After a heavier mass collides with a lighter mass, both masses begin to rotate.

This is just a special question of my model. Where does the angular momentum come from? Equalized protocosmic orders do not cause any rotation! The angular momentum of the mass block is zero. Let us look around! No tree, no bush, no animal, no human has an angular momentum. But they all have internal circuits. Yes, these are the analoga to the protocosms. They are programmed! Equalized rotations compensate each angular momenta and each magnet fields.

There are only two mechanisms left that can cause a rotation in the elementary area of the protocosm. That's the immanent curvature of the space, and that's the collisions of the massive bodies.

As this central ellipsoid collapses in its DS of galaxy formation internally repeating, continuously it generates sPK pairs that are emitted (blue arrows). In the following time period, it has already won an own rotation. With the orientation of its angular momentum, it emits the sPK into the disk, which in turn is perpendicular to the jet. The first stars of it are placed far out, then further inside. Though the center throws sPK into the environment depending on its own rotation sense. Only with your phantasy, you can imagine how the spiral arms are created, at first surely barred spirals because the fastest sPK are the furthest away. This has to fit with the rotation speed. So barred spirals are special shapes of spiral galaxies.

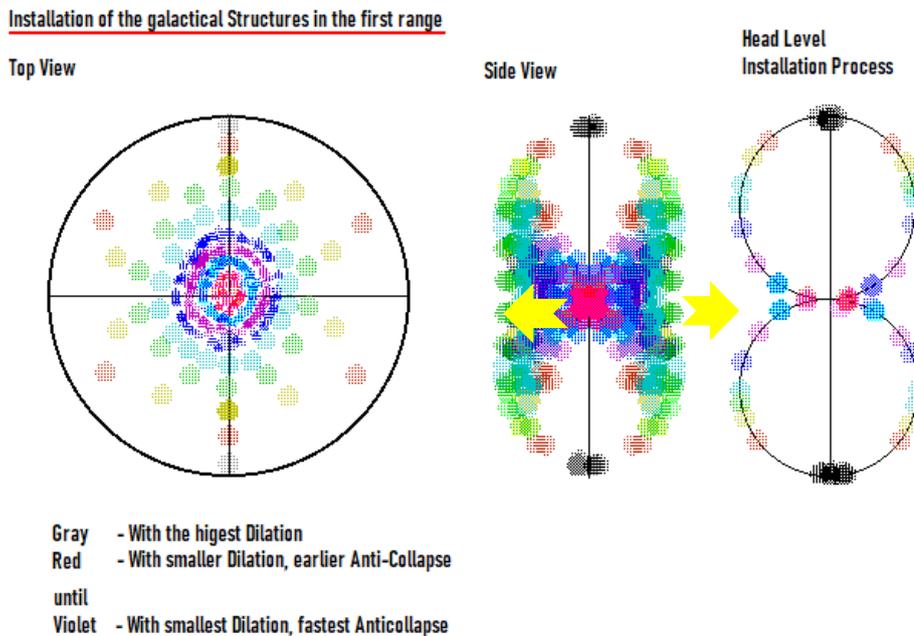
The system of these formations can be broken down from galaxy clusters over globular star clusters, planets to satellite systems under the condition of decreasing energy of the centers. So the SPK already remained hidden in the centers of globular star clusters, and so on.

A lot of objects were formed in the environment by SPK as first protoplanets and their satellites in a solar system. Several strong explosions of the primordial Sun drove the protosatellites into the asteroid orbits arising now and to the protoplanets of Jupiter class. Jupiter got a mass maximum. Protoplanets in the proximity to the Sun were absorbed or burnt except for tiny remains. Just have a look at planet Mercury.

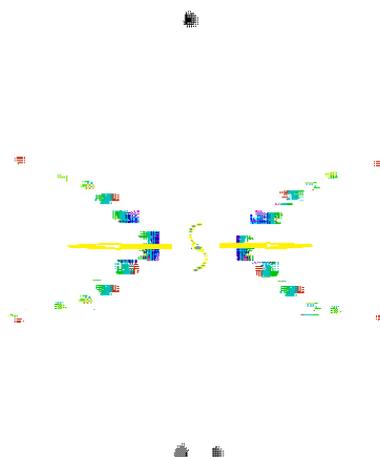
It is not easy to recognize what will happen when the external SPK are flying away with high speed and the others are shifted along to the outside. In 2001, I was in holidays on Gran Canaria island. There I watched my graphic result of a table calculation. It took a long time until I recognized what it means in motion.

In the top view, the radiation jets come towards us. On the other side, they are running away. The plane creates a disk. In both side views, you recognize the free space inside through that the SPK were flying away forming the external disk. Those SPK fly away as 2 pairs. You see that the maximum of the flight direction of the SPK is close to about 30° in relationship to the disk.

From a table calculation, I developed this graphics later:



But this thing is the quantization of a stable cosm inside. A PK just like the middle image in the beginning, flies out of each other as following:



And now I saw a fantastic image before my eyes like this: The top sub-protocosms SPK, those four gray spheres, are objects with the least mass externally and the last that evaporate very far away. They use the given chance of a protocosm and hurry away. In the middle of my illustration, each a pair would fly up and down. Both pairs install new and relatively big rotation systems of cosmic objects very far away from the starting point. But stop! Theoretically, every quadrupole has 4 protocosms. Projecting an angular momentum to the outside, in the top orbital 1s ($n=1$) must be an asymmetry. In the past, I called it 1+0 or reversed 0+1, if there three protocosms were missing. Then just one PK determines the angular momentum like at the electron. If 2+1 or reversed are given, then the spins of both are almost compensated. The third is the one that determines the spin of the result. So I had rather called this asymmetries "mass-block $MB \pm 1PK$ ". That means there are always twins of the system MB-1 and MB+1. From MB-MB-symmetry, one MB gives one PK to the other MB, which becomes to MB+1. MB-1 is now an inner MB_x , on which 3 PK move on the top, $MB-1 = MB_x + 3$.

Unfortunately, I calculated my table with very less points. The secondary levels form three spatial disks from $n=2$ with orbital 2p. Including 3p, d, 4p, d, f etc. the space will be exponentially denser. We much faster get a thick body in the central area in relationship to my simple graphics. Later I called this thick central body a **mass block (antimass block in the antiworld)**.

Both **fungus hats** remain to the left and right of the **Waist** (Funnel Slot) lying in the perpendicular. They aren't too clearly visible. The propellant charge of the central Small Bang, I marked with red color filled with homogeneity. Above this area, there are the innumerable amount of SPK in their bow motions. While their escape, their curved paths become straight. In practice, both fungus hats open to the right and left. During their fastest sub-protocosms advance, the remnants of either side form jets of emitted matter. It's like an hourglass or two drops, as if two fungi were symmetrically attached to a small, extremely hot sphere. Such phenomena have already been observed many times. They are also snapshots that have to be interpreted correctly!

As I just explained, all the structures in universe are created in the beginning. The same way, all the internal structures are made in the protocosms PK, sub-protocosms SPK, sub-sub-protocosms SSPK, secondary protocosms sPK, etc. It is the way like all possible structures of elementary particles are created. On the same way, the Creator moved the first primeval substances through the first microcosms called Graviton and Subtron by me.

However, such an opening structure does not last long. The center collapses again to form a pair of secondary protocosms sPK with less internal mass than before, while the few material structures remaining outside near the new and old center of the Divergent Sphere DS rotate at high speeds.

Further series of evaporations (openings) of the internal DS of the galaxy becoming lighter and of newer condensations of the emitted sPK lead to the extension of the environment, to special ways of the paths and to less masse in the DS in the central proto-galaxy. In the end, the DS and the environment stand in balance of "give and take". So, in the immediate environment, the matter will be continuously renewed by eating of old matter falling in and emitting of new matter in the shape of the secondary protocosms. This stable state could last forever, so also our existence with the Sun, our existence with Sagittarius A and more of such objects where Black White Holes have a connection to the objects.

But this is only valid for the highest inner energy. Does it decrease along the reduction of cosmic objects, then the sPK-arms sink in the centers. They become invisible. At galaxies, you can still watch them. In globular clusters, they are just hidden inside their centers. In stars, their sPK-arms are deep inside their centers where they refresh surrounding gas matter.

You can expect a gravitational wave when both extremely heavy masses collide or a mass would quickly move. Consequently, researchers waited on a collision of two "Black Holes" or on a SN (supernova). They should trigger an impulse in the certain macro-measurements of the institutes (detectors of gigantic masse, about 1,150 kg, University Leiden). These are seldom appearances because Divergent Spheres have to collide or to explode. In the meantime, it is actually believed that such rare-low frequency gravitational distortions have already been observed (February 11, 2016, LIGO Observatory).

Nobody even suspected that – as in my models – a gravitational wave is nothing more than a counterpart to an e. m. wave. That's why I called it more modern a gravitomagnetic wave or g. m. wavequantum. Mass magnets and mass shock impulses are formed by pulsing mass of each kind of mass in motion! By the way, because mass is derived by pulsation, there are g. m. wavequanta as

primary exchange wavequanta between elementary masses by which the gravitational force is actually caused!

Secondarily, we then form secondary g. m. waves (wavequanta) by moving masses. I would like to prove them and build the first transmission path of our world if I could. The effects are much too weak. I only can make suggestions how to do it. Later, I want to tell you about it.

G. m. wave are hidden below the e. m. waves because of their extremely small intensity. But their frequency can be the same of the e. m. wave. So their energy according to Planck is equal $E=hf$. In the end, I have doubts about the intensity that I want to test mathematically. How many Watt can we expect for the modulation of the ideal static gravitation of the gas mass of the Sun caused by its pulsating Divergent Sphere DS?

as ich aber noch mathematisch überprüfen will, mit wieviel Watt wir die Modulation der idealisiert statischen Gravitation der Gasmasse der Sonne durch ihr eigenes pulsierendes DS erwarten könnten.

From Wikipedia I got data of the **radio emission** of the active **Sun**: “The intensity correlates with the relative number of sunspots. The wavelength of this component is 1 to 100 cm with a maximum at 15 cm. Radiation bursts: The wavelength is between 1 cm and 15 m.” By making the radiation intensity dependent on the amount of sunspots, I think the spots emit radiation.

I calculate: 10e-2 m to 1m, Peek at 0.15 m. Frequencies: 30 GHz to 300 MHz, average: 2 GHz. Bursts: 30 GHz and 20 MHz. 2 GHz are in the middle of harmonic and subharmonic waves.

The frequency of those protocosms that are exported from the DS with a mass of about 10e25 kg, I estimate on 6.4 GHz. If this PK internally would be three times heavier, it then had about 3e25 kg and a frequency of 2.1 GHz. The ascending and opening secondary protocosms would produce the sunspots. Which is completely written in the stars: The g. m. pulse frequency will be shifted by itself into gravitationally red during the evaporation, so to lower frequencies. My calculation of the g. m. frequency is made by the well-known equation $f = mc^2/h$, in which now the external mass m of this equation is substituted by the internal mass M and the constant d from eq. 4.1:

$$\begin{aligned} f &= d c^2 / (h M) = 4.737155e-16 \times 8.98755e16 \text{ kg/s} / (6.626e-34 \times M) \\ &= \mathbf{6.4255 e34 \text{ kg / (Second s} \times \mathbf{Mass M)}. \\ f &= K_M / M \end{aligned} \tag{8.9}$$

Using this new constant $K_M = 6.4255e34 \text{ kg/s}$ (this would be 5.537e24 Ampere), we find each frequency of each a cosm, if BWH, PK or EK.

By the way, 1A (Ampere) I already calculated in my work TBA I, p. 329, to 1.16045e10 kg/s. This is an analogon to the intensity of the current of 1 A. At that time I didn't know what to do with it.

I would also like to refer to the conversion of g. m. wavequanta into e. m. wavequanta and vice versa. An electrically uncharged mass in motion creates g. m. waves. These wavequanta can move electrically uncharged masses. So a transmission is possible on the g. m. way. I think that the receiver masses are vibrating back and forth with the same frequency as the mass of the transmitter. That's my reason why a very big receiver mass cannot swing because of its inertia.

If that g. m. wave would move an electrically charged mass, for instance the electron, then the g. m. is changed into an e. m. wave! This is fact like the amen in the church. This reality changes the view on these waves completely.

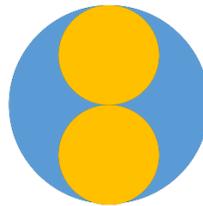
Construction of an experimental gravitomagnetic Oscillator

A coil made of a glass tube evacuated, I fill with a gas dissociated. The electrolyte should consist of anions and cations that are equally charged and of different weight. If you now would contact an electric AC voltage at the electrodes of the coil, then you'd generate an e. m. and an extremely weak g. m. wave of the same frequency. It is because both effects of anions and cations are added. They move in the rhythm of the AC voltage into the contrary directions. In

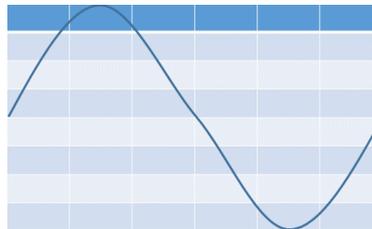
that way, they generate a double e. m. wave in addition. But the masses generate two waves of equalization in the case of the mass balance of both ions. From a difference of the weight, a g. m. wave results. One had to turn around the effects. This isn't possible with a single induction. I cannot couple the coil with a "gravitational" voltage. So I have another idea:

A second glass coil should now be asserted almost congruently. We should now have to compensate the e. m. effects. Then the g. m. effects would remain for emission. However, the electrograviton has a mass of about $2e-9$ kg matching to a single elementary charge of electrition. An ion, on the other hand, has a mass of an average of $1e-25$ kg. The intensity of the g. m. wave in relationship to the e. m. wave would be 16 orders of magnitude lower, although its frequency-dependent energy would be the same. Such a weak result cannot reproduced in an experiment. But if a protocosm of the Sun shifts the masses, then it would transmit approx. 9 orders of the magnitude stronger than an elementary transmitter with only a single elementary charge moving. A billion elementary charges are in motion. Here you can recognize that the transmitters in the sunspots cannot be made by g. m. energy. It would be too small. The vortices also convert this energy into e. m. radiation by their electric charges of the particles.

