

Gravitons and subtrons consequently are never come really free which means that they don't appear in quantitatively asymmetric form externally their second hierarchical plane! These first particles are installing real structures at the inside of protons and electrons and their neutrinos, certainly not fine quantized but already in analogy to the galaxy structures of our universe.

The number of protocosms which build-up the particles of the second hierarchical plane is programmed to three types. Those protocosms of electron neutrinos PK_{ν_e} and of electrons PK_e are the same:

1. PK_{ν_p}
2. PK_e or. PK_{ν_e}
3. PK_p and their antis.

This means: the first two particle types called gravitons and subtrons are made to be modules of the stable particles proton neutrinos, electron neutrinos, protons, electrons acting by their protocosms.

The proton-antiproton-annihilation begins below the temperature of $T < 2.177 \times 10^{13}$ K. Those photons work with their energy at electron-positron-pair forming until the temperature has reached the level below. This is given from electron-positron-annihilation at $T < 1.1857 \times 10^{10}$ K for 1 : 1 magons and antimagons of the photon energy of each 5.928×10^9 K.

Derived from rest mass of electron neutrinos and their antis their annihilation can start below of 228.000 K. Protonneutrinos even annihilate below of 124 K. So the consistence of universe is resulting:

- **g and s are ideal products.** The consist of apparently „nothing“, from the *anything moved*.
- e and also p consist of s and g.
- ν_p and also ν_e consist of s and g.
- The universe consists of ν_p , ν_e , e, p and at their inside of s and g!
- Externally of the universe there is the ideal substance, therefore „nothing“ or the fundamental substance for the *anything moved*.

The vacua of gravitons and antis including the vacua of subtrons and antis make the stationary gravity-vacuum of universe: gravitation = negative gravitation (condition of Einstein for stationary cosm). There are each a graviton magon and a graviton antimagon as well as a subtron magon and a subtron antimagon for each gravitational vacuum cosm consisting of a graviton trunk and an anti-graviton trunk and of such combinations from subtrons. Under these conditions the radiation cosms are not forgotten. **But they remain closed or locked in the stable particles of each of the hierarchical plane.** The universal protocosms PK_U are combined of radiation energy, of the four cosm types of the second hierarchical plane and their antis in quantitative difference. Following they are running their installation only over the above called isolated temperature stages but only until those temperatures laying above 2×10^{13} K but still far below of 10^{28} K. Because the higher temperatures for pair formings of gravitons and subtrons only exist internally the four particles of the second hierarchic plane got unstable by energy supply from environment. Even if you reach more than 1028 K in experiment, these particles do not dissolve themselves, but they can form subtron pairs and graviton pairs in protocosmic states very soon annihilating and reflecting the states at the inside of the particles. In these experiments you will see that there is no break of the pair symmetry by chance.

4.10.2. Death and rebirth of stars and star systems

Today one expects the exploded star would only be the expression of the death. By chance or accidentally nebulous products found together making the „fire“ of new stars then.

But we found that the complete system is caused by a programmed process of life transformations.

Today astronomers think that "black holes" would be in the centers of the star systems like Virgo and Andromeda. Here the question results: Why are "black holes" just in the cores of extremely hot areas, when the teaching opinion predicts the „black hole“ as a result of a cold collapse? Isn't it suspicious? Astronomers wonder why completely young stars are existing next to the oldest stars. Fi-

nally they explained this fact with a slower contraction of remaining „big bang nebula". But, should our children just live next to us because the matter of primeval human beings had a slower evolution? This one question shows the contradictions of all present theories of universe and of life evolution.

After our opinion of a radiation supplied collapse into a protocosm, the fact is clear. The structures of systems came from anticollapses. Like shown, the highest density remains in the centers. This is the force for the influx of masses. Driven by gravitation and supplied by radiation, in the center of the galaxy core a protocosm is built-up. In this moment that mass turns around from the external to the internal state. After equ. (2.7,1b) it is immediately disappeared because changed into a very small mass of vibrating surface. The protocosm can be moved by a very small momentum coming from the center (the stronger the momentum, the more the protocosm can fly at all). Then it anticollapses next to the center or far away in the slice or halo population producing new systems nearly the core or for example a small system of very young new stars or only one single star with its planet system.