Here the consequences of my spin and pulse opinion of my IOT are following (1, p. 391 to 411). We all know well that an oscillation consists of both half-waves. Two half-waves form a period.



The unit circle (or its two inscribed unit circles, which face each other like the number 8) must rotate once around its **entire circumference U** so that these two half-waves arise either in trigonometric functions or in cycloids. From the inscribed rotations, four half-waves result. However, there are two half-waves. A single half-wave would not be meaningful:



Both half-waves create a temporal period of the oscillation time, which is the period time τ . In the same cohesion, both are creating a way-like period in the shape of the wavelength λ . Each maximum deflection of the elongation R is an amplitude R_0 and in the same calculation it is the radius R_0 of a rotating circle:

$$U = \lambda = 2\pi R_0 \tag{8.10}$$

According to the speed, the quotient of distance and time, this results for the period time as follows:

$$v = \lambda / \tau \tag{8.11}$$

The period time can also be written as radial time of the amplitude:

$$\tau = 2\pi t_0 \tag{8.12}$$

At e. m. waves or oscillations in vacuum, the speed v is also vacuum speed of light c . From this, it follows for e. m. or g. m. states:

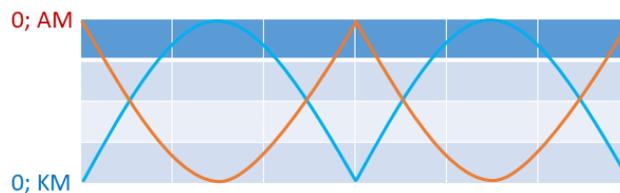
$$c = \lambda / \tau = R_0/t_0 \tag{8.13}$$

Radial relationships, however, are amounts reduced by the divisor 2π . If a total oscillation is always related to Planck's constant h , then the half-wave is related to $\frac{1}{2} h$. Now it is reduced to the radial amounts. So the result will be divided by π . Summarily, the size of h is divided by 2π . We get the reduced Planck-quantum of $h/2\pi = \hbar$ (\hbar across). How is the unit circle related to the space vibration? A half-wave of the space wave is described if one photon would run once around the circumference of the maximum space wave elongation (on the amplitude). But it is the case that a protocosm writes its own circle into the unit circle starting from the center of this circular area.

This way, it is once more half the half-wave. So we get for its angular momentum $\frac{1}{2} \hbar$ expressed by the reduced Planck-quantum. This amount is an image of the fermion spin of the sciences. For me it is an imagination for the pulse that a fermion achieves. Inside the pulse, there are paths (path angular momenta or orbital angular momenta) resp. parity paths of the protocosms, which can be correctly expressed by this image of $\pm\frac{1}{2}\hbar$. The protocosms as g. m. partons must also have such an intrinsic angular momentum of the same size in the same rotation sense with the same key signature. From the inside of such a space-wave a parton will be emitted. After this, you can draw the conclusion of the external angular momentum from the internal and of the handedness from the internal path rotation sense of that parton.

You may ask now, where do these oscillations actually come from? Must there always be two half-periods? Why is one enough at a cosm oscillation as spherical wave? Each half-wave is the same, or isn't? According to my IOT, there is an answer. While the ordinary matter sphere is climbing up in its elongation to the amplitude, the antimatter sphere is falling down to the center, to the gravity center of the system. The elongations are adjusted reversed to each other.

Illustration: Ordinary Matter KM vibrates against Antimatter AM



One single half-wave were enough. But the opposite side of the antimatter must have a chance for revenge. In this respect, every second half-wave is a wave of revenge. It seems as if ordinary matter turns relatively into antimatter after its half-wave.

We assume the following case. Both gravity centers of both spatial waves are congruent, that center of the **ordinary matter** and of the **antimatter**. The result of gravitation then is zero. There is no gravity, no inertia! I early recognized this principle for future space ships. They have a storage ring of antimatter on board to reduce its own ordinary weight, idealized against zero. This is comparable to the mass of neutrinos and such a similar behavior. That space ship could fly with almost light speed in vacuum without e. m. interactions and without effective g. m. interactions. It is because an "impact" of the own wavequantum with the wavequantum of another mass would distract the space ship a little bit. But it would not destroy the ship. The braking mass would be much too small.

Let us take now a protocosm. It should rotate on its path into the right. Then it has an orbital spin of $+\hbar/2$. In this cohesion, its gravitomagnetic intrinsic rotation sense, the g. m. spin would be the same of $+\hbar/2$. If that PK would be emitted into the direction of your view, then the following qualities would result. It has right handedness, so rotating to the right with the spin $+\hbar/2$.

Now it becomes problematic. We take now an anti-protocosm. It also rotates to the right on its path. So it can meet later the ordinary PK annihilating with it. The anti-protocosm has an orbital spin of $-\hbar/2$ (a negative rotating to the right makes a negative). The same is valid for the intrinsic rotation sense, the spin: $-\hbar/2$. This anti-PK is also emitted into the direction of your view. Then it is right handed, rotating to the right with its spin $-\hbar/2$. Satisfying! The matter with the spin seems to be correct. But the handedness doesn't agree with previous knowledge of science. On base of equality of mass and antimass, these science assumes that an antimass must rotate to the left with the spin $-\hbar/2$. We may look reversed. Nothing changes. My handedness is different to the previous science!

How does that even work? Let us take the neutron (cf. TBA III). On base of its special construction, it has to emit a negatively charged protocosm of the electron and an uncharged electron antineutrino

body. But both are rotating to right in the neutron. If we look at it reversed, then we see them in the left rotation sense. Well, let us take this left sense, not without any reason, because it is preferred from certain reasons during the emission. Now we form a pair of electron bodies (this is a Higgs block H_e) by support of momentum energy. Together, these 4 partons form an electron and an electron antineutrino starting in the center of the neutron. Both leave the neutron in the same direction turned 90° to the original orbital motion. How do we have to imagine that?

A left rotation is moved forward and thus it causes a left helix line out of the neutron laterally. So both emitted elementary particles have left handedness. They are left helices. In my model, antimass is the opposite of ordinary mass $m = -\bar{m}$. Present theories assume that both would be the same $m=\bar{m}$. In the classical sense of opposite rotation senses, also optically, the present science consequently gets different spins and handedness to mine. But I calculate as follows: That gravitationally negative electron antineutrino rotates to the left and creates a positive spin $\frac{1}{2}\hbar$, therefore. The electron but has a negative spin $-\frac{1}{2}\hbar$. Both are equalized to zero spin. In this layer, both rotate to the left. Is there also possible a right sense? Obviously, not. Both partons always are emitted in one direction across the path, never into the other direction. The present problem is, that you think at an electromagneton, an electrically caused momentum. So you think, the gravitational spin with \hbar would be the same as the electric spin with μ . This reversed thinking makes it complicated, because the electron carries a negative electric charge. This charge moved to the left makes an positive magnet vector into the helix direction. Currently, I don't know how physics want to explain the mixture of e. m. and g. m. interactions.

Surely, electrically charged pions could not be formed, if one of both partons called above would escape into the contrary direction. They have to run in the same direction forming its common spin 0, zero of the charged as also the uncharged pion. The spin of W and Z bosons has to be ± 1 like at a pair formation. I think, it is caused by the collision of proton and antiproton without annihilation. If there was an annihilation, both photons had each a spin of 1. One proton momentum to the right is positive, one antiproton momentum to the left is positive, so is my opinion of contrary mass effects. Momenta have to be added to one, so at the interacting protocosms, too. What is the reason?

My system is based on $m \neq \bar{m}$, $m = -\bar{m}$. Both masses are opponents! And soon, there is a different system, especially an unlimited leading of a line of the electrons and electron antineutrinos emitted from the neutron, may be coupled to the negatively charged pions and made to the negative W bosons. A lot of particle pairs will be formed like lepton protocosms, lepton bodies, neutrino bodies, electron pairs and neutrino pairs, muons and tausons.

I suspect the necessary energy density for fallons inside the nucleons and in the targets from collisions. That density allows the formation of all the particle pairs that are well-known. **Result: After emission of an electron and an electron antineutrino from a minus pion, the spin balance remains zero. By pair formation of W and Z bosons, the spins are ± 1 , but in the pair balance they are zero!**

Currently, explaining of the universe and its seemingly mystic properties, mystic premises are given: a) Dark Matter DM (actually invisible mass) and b) Dark Energy DE (acceleration energy for cranking of the decreasing "expansion"). Both premises have become by observations that do not fit together: a) In galaxies, the stars move in the direction of the external galaxy arms with the same speed or faster than the visible mass in the center allows. The simple conclusion is: "mass had to be essentially heavier." b) The red shift of the e. m. spectrum increases again since some billion years. Simple conclusion on base of the Doppler effect means: "The expansion is increasing." I tell you as hard as it is: Both simple hypotheses are nonsense!

9 Mystifying Dark Matter is Not Necessary

Where does that idea of "dark matter" come from? It really is invisible mass! Physicists set the concepts of matter and mass together, although the **matter** abstractly consists of **mass and energy**. That's a little incorrectness that we always have to take in our account according to my models. On the website of the University Bonn, you can find the explanation of the origin of the dark mass, citation: <https://astro.uni-bonn.de/~deboer/galstruc/galstr.html> (self-translated from German into English) "As observed, the rotation speed of the Milky Way does not decrease to the outside, but it remains almost constant or it even increases That behavior does not match to the laws of Kepler that predict a decreasing speed to the exterior areas. Other galaxies have the same behavior. Expectation of the decrease is based on the effect of the gravitation of the complete mass

of the Milky Way. Missing of this decrease is meant that there certainly is *more mass* than one can explain with the well-known matter components (stars, gas, dust, comets). ...

Therefore, one postulates the existence of **Dark Matter**, because of this *Matter increase* gravitational effect is larger and, so one means, it will lead to the special rotation observed, and *dark*, because this matter is not visible. It cannot harmonized to the conventional forms of appearances of matter.”

Such a nonsense I cannot describe by means of the common sense. This is simply too much. Follow me, please! More matter only makes a heavier galaxy, summarily. That galaxy would have the same indescribable properties of the rotation paths, but also one gravity plane higher. More isn't!!!! And here, I have another citation to amuse about the presumption having a standard model. <https://www.weltderphysik.de/gebiet/universum/news/2012/kaum-dunkle-materie-in-der-naehe-des-sonnensystems/>

“Concepción (Chile) - According to the present standard model of cosmology, approx. 80 percent of universe matter consist of dark matter – of a **substance** that is composed from elementary particles currently unknown. **But each of the most accurate investigation of the movement of the stars in the environment of the solar system provided no evidence that there is dark matter in our cosmic proximity.**”

Strongly and colored by me!

<http://www.usm.uni-muenchen.de/people/saglia/dm/galaxien/alldt/node41.html>

“Normally, one would expect that the rotation speed of the spiral galaxies has to decrease at large distances from the center, similar to how the outer planets in the solar system revolve around the Sun more slowly than the inner ones.”

Mmmh, that „dark mass“ but should not affect the entire galaxy, otherwise it had only more mass in the sum. Kepler's speed distribution would have to be expected as before with less mass. In this respect, the fantasts of physics have a thinking of missing mass anywhere between the external stars of the galaxies being a “substance”, the outer the more. We're further out in our Milky Way. Why is here no DM under best conditions? Answer: Because there is not any DM at all!

If we really had dark mass everywhere, Jupiter would also have to move faster around the Sun than calculated by Kepler's equations. In absolute reality, in our solar system, there is no “dark mass” as above mentioned. According to my opinion, it is absolutely correct to say: **There is no Dark Matter at all.** My further arguments result from my question as follows:

Does that dark matter especially loves the outer areas of the galaxies or does it love the Halo?

I never heard about such a physical mass resp. of such a “substance” that would have such a preference. Such a rubbish can be spread worldwide. Contrarily, my models are not allowed to be published in specialist journals, because they are considered to be “implausible physics”. For this reason, I am arguing vigorously against all that rubbish that has come into the specialist journals.

Let's see what my IOT says about it: Every receptacle cosm GK consists of a quantized amount of protocosms PK. Energy cosms EK are possible, too. Surplus of energy and mass are decisive. You could compare both types of worlds with a supersaturated solution in water.

Every protocosm (or energy cosm) consists of the amount of sub-protocosms SPK the same way quantized. Every of these SPK consists of the amount of sub-sub-protocosms SSPK the same way quantized. So this hierarchy goes on into the depth until the elementary particles of high energy – that means as energy cosms, for example as Ksi Hyperons – are packed into each other. When the last mentioned ones decay, we have arrived our stable elementary particles.

Also those elementary particles, which are special receptacle cosms GK of microcosms, consist of protocosms and their hierarchy (SPK, SSPK, SSSPK, SSSSPK ...). If these receptacle cosms together with their PK and EK would dissolve completely, then there were no way back after one quarter period of an oscillation. There world would be no world anymore.

This is the reason that all the protocosms remain with a central residue after unpacking of their contents. That residue is the **Divergent Sphere DS**, which is a continuous producer of secondary protocosms sPK. You can imagine it like a pump that sucks, presses and outputs. Pumping principle has remained in the elementary nature even in organic living beings where are running cycles.

A big amount of mass m and energy E only comes free into the space of the receptacle cosm subordinated while evaporations of the protocosms and their sub-structures. A small part remains so that they themselves remain as DS with PK productions. It's possible why there is no single evaporation opening but series of it.

As soon as the external pressure of mass and energy becomes lower than the internal pressure of the matter in the protocosm, the new PK accumulated has to evaporate down to the next state of a PK. If no matter (energy and mass) pushes against the pressure, the PK evaporates consequently to the small residue that finally isn't a PK anymore but just a pump. A heart is an analogy. Series of evaporations continue. How long does it take? It takes time until the original PK has lost enough matter by evaporation, collecting of matter and evaporation again. Then it is dissolved.

Just because of that condition following as well as from the GRT and from my eq. 4.1 directly, the protocosm formation remains in the active centers of elementary objects in macrocosm and microcosms. Now before your eyes would appear an image of your fantasy, a movie. I want to try to draw it for you like this:

A first-range protocosm pPK of the universe is opening and setting free its internal structure by series of sub-protocosms SPK. While this process, in it was running the emission of internal mass starting from the center climbing up to the top subprotocosm in $n=1$, the orbital $1s$. That top SPK is the largest, externally the lightest, internally the most filled sub-protocosm. Additionally, it has the largest distance to the inner structures already open. It is one of the last sub-protocosms that have to be opened that the internal mass inside of the event horizon r_o can create the real feature of a theoretical Black Hole. BUT they do not do it what they have to do dependent on the kind of the energy (of energy cosm).

As S. W. Hawking calculated, but I am able to cause, this top SPK and some other ones with it plays the tip the scales shooting out of the event horizon. It is that tiny quantum expected for later dissolving of a theoretical Black Hole. You see that my Black White Hole is becoming reality. Why is that quantum as tiny? In the meantime you have learned that its external mass is tiny according to my eq. 4.1. This is almost nothing. BUT what is inside of this almost-nothing? Yes, it is the greatest mass transport that you ever can imagine when that SPK evaporates out of the event horizon. In this moment, the complete residue of the remaining "internal" protocosms is already open missing its theoretical event horizon. Now it emits radiation and mass portions into the external receptacle system. This behavior was unknown for Hawking because his Missis Doctor Anteroom did not deliver him my post rejecting with the usual substantiation. Implausible physics.

Here again for repetition that it will be totally clear. The top sub-protocosms as the largest, lightest and internally heaviest objects trespass the theoretical event horizon r_o of GRT because it was already not locked energetically. To be dark gray means that all the SPK while their forming by condensation, the collapse supported by radiation energy, from the outside never reached the event radius r_o . They behave like an object that never reached light speed in vacuum. This way, my SPK negate the theory of the absolute Black Hole that was constructed as static feeding hole. So the top SPK and their SPK-series below come far away while the opening process of the primary protocosm pPK of the receptacle cosm.

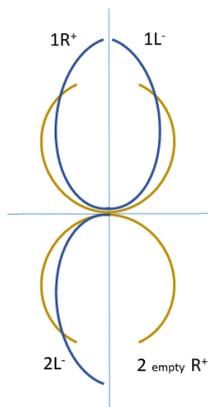
That primary PK now is completely unfurl in the external coordinate system. Let us state. All the open structures of the environment are related on the central mass that is given in the beginning of the being! This central mass is big. Consequently, high speeds of the environment masses are following!

Inside all the centers of the open SPK, the production of the secondary protocosms begins in their Divergent Spheres DS. Don't forget. Also in the DS of the central mass! While this process, the complete structure lose central mass. The area of the core becomes smaller and lighter. The central mass is discontinuously decreasing, portion for portion of sPK pairs produced!

The next masses are falling into the DS. Later produced sPK successively become smaller. In the end of this process, it seems as if all the external areas next to the galaxy core would have been flown away. But no, the core was falling together, because it has continuously swallowed mass and energy, changed them into secondary protocosms emitted into the environment, placed there evaporating and giving free new matter.

Attention, please! It is essential that the area of the core of a central object is the residue of a mass block. There are only quadrupoles, 4 PK, 2 negatively charged and 2 positively charged. Contrary charges almost hit themselves at the amplitude of their internal path. Protocosm pairs, which are on deeper orbitals placed, below of those 3 top protocosms, do not arrive the amplitude of the receptacle cosm. They evaporate earlier and form a space of single installations. So you will find an sphere or a Halo of rotating bodies all-round. When a pair of SPK- and SPK+ is starting from $n=1$, then both objects are coupling electromagnetically, rotating around themselves expanding their curved path to an extremely small curved track of escaping out of the protocosm. In the moment of opening, there is an

interaction. The result could be irregular or a cloud distributed. We could compare this to the Small Magellanic Cloud that is irregular in the distance of 209,000 light years. In our solar system, I would look for the Oort Cloud.



That single SPK takes a curved orbit upwards and does not arrive a place far away and no collision. I think, it is the producer of further dwarf galaxies. In the solar system, this area could be filled with the Kuiper Ring.

The core in general, so the galaxy core, the star core, collapses into a pair of secondary protocosms condensing and contracting now. While this process, they withdrew some part of the active mass from the center of the system. The central gravitational force is decreasing. So both secondary protocosm can fly far away where they evaporate and create a disk in a plane around the galaxy core. And what do the first, the fastest of them?

Answer: In their inertial movement, they plunge back to the center of gravity in a long elliptical orbit! After or during this first orbit's installation, the center produces the next secondary protocosms. The central mass decreases again. In this moment of less gravitation, the top objects escape another way into the cosmos. Their path becomes less curved, less elliptical. Discretely, it is continuing while the center loses mass again and again. While this behavior, both galaxy arms have been formed by the sPK pairs.

So the given objects in the beginning of the evaporation come into a certain larger elliptic escape track. This track (path, orbit) has been reflected to our view like a frozen path of inertia because of the extremely large temporal periods.

During the formation of galaxies, the top and the below the top lying stars were flying away by inertia of their starting highest speed. The reason is said that the central mass got smaller and smaller, pulse by pulse. Those stars, which came after the first, had less speeds of inertia. So a disk arose that we call now the galactic disk or the ecliptic of the planets in the area of a star. It seems to be the same, or doesn't it? No, the galaxy has extremely less time for complete circulations to correct the relationships of speed. But the planets around the Sun were temporarily able to adapt at Kepler's laws. They don't come from sPK. This behavior gives us an imagination that we know well from our observations!

The tidal forces of the masses lying above in comparison to the masses of those stars lying deeper in the disk must also be taken into account. As a result of both conditions, **1st Inertial Motion and 2nd Tidal Gradient**, the upper stars at the edge of a galaxy are moving so fast that it gives the impression that the galaxy has a mysterious "substance" of more mass on the outside as can be measured (analogy in the galaxy clusters). In any case, you can forget Kepler's laws of the movement of stars in galaxies. But why were they derived from the planetary movements?

That first galaxy once had more mass to this time when its core was the first core of the elliptical giant galaxy. After this, it developed into a normal elliptic galaxy and to a barred spiral galaxy, too. The bar clearly shows how the damned fast top stars find together, to swivel into a state of a loop. Due to the huge distances, the rotation relationships are almost frozen.

Let us take a big star with a system of giant planets into our account. Yes, the comparison is necessary! As also at galaxies, a Halo arises first from SPK. These are the protoplanets close to their protostars.

Such a kind of planets, very close to their central stars, have been observed many times, and one wondered how that can be. They thought, there will be no life. It won't either. That proto will be go down soon.

The secondary protocosms will be emitted into the gas space of the proto-star itself. There, they remain. To this time, Johannes Kepler appeared in the beginning of the 17th century, and he discovered the laws of the planetary movements in their orbits. He could be lucky that he hadn't started with the movement of stars in galaxies. You would never have heard about him.

While that time in which the outer proto-planets found their locations, the Divergent Sphere of the Sun ejected secondary packages of protocosms into the environment becoming smaller and lighter. That will have led to extreme interactions. Hardly any protoplanet and protosatellite will have remained unscathed. I think that the planet Neptune will almost look like one of the protoplanets.

Admittedly, I mean that the inner planets Mercury, Venus, Earth and Mars hat an own proto-satellite-system. Where did it go to? Just three satellites remained of a multitude of potentially applied satellites. Well, we know that these 3 satellites aren't the original ones at all. The earth captured its Moon surely from the offer of the small proto-planets. Later, both were supported by matter of SN. The Moon got heavier by this matter like also the Earth. It probably collided – as suspected for a long time – with the proto-earth, I think, because of its mass increase.

Mars has also two satellites, which rather are similar to both breaking pieces than beauty minor planets. So I draw the conclusion: The proto-sun becoming smaller and denser had a shock ignition on that an expansion followed with an extreme radiant wind. It also blew the last proto-satellites away into the asteroid orbit, into irregular orbits and into the area of the proto-jupiter, which was supported by that mass and additionally got more of satellites. Astrophysics knows this state of the stars with the name "T-Tauri". I don't know how often this happens. But once is enough. So there may have been many interactions after the proto-state of the solar system that we cannot fathom in detail today.

The older Sun has not died. It still throws secondary protocosms into its gas shell, which do not reach as far as during the proto-age. They refresh that gas shell with new hydrogen matter. Old matter is falling into the central Divergent Sphere DS. This way, the Sun has a kind of a Heart. It pumps. And it pulsates relatively stable dependent on its garbage of matter. From this behavior, periods result that can be observed externally such as maximum and minimum spots. What comes in of old matter (heavier elements) is ejected again as new protocosmic matter but only up to the gas space of the Sun, no further. Otherwise, the central mass would shrink more and shift the Earth from its orbit to a higher one, where it would become colder. This could have been the case in the past because there are no other mechanisms. The worst case scenario would be something like a resonance catastrophe. Secondary PK would not form for a while but after this period really fat of them. I hope the Sun will think about it one more time.

Dear Astronomers, please keep a close eye on all discovered exoplanets over longer periods of time! You might miss the moment when an apparent T-Tauri event changes the system significantly. You could directly observe how the Jupiter-class planets are swallowed up by their narrow orbits and how the central star is impoverished in its mass.

Every galaxy that you observe in space gives you a snapshot of the relativity from outside and inside, a relativity between condensation and evaporation.

The galactic disk should have been rotating around its center approximately 28 times. While this time, the external stars experienced how the central gravitation decreased step by step. They were attracted less, step by step, flying on with their given speed of birth. But they had to follow their inertial movement. In the same cohesion, they had to adjust to the force of gravitation becoming less. In the consequence of this change and the conservation law of momentum, these stars climbed up with their given speeds. The distance to the center increased. So they arrived far away. Actually, they were released from the decreasing central mass, as I already said: **A discus has been thrown.**

Currently, these edges of the galaxy arms still seem to be travelling much faster. We aren't in our solar system where the distances are still bearable. We are on the edge of the galaxy! It is guaranteed that there is some residual inertial motion from earlier. I call this phenomenon **Galactic Protocosmic**

Development (my word creation!). To this day, however, a second reason for speed distribution has emerged that doesn't correlate with Kepler's laws, but that is also a little bit overlaid by them.

That is the **Tidal Gradient** (my word creation!) in the expansively and gradually created disk.

Our Milky Way protocosm was a great one. It ejected approx. $10e43$ kg, about 1.3 billion times more mass than remained measured today. Currently, the Divergent Sphere DS with the name Sagittarius A* has about $7.36e36$ kg. **The complete Milky Way only „weighs“ $3.6e41$ kg!** There is no Dark Mass! I will now explain the influence on the speed of stars of a galaxy by the tidal gradient.

The top stars of the Milky Way move around the center in attraction to the gravity center of $3.6e41$ kg. But how is a star gravitationally attracted, which is further inward on its orbit around the galactic center? Perhaps, you think that is must be like in the solar system: Only the gravity center of the star is essential.

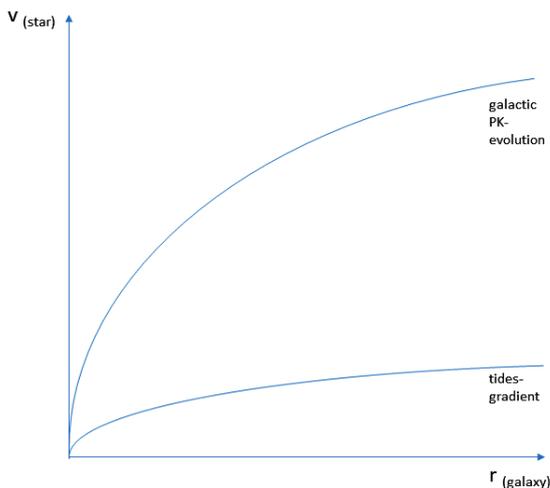
No, in the galactic disk there is a different cohesion. *That* "disk" is even relatively thick. So there a resulting gravitational force is following from those masses that lay more far away forming a separate gravity center there **and** those masses that lay more to the inside forming their own gravity center.