This is the fountain of youth of matter - the death and the rebirth!

Certainly problem of so-called „worm hole" seems to be able to be explained. This physical building of fantasy should help to overcome the inexplicable phenomena. Disappearing of matter and its return is bound at the change of isolated mass into external mass and reversed. Neither "black holes" nor "white holes" nor "worm holes" are really existing in their strange phenomena but only one uniform process in the shape of those tree features:

- Collapse to protocosm (becoming black - the death).
- matter transport by that protocosm with next to light velocity while the new order is rebuilt (being worm or better being seed - the prepared rebirth).
- anticollapse of that protocosm (becoming white - the rebirth with potency for life and death).

During the galaxy core is missing matter by periodically continuous protocosm production, the process seems to be a fall without an end, externally observed, as if there were concentrated extreme "black-hole-masses" in that core: a barrel without ground.

The core of Galaxy (SAG A) consists of a shell of more than 4 millions of sun masses and a star core of less than $\frac{1}{2}$ million sun masses, which activity is already identified as compact radiation source. This kind of cores we discovered to be a feature of PULSAR. Contracting shell masses and their gravitational energies are pumping up the level of the divergent black-white holes in pulsations guiding with continuous radiation. After this the Galaxy core exports star protocosms PK_s during a continuous production line. At the same it splutters falling matter. New stars are born.

Birth and rebirth are reality. There is no need for a belief, if there wouldn't be still the other *belief* in the „stationary black hole" and in the *accident* which has the purpose that one don't need to accept a world externally the universe in which the programmer of the universe may be living. But the mathematically and logically based belief will be more science than the belief in assumptions.

4.10.3. Transformation of universe matter

4.10.3.1. First objects

Externally the protocosms carry their electrogravitational *wave energy* E_w (after (2.12,8)) or their *rest energy* E_{A_0} . We distinguish the *orbit spin* of the protocosm in universe - differently expressed: its *wave quantum spin* (WQ-spin) and its *primary spin*, which is a primary action standing vertically on the WQ-spin. The monopolar force coupling of gravitational primary spin decides over the kind of gravitation of a protocosm after (2.12,6): negative **or** positive. In universe only positively gravitating protocosms are given but not protocosm pairs. This is differently made in the particles of the universe:

Only internally of the unstable particles both kinds of gravitation are realized programmatically at the protocosm pairs.

When the protocosm anticollapses, the electromagnetic and gravitomagnetic force coupling as quality of that protocosm is disappeared with rapid speediness. The movement are freezing. Because of the larger mass M now immediately the laws of gravitation are acting in a new way. Subprotocosms stop their movement next to zero and take now the smaller movement momentum remained of being protocosm into their gigantic mass (cf. (3.4.2,3)). All the ejecting subprotocosms will get a minimal angular momentum for initial value negligible small. The primary momentum vertically standing on the wave momentum initially means the minimal angular momentum for the rotation direction of the complete world existing in the protocosm. If it is ejected, then it carries - even only tiny dimensions at all - a pre-rotation pointing the way after the principle of sensitivity.

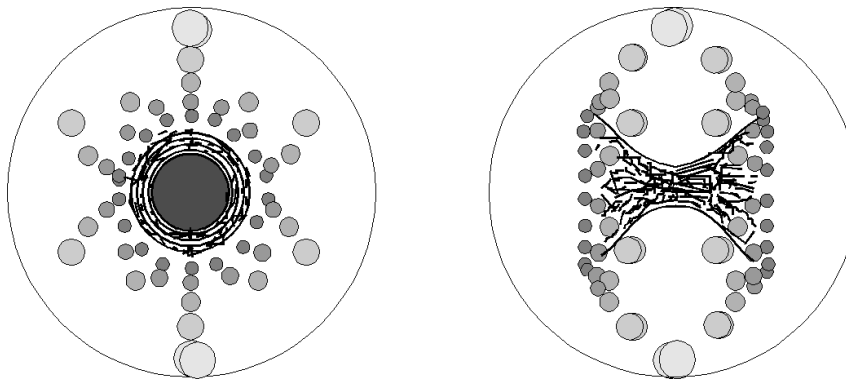
Therefore the rectified rotation direction of partial systems is adjusted normally in the opened system of the next low hierarchical plane - that plane of the first-rate subprotocosms of the opening protocosm. Then the further hierarchical subplanes below like second-rate protocosms, their subprotocosms and so on follow the same principle for themselves.