If Jupiter were constantly positioned above the Earth, perhaps together with Mars, then we would notice that. We know it of the Moon. Does somebody know the tide? But Jupiter only occasionally comes close to Earth.

In the galaxy disks, matter is relatively distributed densely. In contrast to the solar system, the gravity mass is more outside than inside in the direct core (galaxies have mass of about $10e41$ to $10e42$ kg in relationship to their cores of about $10e37$ to $10e38$ kg; solar system approx. $1e30$ kg outer mass to the center of $2e30$ kg).

The outermost stars need about 400 million years to orbit the center of the Milky Way once. Since the beginning of the galactic era, the stars have rotated around their center about **28 times**. The complete movement in the disk seems to be frozen despite the huge speed of about 400 km/ s. It is almost standing still. In any case, a person can hardly observe the rotation progress. He can only interpret measurement results. He can see next to nothing. And now, he comes up with his great idea of "dark mass"! But it is no longer necessary because of the protocosmic developments.

Illustration 9: Approximate Speed Ratios in a Galaxy



Summary: Top SPK and sPK thrown far away fly at top speed on relatively slightly curved paths to their location of opening. Further SPK and sPK below do not climb that high as the top ones. They have lower speeds. Consequently, the relativistic angular momenta of the widest SPK and sPK are the greatest. Therefore, their **inertial movement** is the fastest. It seems to be like frozen before they *even find their way into a track that would be similar to a planet's orbit according to Kepler's laws.*

Additionally, I discovered the following cohesion:

Please, think of Jupiter and Mars and all other planets if they would not move away from the proximity of the Earth, but rotate around the Sun almost synchronously with the Earth! What do they do then? Yes, the top planets attract the Earth from the outside. Naturally, a decreasing attraction follows in opposite to the center of the Sun. So that the Earth does not fly away caused by its inertia, it would have to be decelerated. Without slowing down, it would rise into a higher orbit with its given speed by inertia.

Now, let us look into the Milky Way. Naturally, there is a decreasing gravity attraction of the stars to the galactic center. This effect is much more efficient than the above mentioned one of planets. So we see the result that the outer stars in the galactic disk have an increase of their orbital speed.

Almost every day, a new theory is added to explain “Dark Matter”. They all run past the goal because “it would be otherwise possible to explain the effects by IOT. Two real physicists from internet may now tell us their opinion (self-translated from German):

... W. N. from Gauting asked and got this answer. 29. September 2011 DIE ZEIT Nr. 40/201:

“In physics, one claims a body have to be a point mass mostly. This is permissible if we calculate the attraction between Earth and Moon – because that would not change even with a smaller and equally heavy Moon.

However, if one thinks about the gravity inside of bodies, than you can no longer simplify. You have to add the attraction forces, which act in different directions. And in the central point of homogeneous sphere, gravity attracts from all sides. So the gravitational force is zero, [Andreas Kemna](#), Geophysicist of University of Bonn, confirms.

If a hole were drilled across the Earth and somebody jumped into it, then – after swinging back and forth a few times – he would finally come to rest weightlessly in the center.”

That simply means: Such a dense package of the disk like of a galaxy you also have to take in account that the gravitation decreases during the approximation to the center because of the complete environmental inertial gravitation. The dense center of the galactic core is excepted. There is a special behavior. In the middle, there is the gravitation zero. But a small distance away, the pressure of all the falling masses and the radiation leads into the center of the Divergent Sphere DS.

I do without a model calculation here. Such a one I made and approved this relation from that I see the decrease of gravitational force in the direction to the center. The less the attraction of the stars by its inner gravitation of their galaxy, the slower they fly on their tracks. The outer stars are the fastest. That is a factor, which influences the reflection of the real velocity. It is the **tidal gradient**.

By developmental history I found the first much more effective factor of my model: During the progress of loss of central mass by collapse and evaporation in repetitions, the outermost stars were transferred into inertial escape movement and thus thrown far away into the space. Therefore, they cannot take Kepler’s movements at all. To do this, they simply have no time. Although they have meanwhile turned into a path, they still show their speed caused by inertia that leads to climbing up, to forming of bars and to turn back into a track. That factor is essentially stronger than the tidal gradient. So I called it simply **Galactic Protocosmic Development**.

If you want to follow my model, please, forget “Dark Matter”!

10 Assuming Dark Energy is also Not Necessary

Dark Energy DE in relationship to Dark Mass DM is a different thing. Present physics believes in the Doppler Effect in cohesion with the hypothetic “expansion” of universe. Therefore, one had to connect the increasing red shift of e. m. spectrum with a so-called “inflationary expansion” of universe. This connection is wrong in that case if the premise of the “expansion by Doppler effect” is also wrong. This tiny word “if” is the essential base of my IOT! If my IOT would be correct in its basic fundamentals, then the current physics of universe would be mistaken. But if my IOT were completely mistaken, Albert Einstein would be disappointed posthumously.

In my models, a cosm or a protocosm does not expand as simply by mass exploding and escaping from each other with almost light-velocity of vacuum. After this expansion, perhaps a contraction would follow into a singularity. Both premises of present physics are wrong. Therefore, I don’t need no singularities. My mass is zipped away on the inside of each cosm type. That internal mass will be

transported by the protocosms of a receptacle cosm like e.g. universe, flying with almost light-speed in vacuum. After arriving its location, it will be unpacked. According to the conservation law of momenta, the speed will be decreasing to almost zero. A certain **meaningful** angular momentum remains.

In free fall, the paths adjust themselves newly to the just existing central mass. The observable matter is not brought up expansively, but it is unobserved brought to the locations by the protocosms. In this respect, the internal mass is an analogy to the construction of a building: one object is piled on top of the other. The universe grows with released mass from approx. zero (the center) up to the amplitude. From there, it is dismantled again (1, cf. eq. 4.1,7, p. 480: $M = M_o \cdot \cos^2\phi$).

It is simple to understand: Where is no “expansion”, where is no primary Doppler shift, where is a primary electrogravitational red shift, there is no accelerated expansion of universe, consequently no “Dark Energy DE” causing such effects.

Rather, the protocosms in universe, in every cosm like EK and PK, the protocosms are adjusted that in the center there are a lot of them with tiny internal mass but big external mass. As a further amount of them climb up to the amplitude, they become less and less with greater internal mass but less external mass.

Therefore, those protocosms become larger and larger to the amplitude. On their inside, they carry away more and more mass in more and more objects of their own, seen in this way, there are complete worlds like galaxy super clusters, Hubble Bubbles! When they opened after about 7 to 8.7 billion years after the Small Bang (of the universe center), in these areas, a new red shift of the spectrum occurred. Even earlier, deeper below the amplitude, a relatively own red shift occurred from the systems that they are bathed in their own red. The largest and last systems are of cause dipped into a stronger red, because they have been ejected from larger cosms, larger protocosms. And this is the illusion of increasing escaping speed by Doppler!

Galaxies in galaxy clusters escape relatively slowly in analogy to the top stars in a galaxy. So they cannot cause such a great red shift according to a Doppler effect.

The strong electrogravitational red shifts of the opening of the primary protocosms pPK also overlap with the red shift at the beginning when the first pPK were opened in huge quantities and simulated the “Big Bang”.

Basically, the cause of the red shift is to be found in the evaporation of the protocosms.

How do I imagine conservation of angular momentum?

A galaxy cluster emerges from a primary protocosm that top-protocosms are the fastest. They fly away on the top positions. Their speeds, apparently designed for expansion, are the greatest. I will try to explain the conservation of momentum. It is calculated with the equation $J = m \times v \times r$, masse multiplied with speed and track radius.

I assume, a secondary protocosm sPK could have a mass m of $2e-57$ kg. Its internal mass M then would be $2.4e+41$ kg acc. eq. 4.1. Its oscillation period is $3.7e6$ seconds acc. eq. 8.9.

When the closed sPK were flying up to the height of $2e5$ light-years (200,000 ly) with high relativistic speed, then die speed has to dilate the time that this sPK will be opened in the end of its flight. Its oscillation time must be extended to the orbit time.

One ly has $3.15e7$ seconds (distance of $9.46e15$ m). $2e5$ ly are $6.3e12$ s. The factor of SRT has to be then: $6.3e12$ s / $3.7e6$ s. It is $1.7e6$. The braking mass $m_A = m_o \times f_{SRT}$ of sPK is therefore $1.7e6 \times 2e-57 = 3.4e-51$ kg. The speed is a little bit less than light-speed of vacuum.

How much curved is the radius of the path in the beginning of the travel? To arrive such a height, the radius of the path just can be curved very less, for example with the curvature of the universe of $R_o = 5.3e25$ m (cf. section 13).

Then we get an angular momentum of the following amount:

$$J_{\text{SPK}} = 3.4\text{e-}51 \text{ kg} \times 3\text{e}8 \text{ m/s} \times 5.3\text{e}25 \text{ m} = 5.4\text{e-}17 \text{ kgm}^2/\text{s} \text{ or Js.}$$

That is extremely less, and it is dependent on the curvature of the path. So the path on its way could be curved extremely less and extended to $r = 2\text{e}42 \text{ m}$ for example. Then the angular momentum of the path would be 2.04 Js:

$$J_{\text{SPK}} = 3.4\text{e-}51 \text{ kg} \times 3\text{e}8 \text{ m/s} \times 2\text{e}42 \text{ m} = 2.04 \text{ Js.}$$

Is that SPK opened acc. to conservation law, we get the following: $2.04 \text{ Js} = M v_1 r_1 = m v r$. The speed v_1 then is dependent on m_A/M and r/r_1 with $v_1 = m_A/M \times r/r_1 \times v$. There, the radius of the path of the already open SPK will surely be an intrinsic angular momentum of the mass M falling down to extremely small:

$$1.4\text{e-}92 \times 2\text{e}42 \text{ m} / 2\text{e-}45 \text{ m} \times 3\text{e}8 \text{ m/s} = 4200 \text{ m/s}$$

An sPK with 10x less internal mass $2.4\text{e}40 \text{ kg}$ and more external mass $2\text{e-}56 \text{ kg}$ has just an opening period of $3.7\text{e}5 \text{ s}$. Its way will be shorter. We take in account now 20,000 ly. The factor of SRT is therefore $6.3\text{e}11 \text{ s} / 3.7\text{e}5 \text{ s} = 1.7\text{e}6$. **It is the same as above.** Braking mass is about $m_A \approx 3.4\text{e-}50 \text{ kg}$. Again everything is dependent on the change of the radii. The bullet radius will be very large again, but smaller than the first:

$$1.4\text{e-}90 \times 2\text{e}40 \text{ m} / 2\text{e-}45 \text{ m} \times 3\text{e}8 \text{ m/s} = 4200 \text{ m/s}$$

So we get the same starting speed. It could also be a little bit smaller determined by non-linear decrease of the curvature of the radius r or/ and the increase of the rotation radius r_1 . The decrease of the curved radius of the path from emission seems to be more effective:

$$1.4\text{e-}90 \times \mathbf{5\text{e}39 \text{ m}} / 2\text{e-}45 \text{ m} \times 3\text{e}8 \text{ m/s} = 1050 \text{ m/s}$$

Angular momentum of the path is transferred to the mass M that becomes a slower speed moving on less distance from the center in relation to the top SPK, etc.

That image appears to the Doppler physicist as if those top objects would be on a continuous course of expansion. But this imagination is frozen. The course of inertia will be changing. So we simply can forget that Dark Energy DE!

I set up the relevant equations for the comparison of Doppler shift to electrogravitational spectral shift in my "DBA I" (1). They are the following eq. 1,2,3; 1.2,7; 1.2,8; 2,8,9.

Certainly, both shifts play their special role in space. **But with the evaporation of a protocosm that relative speed v_1 decelerates towards the minimum, the electrogravitational red shift must be taken into account while opening that protocosm! It is valid as mentioned above: The mass does not attract the photons, but the given photon density inside the protocosms is in exchange with the surrounding photons by which the exchange-space for photons is curved in the same way as it is curved for fallons. Don't forget that the top sub-protocosms have the highest speeds on their paths.**

11 Inertia and Reversible Thermodynamics

Isaac Newton was the first who developed an imagination of the inertial mass. He meant a body that would continue moving on a straight line after a single push unchanged by direction and layer without decelerating. That was the macrocosmic description of a body once set in motion. For this cohesion, you had to imagine the space free from other bodies, free from other masses, free from influences, free from immanent curvature!

Ernst Mach recognized through the effect of gravitation that the mass or the masses of the environment determine the inertia of the moving mass. Well considered, still macrocosmically: each partial step of a movement of the inertial mass is determined by the attraction of all the masses moving around. In this way, each sub-step can adjust to a new path in that moment in which the constellation

of the surrounding masses is changing. So there is nothing left of the straight line on which the inertial mass moves. Only a small part of the way could remain as a straight line, rather as a math differential of the distance.

Albert Einstein perfected the whole problem in his GRT. In every differential of the path of the inertial mass through the gravitational space, it is guided by the surrounding masses and their gravitational potential. It also can be expressed in terms of time. There is no difference between the inertial and the heavy mass! Inertia only can arise, because the mass that was pushed gravitationally moving in its gravity field is moving inside the area of interaction of all the surrounding masses. Every change of the interaction changes the path, the direction and the speed of the mass. Ernst Mach is confirmed in this but even refined to the differential of [the space curvature](#). I calculated this problem in my book "TBA I" (1, pp 435). It was able to prove with it that the surrounding masses determine our way and our time unnoticed by us. The important thing is that every movement is a curved path. It is running on a bow (an arch). Every distance line is curved if it is meandering, elliptic or ideally circular! You can forget the straight path!

So we don't need a further debate of inertia and heaviness of mass. Nevertheless, observers still rely on watching with their eyes and measuring with their hands. They shouldn't believe their eyes suspecting the world would be flat. If you as an observer are forced to follow the light-paths, you cannot know that you look through a curved light-pipe. I myself reject the naïve construction of an extremely weakly curved universe. But there are more theories of observers who have distanced themselves from Einstein.

Classic physicists often ride the hobbyhorse of the Irreversible Thermodynamics. I won't waste many more words on that either. My model doesn't need it. I found the reversible TD.

Any matter from the environment is absorbed by the Black-White Holes (the DS), the protocosms and energy cosms and compressed by means of radiation energy and gravitation. This also includes the amount of heat. If its compression exceeds an energy threshold, it is able to form matter and antimatter in pairs of elementary particles. During that process, the e. m. energy ("heat") will be stored at the particle pairs. This storage now is located inside of the protocosms. There is nothing left of it on the outside. The external sphere now is free from that heat amount, which the evaporating protocosm was giving before. This is exactly that heat that was got free while the external existence of that protocosm, during this time it was irreversible. After this, the heat is inside the protocosm again. There it is pushed to amounts to be able to generate sub-protocosms and pairs of matter. Inside the PK, new orders are created according to the laws of quantization of SPK, SSPK etc.

In this respect, "heat" supports the gravitation to work at the creation (condensation) of structures and storages. Therefore, it is able to be released again if the protocosms are opening and evaporating. Currently, the science don't speak about such a feature of Black-White Holes that are probably opening as closing. They only see the Black Hole as a locked object for eternity. This will remain a mistake.

So the universe of the others remains a location of irreversible thermodynamics.

The complete procedure of close and open yields the reversible thermodynamics in **my universe** in the end. Packing in and packing out by Black-White Holes allow the reversibility of processes bound on heat energy (that is e. m. energy)! Conclusion: The cold star collapse, as expected, is more a mistake. In my model, a collapse is only running by support of radiation. It always is a hot collapse forcing to condensation, to pack in the heat into particles and antiparticles including the structures of mass and energy.

12 The Universe as Precision Clock

It is such a thing with vibrations. If they aren't coordinated, then sometimes a disaster follows or everything will fall apart. I don't believe that the Creator was such a bungler and left us with a purely random oscillating system that would fall apart itself.

I think that universe must be an precision clock. This is why I developed a long time ago in my work "TBA I" the section „4.5. *Universe as Ideal Transmission*“, which I now added here, corrected and expended. Essential parts are marked in blue color. There are no „proton neutrinos“, because I calculated the electron neutrino mass wrongly.

Newspaper editors sometimes don't take a back seat when they write about a discovery. I can still find the article from "Die Welt", 31st March, 2015, on "google" searching for the mass of neutrinos. It was written by Norbert Lossau with the title "The secret of the weight of protons". So the title looks as made for housewives and housemen:

A team of scientists has succeeded in calculating the difference in mass between protons and neutrons. It says further there accordingly: This calculation is important because it showed that everything in this universe is as finely tuned to one another as the mass of the neutrons and the mass of the protons. This way, our world is as it is, otherwise it would not even be able to exist in this system. Another conclusion was given by the author to the correctness of Quantum Electrodynamics, Quantum Chromodynamics, the Quarks Theory etc.

I would also have pointed out the correctness of the Bible, the Koran and the Epicyclical Theory. Simply, from a system that is made of values that belong together, no matter what model you take for it, of the Koran or the QED, you always will find that the universe is an **Ideal Transmission** as I say or a **Precision Clock**.

In 1997 I discovered the ideal transmission. I assumed ideal transmission ratios of all the real and stable cosms inside the common vacuum of the universe. Assuming that the stationary vacuum contains a limited spatial oscillation of matter, I have a means to draw conclusions about currently unknown cosms. After all, the beginnings have to line up with each other and represent a closed system if the universe is really locked. To find this cohesion as first feature, the **numbers of revolutions (frequencies)** of the real cosms are to be related. A second kind of ideal transmission can be found with the **relationship of wavelength** (oscillation length). If the vacuum spheres dip into each other, the result leads to α_2 (TBA IV). So I found in my "TBA I" the following amounts of which I told you about the most important sizes:

Electrograviton q and Graviton g resp. their Anti-Particles – The first Particle of Matter

$m_{gq} = 1.8592657 \text{ e-9 kg}$	$m_{gq} = 1.0429633 \text{ e27 eV/ c}^2$
$R_{gq} = 1.8919991 \text{ e-34 m}$	$t_{gq} = 6.3110298 \text{ e-43 s}$
$e_o = 1.6021894 \text{ e-19 C}$	$T_{gq} = 1.2100106 \text{ e31 K}$

Subtron – The Second Particle of Matter packed Together with the First one in the Proton, Electron, Neutrino etc.

$m_s = 1.0125878 \text{ e-12 kg}$	$m_s = 5.6801558 \text{ e23 eV/ c}^2$
$T_s = 6.5899244 \text{ e27 K}$	

Proton – The First Particle in the Second Hierarchy Area

$m_p = 1.6726487 \text{ e-27 kg}$	$M_p = 2.8321279 \text{ e11 kg}$
-----------------------------------	----------------------------------

Electron – The Second Particle of the Second Hierarchy Area

$m_e = 9.10953 \text{ e-31 kg}$	$m_e = 5.1100308 \text{ e5 eV/ c}^2,$
---------------------------------	---------------------------------------

It is 1,836.15258 times **larger** and lighter than the proton.

Neutron n – The Fourth Particle of the Second Hierarchy Area

$m_n = 1.67495 \text{ e-27 kg}$	$m_n = 9.395705 \text{ e8 eV/ c}^2$
$R_n = 2.1001995 \text{ e-16 m}$	$M_n = 2.8282367 \text{ e11 kg}$

Universe – The End of the Hierarchy

$m_U = 6.6326156 \text{ e-69 kg}$	$\lambda_U = 3.3324024 \text{ e26 m}$
-----------------------------------	---------------------------------------

$R_U = 5.6061172 \text{ e9 ly}$	$R_U = 5.3036831 \text{ e25 m}$
$E_U = 5.9610976 \text{ e-52 J}$	$M_U = 7.1422126 \text{ e52 kg}$
$f_U = 8.9962863 \text{ e-19 Hz}$	$K_o = 17,612,136,668 \text{ y}$
$\tau_U = 1.1115698 \text{ e18 s}$	

Elektronneutrino – The Third Particle of the Second Hierarchy Area

$m_{\nu_e} = 3.551928 \text{ e-36 kg}$	$\lambda_{\nu_e} = 6.22268885 \text{ e-7 m}$
$m_{\nu_e} = 1.9924695 \text{ eV/ c}^2$	$R_{\nu_e} = 9.99037177 \text{ e-8 m}$
$E_{\nu_e} = 3.1923136 \text{ e-19 J}$	$M_{\nu_e} = 1.33368556 \text{ e20 kg}$
$f_{\nu_e} = 4.8177315 \text{ e14 Hz}$	$T_{\nu_e} = 2.3115958 \text{ e4 K}$
$\tau_{\nu_e} = 2.0756657 \text{ e-15 s}$	

The most important facts of this transmission are the amounts of the electron neutrino and the universe given from the known sizes. So the neutrino has a resting mass of about 2 eV/c². Our universe lives once during 17.6 billion years. Its amplitude is approx. 5.6 billion light-years and its internal mass has the amount of 7.1e+52 kg. You see these aren't absurd quantities that my model predicts.

13 Structured Installation of Stars

(cf. 1, section 4.10; pp 565). I cite from my new work of 2021, TBA I corrected

“4.10.3.2. Solar Systems

We choose the installation of our own Sun and planetary system, for example, of an excerpt of the transformation process.

That time the sun protocosm had the mass $m_{o(PK)} = 2.38 \times 10^{-46} \text{ kg}$
 and acc. to (2.10,23), it had the internal mass of: $M_{o(PK)} \approx 1.99 \times 10^{30} \text{ kg}$
 kg .

This corresponds, calculated into earth-masses $m_E = 5.9742 \times 10^{24} \text{ kg}$: $M_{o(PK)} = 333 \ 107 \ m_E$.
 The mass of the present sun amounts about $333 \ 099 \ m_E$.
 Proto-mass could also eject the difference of about $107 \ m_E$
 in the feature of hydrogen/helium coming from $99 \ m_E$
 protosatellite systems etc. From the outside it took about
 of dust masses of supernova. First, hydrogen and helium bodies appeared to be protosatellite systems.

Present mass of planets, satellites and small planets amounts about 445 earth masses. Additionally, we estimate Oort's cloud including Kuiper's ring would have about 10 earth-masses. They are particles of supernova dust coming from that SN that was the birth of our solar system. So about 107 earth-masses remain ejected from the inside of the Sun's protocosm. Partially, the ejected subprotocosm mass was firstly active forming the protoplanets actually

$$\Sigma m_{\text{Protoplanets}} \approx 107 \ m_E \text{ (from 97 \& 10).}$$

So the central proto-body got the remaining mass M of the rest of subprotocosms of about

$$m_M = 333 \ 000 \ m_E .$$

About 99 earth masses of interstellar dust fell into the protosun, how it took the above called mass of 333 099 m_E . SN-dust was collected by gas-pregnant protosatellite systems, so that the total mass

reaches 445 earth masses finally for installed inner planets and outer satellite systems. During the collection of SN dust, the hydrogen was drifting away from the protosatellite systems. Deleted.

Overview 4.10.3.2,1: Masses of the Proto-Planets

Mercury isn't a planet anymore as well as Pluto with Charon. Too less mass and too much inclination.

Venus 12.5 m_E	Earth 11.5 m_E	Mars 13.7 m_E	
Jupiter 14.3 m_E	Saturn 13.7 m_E	Uranus 14.3 m_E	Neptune 17 m_E .

Sum of the proto-mass is 97 m_E . Inner proto-mass is 38 m_E . More than 36 m_E were given out to the outer protos. SN-dust filled the void. Remaining inner mass was 1.92 m_E .

Jupiter, Saturn, Uranus and Neptune have 59 m_E . In addition, there were more than 36 m_E from the inner protoplanets, but a gigantic amount of mass from the Sun of hydrogen and traces of helium. The outer planets currently have 444.7 m_E . Neptune remained almost unchanged. In level 1s, it got more proto-mass than the others.

Interstellar dust coming in, not only distributed fine, but also in shape of chunks expanding the mass with heavier chemical elements and compounds produced by supernova exploding before in a distance of about 300 - 400 billion km creating the above called sun-protocosm. "Planetesimals" have never been there! The oldest meteorite may be 5.1 billion years old, and the oldest rock of Earth may be about 3.8 billion years old. So the Earth's rock only can have formed afterwards. The formation of heavier and radioactive elements can only be seen in cohesion with supernova. Their age is calculated on 4.6 billion years. Therefore, the meteorite material comes from that time when earlier stages of protocosmic rates existed. Possibly, it is directly a stone from a planet of that solar system that was destroyed by the SN before. (/Q 1/, p 94)

Oort's cloud as well as Kuiper-belt arose from the rest of the supernova that has made our solar system by that protocosm for our protosystem and for the products of decay of the old star and its destroyed planets. Such a kind of giant collisions left their traces of chaos.

In the sun core, there seems to beat the heart of energy change: the pulsating initiator and retention of nuclear fusion. Its extreme density doesn't only produce antimatter, which lights the nuclear fusion next to its surface but which also forms new protocosms in the Divergent Sphere. Those protocosms may be measured with some ten millimeters radius. Then they would include up to $1/100$ of Earth's mass. These protocosms are exported into the shell of the Sun and make small spiral structures there. There, they anticollapse (evaporate) relatively early because of their relatively larger gravitation. "Energy bundles" are produced for change of hydrogen into helium. They look like galaxies or mostly even like "turtles". These systems are really an intrinsic feature of life in the Sun's shell. Some momenta produced there, reach upwards to the sun surface where they are observed as protuberance.

The core of the Sun has a charge difference from its e. m. quantizing producing the corresponding electromagnetic momentum. Sub-rate protocosms are charged only with integer electric charges. Along the opening, gravitomagnetic orders are valid as long the mass is larger than the substructure of their electric charge. So the synchronized rotation direction of all the structures is following. Now the electric charges start to work for differentiation while the difference of rotation of all the charges leads to a definite and strong e. m. vector. When the highlight of polarizing is exceeded, the charges are moving to each other compensating and changing the position spatially by changing of polarizing difference. These properties seem to be the magnetic qualities of sunspots.