Each system coming from the first rate of the anticollapse has a characteristic shape following the quantizing. Two funnel areas curved to the outside like fungus hats are formed with approximately circular bases, which most tight openings are in the center and there they are coupled at each other with the highest density of the system. Because there is no geometrical name for this body, we make it with a comparison: this thing is similar to two chanterelles coupled at each other with their handles. This is a **double funnel** with an **upper** and an **lower hat**. Every body is described by the gravity centers of the subprotocosms living there.

Illustration 4.10.3;1: Double funnel

a) Top view

b) Side view



We leave the view of a funnel and look at their side view. The outer circle signs the amplitude $R_{o(PK)}$. In the area of the waist of the building, the upper and the lower hat are meeting themselves. But they let open a slot in equatorial width. Its width is dependent on the number of main levels. If there are few, so a rather large cyclic cave gapes. With hundreds of main levels, the parity orbit can be divided into few degrees letting open the **funnel slot**. All round it isn't open: exactly on each two contrary laying sides the subprotocosms of the first main level $n = 1 \dots$ are built-in; the first three, the second four, the third four etc. They are those bodies with the most large distance from the gravity center of the double funnel. Dependent of the dilation, they are opening themselves in angles between next to 0° and maximally 180° . In this respect they have an intrinsic inclination to the rotation area of the funnel slot also depending of the number n (later inclination over the ecliptics).

At a multiple number of main levels, the secondary levels already grow into the funnel slot. In the complete area of the funnel slot there is no further subprotocosm, so that the total energy of central annihilation shall pass the slot all around. While this the radiation hits the upper subprotocosms which are thread up like on a spinal column in the areas of the quantum number $m = 0$ of equ. (2.13.2,2). These subprotocosms absorb the energy at both ends of the column while they are accelerated (this acceleration is the projected analogon on *inflation* of cosm). This way the radiation

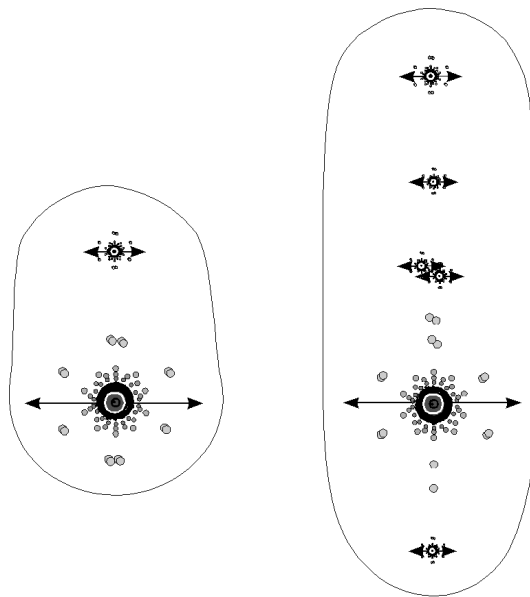
from annihilation only can get free between the hat margins from the funnel slot and from the funnel centers.

Because this prestructure is already given before the protocosm is opened completely, the upper subprotocosms get an energy supply via radiation, which makes dilation stronger or which makes them remaining locked and which accelerates them with the necessary momentum in orders of magnitudes.

The whole primarily opened body takes the shape of a **well-flat rotation ellipsoid** which shows the funnels at both sides of the rotation axis and the funnel slot in the rotation area. From this center of funnel slot the radiation energy of the annihilation including hydrogen-helium gas is coming out, following the energy of protocosm production in the contraction process, too. But while the annihilation energy still shoots out the funnel slot like from a disk-like radiator, it meets the subprotocosms of the space quantizing $m = 0$ and accelerates them under absorption from its layer (see section 4.2.). This looks like a turtle would venture out head and tail under their shield.

From both sides *between the slot* the radiation can pass *unhindered*. The system looks then like a double jet: **two extremely radiating jets**. Central asymmetries can make emitting only one ray into one of both directions. These phenomena were observed in universe, but they were explained with other theses.

Illustration 4.10.3;2: The double jet of a first-rate and of a sub-rate protocosm
(in the horizontal; vertically there the ejected subprotocosms)



The accelerating process of subprotocosms is equal to a throw into the plane forcing the ejected subprotocosmic bodies to take a parabolic orbit. In this respect it will be changed into an elliptic orbit approximating a circle. While first-rate openings the subs distribute their central and subordinated bodies including their gas clouds this way that one gets more a drop-like body than a spherical space for the initial state of installation of the systems. This might be right for early installation stages of galaxies. The far the rate is gone, the more symmetric and longer the drop will be (galaxies of two or more beam or spiral arms, sun systems with planetary plane). Let us imagine the drops would only rotate around their jet axes and consist of some superimposed drops, so we would get the picture of a disk with a central body like it is well-known of galaxies and sun systems. The deeply quantized ejection of gas and radiation wraps up the complete system shown here.

Because of high energy, the ejected subprotocosms are the base of a rotation plane in the shape of a kind of a disk showing very small inclinations of their elements. It is possible to assume that the subs reach determined inclinations in their receptacle connecting with completion of curvature. The upper subs will be able to complete the curvature nearly. So they strive to inclination of zero while deeper laying subs have had an anticollapse short before and the deepest were already anticollapsing. These objects have a larger inclination for later adjustment of an ecliptic (which one had to refer

to Neptune in our sun system, but one had not to do it with earth). So the disk will be thicker in direction to the center until it finishes in a well-flat ellipsoid. This means: in the course of acceleration by annihilation radiation, the subs will be blown out being in reflective states of inclinations. The most upper will lay next to the plane of arising disk (ecliptic). But the last will be set into the plane above and below of it. The inclinations of the orbit against the ecliptic increase along the shortness of that way accelerated by radiations. For example we see this at the planet system: Mercury 7°, Venus 3.4°, Uranus 0.8°, Neptune 1.8°. Just like this, the intrinsic inclination of subs against their rotation plane behaviors. The partial system of asymmetry 1 agrees with that fact which already adjusts the angles of about 26°, for example: Earth 23.45° - Mars 25.19°; Saturn 26.73° - Neptune 28.8° (see below). (/Q 3/, p 259)

If the spiral orbits remain incomplete, one observes them as spiral arms of spiral galaxies today. From funnel slot didn't come single bodies but pre-structures: each secondary level spatially lays next to the main level $n = 1$, if there are only very much main levels. In this respect it was pre-selected *after the gravitation* of the objects, chains of bodies in pre-programmed directions were ejected: two main spiral arms are the absolute condition for a long stretched body which condensation makes the central body. Along the four first secondary levels below of $n = 2$, $l = 0$, $m = 0$; $l = 1$, $m = -1$; 0 ; $+1$, two times two bodies will be ejected into the same plane of $n = 1$. They amplify the above called main body. Two times two bodies of $m = 0$ are added. Finally, each two smaller arms are created of $m = -1$ and $m = +1$: four points at which each two protocosms are opening. Summarily, there are six galaxy arms with strong ends. Each sub-quantizing certainly fills the interstices or adds more arms. One of the last collapse processes can have ejected matter into the given arms and exceed it. There would be seven arms like Galaxy or more. These are special forms like hump-back or belly.

Even a tree corresponds to the principle of *double funnel*: crown and root are similar to each other in their growing and branching structure. Between both the limit of medium is given - a plane like ecliptic or a disk like the *funnel slot*. Those children or layer of the trees are in the proximity of the mother tree laying in the plane as if they were a disk population of Galaxy.