The additive electromagnet of all the internal electromagnetic actions is obviously shifted in a period of 11 years (electromagnetic pole inversion). Sunspot's quantizing order proof synchronizations. They also inverse in this rhythm although they turn around themselves faster. Always two subprotocosms would make a quadrupole of charge contradictions. They are to find on the contrary surface sectors of the Sun. The structure of a single subprotocosm appears now as a swivel that is similar to a vibrating rod magnet - a sunspot as a remnant of a subprotocosm.

Explanation of electromagnetic quantizing internally the sun-protocosm is able to transfer at such subprotocosms, which descendants exist in the sun as well as externally by escape. For example, it has influence to the Earth's magnetic field and its inversion in larger time periods. Inertia continues to have an effect of the life oscillation died out in the meantime. It works in fluid Earth core. Phases of inversion slow down themselves.

Protoplanets formed proto-satellites and again proto-subsatellites from their own subprotocosms etc. down to the physical bodies rotating and having the task to install determined bodies up to organic life on later planets. Like at protosun happened, the most central layers of anticollapsed protocosmic hierarchies could be changed into the central body that isn't a compact body, actually, it consists of innumerable bodies of that hierarchy living in a body of gas. Therefore, each protoplanet had its central body, its gas shell and its own satellite system like the protosun had its planetary system. This is the principle of quantized order of rotation systems! The relations of orbit radii of both systems are "comparable", nevertheless the temporarily gone interactions, so D. Möhlmann is writing. Though - we mean to reply - there is no homogeneity because of the possibilities of programming. (cf. /Q 8/, p 7)

Rather a life system as on Earth is one complete system of one complete body. Human beings are only a small part of Earth's life. Every living being is a piece of our possibility to be allowed to live. We can watch along the Fibonacci sequence from above at galaxy clusters down to the number 1. There, we arrive stable elementary particles. All the above structured matter is made from them. Organic cells are very small life structures that can be compared to cosms.

Möhlmann means that comparable qualities would arise by chance or from accident, and planets would be built from single rocks, he is calling "planetesimals". Our theory shows the laws of gravity quantizing why the comparability of radii has its right to exist from a program: the universe is based on its own genetics. There will be wave-quantized rings around every celestial body. These predictions of Möhlmann were already confirmed. Though, we reject his planetesimal theory and its origin via pure accident.

In the proximity of protosun, protosatellite systems stood in such a dense position in the area of equal margins of the double funnel that they collided after their hot phase and because of missing isolated quantizing forces of protocosm. So they fell into the direction of the common gravity center falling all together and forming a central gas body up to the height of 700 000 km.

The satellites of the inner systems were emitted far away. They could almost not be held by their inner planets. This way, they took elliptical orbits strongly extended in large half-axis. Sometimes they simply crashed and took **apparently** unordered orbits (they follow causality). A result of this event is the ejection of a part of smaller protobodies - of the smallest planets or of planetoids - from their original orbits with mostly ecliptical but also elliptical and non-ecliptical orbits.

In the courses of opening of the sun-protocosm and its push by radiation, in double funnel a superordinated gas body of hydrogen and helium was formed, in which the subprotocosms and their hierarchies were opened. They represented the organ-like compressions in thin gas. At the margin of the gas sphere, the density was essentially smaller.

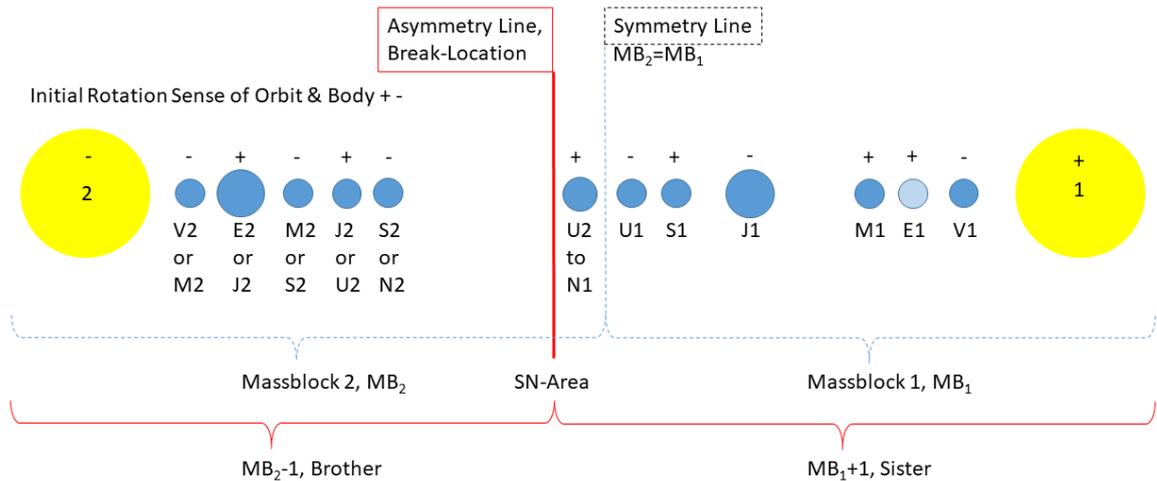
There, the gas ball emitted its annihilation energy heat after the first gamma ray bursts. In this respect, the "primeval Sun" consisted of a hot double funnel in which open waist there were big external protobodies and the protoplanets of Neptune to Mercury. The radiation of annihilation in the disk of the protosun equator ejected the subprotocosm or their later protosatellite systems out of that state. Here the around rays with mass of protoplanetary birth chain are radiating. From there we take 90°. There both jets emit into the gas shell. Partially they are able to overcome the shell. This is certainly the only indication, present astronomers see of so-called "star arising" within a nebulum.

Compression of the central body of protosun system and its parts in the double funnel and the active come to metabolism of hydrogen gas by subprotocosms seems to be as protosun would "fire" its T-Tauri stage how astronomers call this unexplained state today. However, we think, the Divergent Sphere caused an extreme explosion.

We have to repeat the expressions of section 4.2 after which each deeper step of the subs cuts further asymmetries MB+1 for each position of the e. m. asymmetries showing into the same emission direction like the upper two asymmetry systems MB+1.

That has far-reaching implications. If a pair of any PK is formed, it only can arise asymmetrically to MB+1 and MB-1. We assume that our solar system consists of MB+1. Then the symmetry would be broken as follows. Our solar system is marked with index 1 and our brother with index 2.

Overview 4.10.3.2,2: Brother and Sister after PK-Formation



Why our Jupiter does not rotate reversed has to be discovered after collision events.

Star systems aren't twin systems. Only a sister is able to give birth to a civilization. The brother remains without people, he never gets pregnant. Twins of these systems are first on the other side of the galaxy core and again on the other side of the galaxy cluster.

We might not even be able to see our sun-brother, if between us would lay the remnants of the past SN that made us both. That could be at least a pulsar, a white dwarf and certainly a larger cloud of interstellar gas. Should we see it, however, then a planet of the Jupiter class, Jupiter 2 (J2), would rotate in a retrograde orbit closer to the star than our Earth. The more centrally located protoplanet, Mars 2, would have been swallowed by it. External protoplanets (analogously, we call them Neptune 2, Uranus 2, Saturn 2) would exist but also marked by stronger interactions.

Asymmetry is always valid. This is the reason why there are brothers and sisters in galaxy clusters, galaxies, stars, planets, satellites, sub-satellites, sub-quantizations to the finest detail.

A sister hasn't just to eject more mass but much more kinetic energy that PK can fly faster and much further away. The result is as follows. Sisters are more stretched in their distances of their objects. Planets e. g. are far apart. The force of T-Tauri-events is stronger. More matter will be ejected during the hurricane of radiation, but also more secondary PK that are ejected into the environment. Consequently, there is an analogon to Jupiter further out in the sister-system, in the brother-system such a Jupiter is close to its central star. In sister-systems, galaxies are loosely stretched in spiral arms, in brother-systems closer to each other.

After this T-Tauri explosion, missing gas masses of inner protosatellite systems dammed themselves mostly on proto-Jupiter. A part of inner protosatellites came into the orbit of the present asteroid ring: they have to be seen as blown-away protosatellites, which were seeds for SN dust collection. The analogous scenario is running at protosatellite systems. There protosubsatellites are separated from the certain inner satellite orbits. There are significantly less gas masses than at protosatellites caused by gravitation.

Consequently, ring systems were generated. Saturn has the most prominent of them. It's essential that the rings include an inner system of satellites and that they are accompanied by shepherd moons. Therefore, they are also an inner system as the asteroid ring. Externally of it, we have to find one satellite at all, which reflects the analogon on a gas maximum. Below, we will compare the quanta.

The interstellar dust of "mother" supernova reached her "descendants" who were waiting for "concentrated feed stuff" like new born babies already physical. Sun system in proto state was like the young boys drinking mother's milk of hydrogen and helium. Now they are ready for eating a really mash of gas and dust of the heavier chemical elements. In their life, these elements are changing into complicated compounds. We call this process **Sedimentation of Death**.

Consequently, there wasn't come the complete heavier matter from supernova but only a certain part of it that cannot be measured but hardly more than 1,000 Earth-masses. Overeating leads to garbage and quick death. The impact of heavier matter made the first sedimentation of death in the centers of protoplanets. New life forms of universe were living on them, life forms being adjusted to follow the gravitation into the denser medium partially and to remain in the thinner medium with the other part. This behavior, one can see at every plant and at animals living in water but taking atmospheric air or living in both media. However, the exception rules cannot live without the other medium: no bird without earth or water, no human being without solid bottom under his feet.

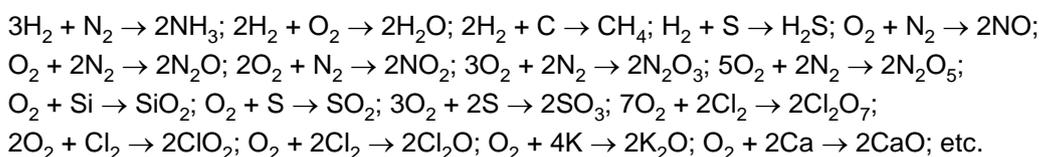
The most important thing is the event of meeting of the SN-dust-front with the extremely hot hydrogen and helium balls, which make the living and virgin protosun-system systematically and hierarchically ordered as if they would be unfertilized eggs in the ovary.

The composition of the chemical elements of supernova has to be taken into account. Corresponding to the present opinions, only wrong in one feature, the dying red hyper-giant consist of the following layers:

1. Helium and **nitrogen** in largest amount;
2. **Oxygen**, carbon and neon;
3. Silicon, sulfur, chlorine, argon, potassium and calcium;
4. Titan, vanadium, chrome, manganese, iron, cobalt and nickel. (/Q 1/, p 347)

The most heavy chemical elements up to the transuranic elements will be synthesized during the phase of supernova itself. The unfertilized protosystem of the proto-sun has its movement. Suddenly the SN-front of **gas** and dust meets the surfaces of high-temperature hydrogen-helium balls with different velocities, where it is reactively absorbed or "cut out". Consequently, such a determined process is running that can be seen as a meeting of "sperm" and "egg cells" or as a "two-package adhesive":

Hydrogen + nitrogen, hydrogen + oxygen, hydrogen + carbon, hydrogen + sulfur, oxygen + nitrogen, oxygen + silicon, oxygen + sulfur, oxygen + chlorine, oxygen + potassium and calcium:



Unless of the enrichment of the elements themselves in the beginning, we get the chemical compounds **ammonia**, **water**, methane and higher hydrocarbons, hydrogen sulfides, hydrogen chlorides, nitric oxides, quartz, sulfuric oxides, chlorine oxides, potassium oxides and calcium oxides. Immediately, there are possible acid-base-reactions and reduction-oxidation-reactions. Nothing pretends the synthesis of the complete repertoires of well-known chemical compounds including the organic compounds upwards to the amino acids. Though, without the present mistake of opinions, the complete event did not happen within a homogenous sludge of the so-called "accretion disk", but within the concentrations of high-organized life existing from the beginning of universe. The proof for this is the gigantic offer of water and carbon in comets.

Additionally, it is essential that the dust front has met the protoplanetary system in a determined moment of rotation. Obviously, planets and satellites rotating along the layers of SN had enough time

to siphon a special layer of dust front more than other areas. This way, they could even get a certain surplus of elements.

Those protoplanets, which were rotating contrary to the direction of dust front, only had little time periods for collecting elements. Additionally, from the beginning, bigger protoplanets consist of much more hydrogen and less heavier elements than smaller planets. Proto-Jupiter was pregnant with collected hydrogen gas from the T-Tauri-explosion. It cannot have collected bigger quantities from dust front like also the protosun. We find a few ammonia and hardly any water. But some of its satellites could rotate analogously the inner protoplanets. So they were able to collect more parts from the dust front. This explains better the differences of distribution of chemical elements on planets and on satellites and on subsatellites than the disk theory leading to more homogeneity. Admittedly, protoplanets and their protosatellites, which are in their immediate proximity, get identical substantial compositions; escape of volatile substances were dependent on gravitation.

Relations are similar to all small planets and asteroids and comets. At first they were packed with water and the other chemical compounds above called in determined reaction series. Then, their proximity to the Sun decided about it, if its gases had to be vaporized after that process only solid substances remained, or if they were frozen into bodies of ice, and they finished their existence this way.

Multiple interactions like pushes in asteroid ring also led to reduction of liquid and steam parts. Only far outside on satellites of the outer planets, which have little heat development, or on various sub-bodies that now also live as comets, are the vapors frozen.

The interstellar dust enriched the menu of chemical elements and compounds. Protosun could just get a smaller part (of arsenic hydrogen, for example) how astronomers found in the meantime. Just using this observation, planetesimal theory is intolerable. A primeval disk of a homogeneous mixture would have represented homogeneous distribution of elements and compounds. Actually, according to our opinion, the collecting protobodies consisting of hydrogen-helium gas were bombed by substances externally coming from supernova shell for each rotation direction and position.

Proto-earth obviously was moved along the front of gas and dust in which it enriched itself as also its proto-moon with masses in slow speed. For proto-Venus we must assume that it reached the dust front rotating along, but in an area that was richer with more sulfur instead of oxygen. This can be happened while Venus had turned around from a tangential walk along the nitrogen and oxygen front into the coming element fronts. We find analoga at the satellite systems. The protosatellite Jupiter called Io got a sulfur maximum, while protosatellite Europe collected much more water similarly to the Earth. Ganymede looks like it. But protoplanet Uranus was certainly moved in the proximity of a carbon layer, so its ring layers got it. Because protoplanet Uranus was the smallest protoplanet of Jupiter classification, an already higher part of ammonia and water could be mixed into the primeval composition of hydrogen and helium.

Let's go again to that time before the dust front was coming in. Expansions of protosun ejected gas masses enriching the protosatellite systems. This way, protos were "eating to be replete" in the descent from Jupiter to the Saturn being protoplanets of Jupiter classification. Obviously one found planets of Jupiter classification at some of the stars in our proximity. Actually, pulsars would have planets, too. If the laws of gravitation quantizing derived by us would be correct, such observations had to be enough for a signal of the existence of earth-like planets! Each star must have a planetary and a satellite system, no matter how far one can observe today with the given technology confirming such an observation with accuracy!

Protoplanet Jupiter was enriched by especially much mass by those satellites, which were ejected away from their orbits (but already running the Jupiter group Greeks and Trojans). It seems to be clear that a bigger satellite was attracted and "eaten" by the gravitation of the proto-Jupiter. Evidentially, today Jupiter is decorated by the "Big Red Spot" similarly to the "frozen sunspot" in monopolar shape. Watching the maximal extension of 40,000 x 15,000 km, it has certainly the magnitude of a protoplanetary diameter! (/Q 1/, p 166)

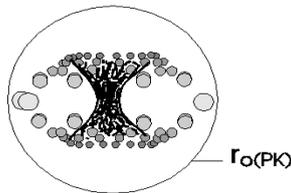
Origin of sunspots is coming from the last protoplanets remaining in the gas layers of the Sun! Just like this, we see the irregular spot phenomena on the outer planets and on the Sun to be the remaining

swirls of those protosatellites, which were falling back or which weren't ejected at all. Possibly, it was the special crash with an arbitrary celestial body (the Big Dark Spot of 12,000 x 8,000 km on Neptune, white spots on Saturn). (/Q 1/, pp 236 and 296)

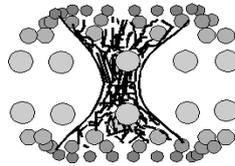
Only Uranus has no spots. Regular spots in stream behavior reflect life forms given from quantizing.

Illustration 4.10.3.2,3: The Origin of Spots

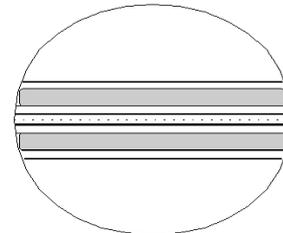
a) Protocosm



b) Protosun



c) Sun



According to the following collapse, T-Tauri outbursts can appear as phenomena of secondary protocosm production. Still inside of the sphere of the proto-sun, the anticollapsing products were annihilating. High energies and even relatively large reaches were given. Big quantities of gas were ejected by the Sun. Then they were collected by the outer protoplanets. This way, inner protoplanetary shells lost a big quantity. Therefore, the mass descent is going up to Saturn. Other stars can have generated first gas maxima of their protoplanets far or next to the star dependent on their energies. Protosun condensed its gas area. Then it only vibrated in low amplitudes. For comparison, ordered after average distance from the Sun, we give an estimation tendency in earth-masses:

Overview 4.10.3.2,4: Changes after Evaporation, Collapse and Supernova

Planet:	Before the 1 st sun collapse:	After 1 st collapse:	After SN-dust:
Mercury	is probably no planet.		0.055
Venus	12.5 - 12.48	0.02 + 0.795	0.815 Dust
Earth	11.5 - 11.46	0.04 + 0.96	1.000 Dust maximum
Mars	13.7 - 13.65	0.05 + 0.057	0.107
Asteroid ring (belt)			0.0005
Jupiter	14.3 +292.1	306.4 +11.5	317.894 Gas maximum
Saturn	13.7 + 72.7	86.4 + 8.784	95.184 Dust
Uranus	14.3 + 0.1	14.4 + 0.137	14.537
Neptune	17.0	17.0 + 0.132	17.132
Pluto	no planet.		0.00022

(/Q 1/, p 259)

The inner protoplanets lost mass, the outer planets added the gas mass of inner protos and of protosun. This way, the initial state of the real protoplanetary mass will be veiled. But where does the second action dust maximum come from with mass concentration in the area of proto-Earth and of proto-Venus? This may not be the result of taking elementary gas masses of hydrogen and helium, but rather this seems to be a maximum of interstellar dust remaining from supernova before. Those masses came in at the same time after the first T-Tauri-outburst. Obviously, a second T-Tauri-outburst - a second sun collapse - still will have carried the gas masses just up to the proto-Earth. A second gas maximum is given possible to bind the SN-dust quantity to itself and to its single moon. The moon only took up the dust as one thinks it should be older, because its material comes from SN (proto-moon came from inner satellite systems next to the Sun and was caught by proto-Earth). But the Earth stored the original solid substances of SN more into its center in process of sedimentation. Their living beings changed them in metabolism process and stored them at the surface of the planet.

Pluto may be a secondary body, which wasn't installed along and together with protoplanets. Its orbit inclination to ecliptic is unusually high with 17.15°. Even its orbit's eccentricity seems to be extremely. If we order planet pairs, we can see better the systems of the past in earth-masses:

Overview 4.10.3.2,5: Order of Protoplanets

Proto order		Present Mass:	Early Mass
Asymmetry ()		m_O (round)	$M_{(SPK)}$
(-)	Venus	0.8	12.5
(+)	Earth	1.0	11.5
(+)	Mars	0.11	13.7
(-)	Jupiter	317.9	14.3
(+)	Saturn	95.2	13.7
(-)	Uranus	14.5	14.3
(+)	Neptune	17.1	17.0

Angular momentum at big gas masses of 11.5 to 17 earth-masses was about the same weak magnitude. The contraction and sedimentation in the strongly condensed centers increased rotation speed at their equator. Different processes show at different adjustments of rotation. Deleted. Neptune made the top, because it was the upper subprotocosm of the second quadrupole level of the sun-protocosm.

Proto-Mercury couldn't have a contraction of primeval gas. So it was missing its angular momentum amplified by SN dust falling in. At Venus we can see how strong the dust was still able to decrease the rotation period. In opposite, the proto-earth could compress more primeval gas like the proto-Mars, too. No single planet represents such a small rotation period as Mercury and Venus, if we look into the outside of our solar system. We think that Neptune should show the rotation period of the past, changed by possible contraction from the past protoplanets. Jupiter and Saturn could condense the most of the gas. This is shown at their high rotation velocity by contraction.

Deleted.

Earth, Mars, Saturn and Neptune are descendants by inclination of their orbits equator to the plane of the track of 23.45° to 28.8°. What is the reason for this behavior? We have an exotic explanation that actually is a natural result from our models. Electrons in an electro-magnet-field have a precession movement. It adjusts the angle to the rotation plane of the field. The faster the electric charge of the electron rotates, the smaller is the angle of the inclination to the movement's plane. Consequently, the rotation-speed we have to take in our account to understand the inclination amount of an electron.

Our model predicts the gravitomagnetic field. Each massive body rotating around the Sun generates a gravitomagnet, G. M., that center is in the Sun. Sun's mass itself has its G. M. there. We know that gravitation connects equal charges or masses by attraction and so by equal directions of mass movements. During planetary masses are rotating, they adjust an angle to the common rotation plane. We conclude here the relationship to the intrinsic rotation. Planets that don't rotate cannot get a defined inclination.

We give orientation to ecliptic at relations of Sun - Earth. This doesn't correspond to the objective facts, because the equatorial inclination of the Sun is already 7.25° to the ecliptic! At both sides of Sun's equator of ±8°, our central star is free from spots. Only the cosm sentences of the subprotocosms of 4 and higher gave spots to the Sun remaining in its gas shell of that star. Similarly, we observe spot structures, swirls and streams at Jupiter, but also at big outer planets.

One cannot neglect that the amounts of SPK determine the external structures. No matter if now MB+1 or MB-1, there is always an especially big and single head-SPK before certain inner symmetrical

objects follow. One head and four follower are also one head, two hands and two legs. One head, two links and four further links make another appearances. Even the organic life is made from these quantizations. You surely think that your hand has five links. Yes, actually the thumb is the head link followed by four fingers. And this order fits again to the system MB+1. So: Every life is certainly programmed by this base.

If quantizing of our solar system gave the same relations to the satellite systems, then a projective behavior of about 10 to 100 would be the result acc. to equation (2.5,1a) $F_{grav} = G_v m_1 m_L / r^2$. The satellite systems, at least the special four, Neptune, Mars, Earth and Saturn, had to form a modified reflection of the planetary system, but we should find a special similarity at Uranus and Venus: retrograde state and steep orbit angle. In differently large protocosms, the energies can deviate of each other very strongly. We had to assume that orders of magnitudes will decide here. As the sun-protocosm could eject its subprotocosms up to 6,600 times of Neptune, protocosms of satellite system only could do this with 20 times. With the number relations of 330, we don't get a projection of equation (2.5,1a).

Overview 4.10.3.2,6: Order of SPK and Inclinations

<u>Proto-Planet</u>	<u>Quantum</u>	<u>G. m. Proto-momentum ($\bar{\mu}$):</u>	<u>Current Sizes</u> <u>Rotation-period:</u>	<u>Inclination of the Path to the Ecliptic:</u>	<u>Inclination of the Equator to the Plate of the Path:</u>
Venus	3s	(- $\bar{\mu}$)	-243d (-r)	3.39°	177.4°
Earth	3s	(+ $\bar{\mu}$)	+23h 56 m	-	23.45°
Mars	2s	(+ $\bar{\mu}$)	+24h 37 m	1.85°	25.19°
Jupiter	2s	(- $\bar{\mu}$)	+ 9h 55 m	1.31°	3.1°
Saturn	2s	(+ $\bar{\mu}$)	+10h 39 m	2.49°	26.73°
Uranus	2s	(- $\bar{\mu}$)	-17h 14 m (-r)	0.77°	97.92°
Neptune (Q 7, p. 259).	1s	(+ $\bar{\mu}$)	+16h 07 m	1.77°	28.8°

Overview 4.10.3.2,7:

Relationship of Rotation Speed and Inclination of the Equator to the Plane ordered by Mass

Mars	+24h 37 m	25.19°	Less mass with less rotation speed
Earth	+23h 56 m	23.45°	A little more mass with less rotation speed
Neptune	+16h 07 m	28.8°	Much mass with higher rotation speed
Saturn	+10h 39 m	26.73°	More mass with high rotation speed

The orbital 4s comes before 3d in the electron shell. Here in protocosmic quantizing, the orbital 3s is earlier out of its receptacle than the orbital 2p, because this level hasn't enough kinetic energy distribution for 12 SPK. In 3s, there are only 4 SPK in the same plane as the other s-orbitals.

You surely comprehend that Venus hardly rotates. So it is easy to explain why there is such a strange inclination of 177°. Jupiter and Uranus actually have a very fast rotation period. It is possible to explain why Jupiter stands perpendicularly with its synchronization of the gravitomagnetic field vectors. It rotates with an extremely big mass into the same direction as well as on its track and on its intrinsic rotation. Uranus actually has much mass. Its behavior is caused by the reversed rotation sense of its SPK. It roles backwards on its path, the axis of rotation close to the plane of of the orbit. It seems that in distant future, it will straighten up synchronously with the central gravitomagnet.

Why do all the planets rotate into the same direction of their tracks, no matter if their intrinsic rotation is adjusted to parallel or antiparallel? The sensitivity of carrying out while anticollapse decided about the orbit direction. So ideal-theoretically 1 : 1 left and right orbits had to be installed. Actually, the space is curved by the mass all around. It determined the total system running to the right direction.

This way, g. m. wavequanta were adjusted parallelly in the center of the Sun - the best gravitomagnetic solution!

Negatively rotating planets moved now contrarily to the positively installed planets or satellite systems in their intrinsic rotation. They made negative gravitomagnetic vectors concentrated in the area of the Sun. All the positive planet masses formed the positive sum vector, which is the strongest because of Jupiter. Contrary gravitomagnets are acting repulsively. Following this force effect, the orbit areas of negative protosatellite systems of Uranus and Venus had to turn around a certain measurement around their own axis or they had to decrease the rotation velocity. Therefore the strange inclination angles were adjusted.

(cf. /Q 4/, p 366)

No single planet rotates in a retrograde orbit, although we observe it at satellite systems. If we take it exactly, nothing is different here, too. The strength of the gravitomagnetic field is essential.

Four of the significant Jupiter satellites Io, Europe, Ganymede and Kallisto could have ejected each two subsatellites into contrary directions. Lexica didn't give information about inclination of equator areas to some orbit plane of the satellites. Based on certain comparisons to asymmetries, we mean that their protos should have similar inclination angles as Earth, Mars, Saturn and Neptune next to 20° and 30°. Really, one finds both subsatellite quartets with about $\frac{1}{10}$ of the satellite mass. There are positively oriented: Leda, Himalia, Lysithea and Elara with average of +27° orbit inclination. Those negatively orientated subsatellites are these: Ananke, Carme, Pasiphae and Sinope with the average of -28° inclination of their orbit to the equator of Jupiter.

Exactly, each planet of Jupiter classification had to emit a first group of protosatellites. Because of their large distance, they could not get into the orbit of its planet but into the Sun orbit far above its primeval mother planet. This could be the origin of Pluto. Above its orbit, there may be a certain quantity of small bodies, perhaps identical with Kuiper's belt. In this respect, these many smaller and apparent satellites and their mites, observed as ring systems, are not real satellites, but scattered satellites of their satellites, similarly to the asteroid ring of the inner planets or similarly to the planetoids between inner planets. Now we call them **virtual satellites**, because they haven't remained subsatellites. The differences of satellites are caused in their prestructure.

[End of citation.](#)

In the center of the proto-sun, you can observe the image of the mass block of my construction (there we still can see the swirls today). All the angular momenta are compensated in it. The fact that the Sun has any momentum at all, which appears small in view of the huge mass, is derived from later interactions. According to Wikipedia, there is just 0.5% of the complete angular momentum of the solar system. That means that all the other objects together account for 99.5%.

Conclusion. However, such a distribution cannot arise from a common gas ball or an accretion disk. My model makes it possible.

Let us go on! Many sub-protocosms were emitted. The complete environment was given into the outer coordinate system after the total momentum change of the protocosms to their internal mass M. After this process, the objects have almost still standing at the sky. Then, they fall back to the different centers of gravity, but not perpendicularly. Because the space in the neighborhood of such strongly concentrated masses is relatively curved strongly. So all the objects are falling into their intended paths, into their orbits. By falling down there, they win angular momentum by gravitational energy on its orbit in coupling of its spin. When such bodies fall back and form the proto-sun or another proto-star etc., then it receives a propulsive angular momentum close to the equator. Gradually up to the poles, the angular momenta decrease less and less, as the SPK fly back and forth in these areas and cancel their momenta. By this cohesion, the differential rotation is now explained!

During the decrease of the central mass and its central radius under conservation of the angular momentum, the rotation speed of the central mass increases at its surface. Those emitted sub-protocosms from the funnel slot accelerate that rotation speed selectively in the equatorial area of the

star. Because there, where as well as no sun-spots are to observe, these sub-protocosms came out for later being proto-planets. According to the law of conservation of momenta, with each departure of such a sub-protocosm, there was a retroactive momentum to the Sun, which slightly accelerated the rotation. Sub-protocosms are ejected as pairs. Consequently, they will get the greater angular momentum over the electromagnetism. So they will reflect their part of the greater speed on the circumference in relationship to its small mass and its smaller radius.

The remaining SPK_☉ contract now. Their amount of multiple hydrogen clouds structured push to the center where a Divergent Sphere DS_☉ arises. In that center, pairs of secondary sun-protocosms sPK_☉ are formed. I think everything is in order, not side by side. One sPK_☉-pair after the other is formed, packed and emitted. The angular momentum is the orientation of the emission's direction of the secondary protocosms sPK_☉. They get stuck in the center where are tiny spiral galaxies.

In a certain sense, you better understand the problem of the so-called "Worm Hole". This is a phenomenon of present physics fantasy helping to overcome this inexplicable missing link between black and white. I think, the disappearance of matter and its reappearance is linked to the transformation of isolated matter into external matter and vice versa. Actually, neither "Black Holes" nor "Worm Holes" nor "White Holes" exist separated from each other as unique. According to my model, there is a unique process of these three following parts.

1st Collapse to a protocosm (that is becoming black – the external death). CONDENSATION.

2nd Transport of hidden matter by a protocosm with almost light-speed in vacuum

While a QUANTIZATION forming a new order is running

(this is being a worm, better said, being the seeds, the germs – the internal revival).

3rd Anticollapse of the protocosm (that is becoming white – the external rebirth). EVAPORATION.

While matter is withdrawn by the galaxy core by periodically continuous protocosm production, that process appears externally as an unlimited falling, as there are extreme black-hole-masses concentrated in the core. It seems to be a bottomless pit.

If I take my quantization for basically description of the Local Group, so I get the following possibilities: dwarf galaxies of the orbitals 1s to 3d have 55 PK for forming Andromeda and Milky way environment, together **110** pieces (2 x 55). Deeper orbitals of 4s to 7i are forming star clusters by the numbers 84+100+144+198 = 504 PK, together **1008** (2 x 504). Currently, one calculates about 500 for Andromeda and 150 for our Milky way. If our galaxy is really larger than Andromeda, it must have more than 150 star clusters. I think, I am close to the reality. Or there are still huge eruptions of the central core where are new sPK will be born.

Surely, such primary protocosms like for Virgo cluster have scattered extremely many globular star clusters into the environment of central galaxies.

I was referring more to our Sun and Galaxy. In Wikipedia I read analogously, that we are part of the Virgo cluster of 100 to 200 galaxy clusters. In the center is the Virgo galaxy cluster with 2000 galaxies. That super cluster has the form of a flattened disk. So this is the largest object in universe that came out of one primary protocosm pPK_u. It's not for nothing that it is also disk-shaped.

Some masses and energies are collected before the complete isolated matter of universe will be collected. In that meanwhile, those parts have the time to evaporate at its location where sub-structures are born living in their own time periods. For example, we have our time and our way (distance). Of both, many people babble of way and time as if they were separate physical quantities, as if they were fixed reference sizes. But no, I tell you, they are sections of the wavelength (oscillation length) & of the period time (oscillation time)!

Even with these connections, the geometry differs enormously that you absolutely cannot speak of "Big Bang" and "simultaneity" anymore. This is valid even when inside of every elementary particle, death and rebirth lay close to each other during an incomprehensibly small part of a second and at temperatures of 2.4e31 Kelvin. I calculated this energy peak predicted by my model. My result is close to the inductively estimated "Big Bang Temperature" of 1e32 K by present physics.

In every elementary particle, in every cosm, protocosm, sub-cosm and their hierarchies of cosms, there is a kind of “Big” Bang as a propellant charge of innumerable Small Bangs on innumerable positions. At every location of a sub-structure is a further Small Bang. This seems to be gigantic: an extreme collection of transmitters, resonators and receivers, which are all together in connection with each other. But they are partially separated by their special coordinate systems. Exactly seen, it is the horror of a matrix in that we exist – inside of an incomprehensible gigantic hologram! In this thing, nothing is dead forever. Every object and subject will be reborn!

14 Consequences

Citation of my work “The Book Arcus I”, corrected in 2021:

“Now we want to watch once again the asymmetry of nature. Golden Cut is well-known. For example of a distance divided in relationship of a:b, we get an equation from Wikipedia: $a/b = (a+b)/a$. If we normalize the section b to one, from our calculation we get the amount of the Golden Cut as follows: $\Phi = (\Phi+1)/\Phi$ oder $\Phi^2 - \Phi - 1 = 0$. For Φ_1 we get the result of 1.618033989, $\Phi_2 = - 0.618033988$ (this amount is the negative reciprocal of Φ_1).

Why is this asymmetry so important? Leonardo Fibonacci found in 1202 a sequence of numbers: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 144, 233, 377, 610, 987, 1597 etc. Starting of 2, each of the third link is an even number. It seems like everything really only starts from the second digit of one. The differences between the numbers in this series also result in such a sequence but starting with 1, 0, 1, 1, 2, 3, 5 etc.

Fibonacci sequence begins with a strong asymmetry, and when dividing the last two numbers, an approximated number of Φ results. Both have to do with each other. Let’s look at the beginning of the sequence 0, 1, 1, 2. We recognize here, if we are able to see that 0 1 and 1 2 are a different way in the sequence. But this is of huge importance. My asymmetry of the protocosms, I signed with 0+1 and 2+1 in the original of my book of the year 1998. What did I mean by that?

2+2 is a symmetric quadrupole of balanced quantum numbers. Consequently, one looks in vain for the number 4 in the Fibonacci sequence. Actually, it is spit into 1 and 2+1. Such a compound, one also can recognize at the number 13, however. We have deeply substructured protocosms or/and cosms in universe. Two of ideal symmetry must split up. Ideal symmetry is called “massblock, MB”. So we find these following cohesions:

MB + MB or top-PK of 2+2 + 2+2 followed by a multiple number of 2+2 in the depth.
 +1 -1 give:
 2+2+1 2+1 or MB+1 and $MB_x+2+1 = MB-1$ (MB_x means the deeper MB of zero)
 0+1 1+2 like Fibonacci’s 0 1 1 2.

It’s a fact that protocosms start with these both possible asymmetries at the amplitude on n=1. If they would be symmetric, they externally were imperceptible. They just were a massblock like MB_x that could hide itself inside of its internal world. Only the asymmetry reveals it on the outside. So we have in our universe protocosms with one single sub-protocosm on the amplitude, 0+1, and in the same relation, there are protocosms with 3 SPK on their amplitude, 1+2. Both types consequently are always integer and single loaded electromagnetically. All four charges are possible + - + -. By asymmetry, it becomes: + - + and - or - + - and +, result: + - or - +.“

End of citation

My universe is filled with twins, brothers and sisters. If you cannot watch twins anymore, than you still see pairs.

The primordial twin in the entire space of universe could consist of a body of ordinary matter and another mirror-image body of antimatter. They are facing each other in the space. Under these circumstances, the isolated and locked space would have a sense, created and separated by the Creator. Universe would be a system of ideal separation into both states. Each of both objects is able to develop itself in pairs.

The further development is bound to the evaporation of pair- or twin-protocosms. Opposite each center, they are like in a mirror.

Our proto-planets were sisters and brothers (pairs) of the same ordinary matter. However, over the course of time and by interactions, they have been disfigured beyond recognition.

Our Brother-Sun and their planets are on the other side of that nebula, which arose from the Blue Giant Star and its own supernova sometimes. Probably, they are running special processes.

I think, in our opposite neighborhood a jupiter-satellite-like planet rotates around its planet next to the star that life can be there. On the other side of Milky Way, our twin solar system should be there.

Let's go on! In our galaxy cluster, we should have another twin galaxy. There also should be twin humanities. In our galactic super cluster, there should be these twins again. So I find the sum of perhaps 8 human societies from ordinary matter, which are in the same state as we are. Half of universe is made from antimatter. There would be 8 anti-humanities. But they are on the reversed way of elongation. E. g., if we would go up to the amplitude, they would be on their way down.

In my universe, there should be at least 16 civilizations like ours.

However, they cannot come into contact with each other. In as many years as the distance in light-years, they could receive a message. The answer would take just as long.

The blue stars were later settled in the galaxy. Their development over SN to stars with planets that include all chemical elements, has taken a longer time. It doesn't matter how many old stars currently can be indicated in these areas. Certainly, they are old but not fertile enough for creating a civilization. I only like to see a limited area, in which the expected younger life forms can exist. They cannot contact us, too.

In the outer areas of the galaxy there should be life forms that are more developed than we are. Let us calculate an example. In the distance of 100 light-years would be a higher developed civilization. She was 50 years older than we are. And she would have send us a message 50 to 80 years ago. So we could expect to receive this message in 20 to 50 years. I think therefore, it is rather hopeless for contacts under the conditions of my universe. In this world, it would be largely silent around us.

It is possible that our very next twins could get in contact in the next few decades. Other, much more developed forms of life similar to humanity would have the chance to report. But they are accordingly far away. Interactions could have disturbed these ideal relations. But this would be pure coincidence. We cannot know what the Creator's program for this is like.

It could also be that HE wanted to isolate us completely. It is also possible that HE would allow that the Higher Ones to visit us for observation by using Bionic Beings. They will know what kind of monkeys we are. Like I always say, we are "Domesticated Migratory Monkeys" as a special quality of species that calls itself "humans". This species is by no means a harmless phenomenon. It even endangers itself. Any truly civilized being would not go into this hell here willingly.

Let's be honest. We can smile soooo beautiful. But what looks out there is a row of teeth. This is a feeding tool! We eat almost everything and we do it in every way, if necessary, even our friends. We are not very different from Piranhas.

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- 1: "The Book Arcus I" – Theoretical Opinions
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Declaration

On the basis of my own acknowledge and of the less information from the given literature as well as with the aid of irrefutable fundamental laws of the natural sciences and some research on the internet, I have created my work myself by proposed solutions within the framework of my own theories of the “Ideal Oscillator” and my own creations of new words. No other person has worked with me.

The product

The Book ARCUS V

The Alternative Solution of the Problems of Universe

remains my sole private ownership. It is subject to international rules and laws of copyright valid for more than 70 years after my death.

On oath on February 23rd, 2021.

Heinz-Joachim Ackermann, D-02828 Görlitz, Germany,
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