Still it was not understandable why a spiral galaxy follows such a complicated rotation law like seen at example of Andromeda nebulum:

| Body: | Distance: | Rotation velocity: |
|-----------------|-----------|--------------------|
| Galaxy core | | 100 km/s |
| connecting area | | < 100 km/s |
| connecting area | 600 pc | 100 km/s |
| connecting area | | < 100 km/s |
| connecting area | 13 kpc | 300 km/s |
| connecting area | | falling |

(/Q 1/, p 15)

Every subprotocosm ejected primarily into the arising structure of spiral arms gives to the ring area an intrinsic velocity around the galactic center. The highest velocity is almost given by ejecting of the lightest and most away subprotocosm with the highest radiation energy; this way the 300 km/s is explainable. It collapses and follows itself after process of death and rebirth. So this special subprotocosm fills up its environment with intrinsic systems by subordinated protocosm production. These subsystems can rotate only more slowly: while one of the produced subprotocosms was flying away vertically to the rotation orbit of its producer initially, it took a curved orbit into the contrary direction to the orbit of its producer. This looks like it got behind it in a plane-like tail. A difference velocity is resulting which reflects the secondarily resulting areas with slower movement.

Every geodetic line is curved. Therefore every vertical throw has a sensitivity of geodetic line direction, 1 : 1 for curvatures to the left or to the right. Differently expressed: the vertical throw does not exist! Even the smallest pre-tension decides about the direction of geodetic curvature. The environment field of the curved electrogravitational space where the subprotocosms stopped making force for curvature by asymmetric state. This way a priori common rotation directions of the bodies are given around their central body. The early stages of bodies of the central body are following this tight spot of space curvature, too, but on smaller field extension and with lower rotation momentum.

With almost a little fantasy it's possible to see the origins of planets from the double funnels. This also is a principle for satellite systems, for stars or galaxies. Complete filling of universe is made by structure of two absolute giant galaxies laying contrarily with the shape of double funnel. They are quantized into super heaps, heaps, galaxies etc.

When you wait long enough, the contours are blurred in the course of gravity contraction and also in series of new collapses and following anticollapses. The central system is ellipsoidally filled of matter and approximates to a sphere. All the matter is falling down to the super-heavy center. Heavier systems need more time to make a clear distance between core and ring. If the contraction to the central body is finally gone enough, the double funnel mostly cannot be observed. Let us look at the sun, its remnant is provable that in its rotation plane no sunspots can be seen on both sides of 8°. Surely there the planets came from! Above it one finds the rest of hat margins - the sunspots up to 35° at both sides. The hat funnels are filled with secondary gas matter; there are no sunspots any more.

From that time at which the central mass of installed galaxy was able to form protocosms of the next rates by contractions, the transformation event was really starting. In the area of young galaxy the secondary systems were installed. First there were larger, later there were smaller bodies along the decreasing total-energy: dwarf galaxies like Magellan's clouds, spherical star heaps, star associations, single stars as sun systems, systems within the stars, systems within the systems - the complete program of life transformation.

From the gravity center of the double funnel the production center of new protocosms is created. Like a machine-gun with sweeping shoot automate, the star systems are born. Those processes of extremely strong radiation in connection with extremely high star forming rates are observed in quasars like also in Seyfert's galaxies. Brown dwarf especially searched form can only exist inside of such a system with a quantizing of its mass of about 0.07 up to 0.09 sun masses. We assume that a system which mass is less than this may have formed the Oort's cloud. (Q 3/, p 48)

Such a universe arising from rebirth need no further explanation, if it has the bubble structure liken seen with Hubble bubbles. It comes automatically from quantizing.

4.10.3.2. Solar systems

We choose the installation of our own sun and planet system for example of an excerpt of the transformation process.

That time the sun protocosm had the mass $m_{o(PK)} = 2.3762 \times 10^{-46} \text{ kg}$
 and after (2.10,23) it had the internal mass of : $M_{o(PK)} \approx 1.9936 \times 10^{30} \text{ kg}$.

This corresponds, calculated into earth masses $m_E = 5.9742 \times 10^{24} \text{ kg}$: $M_{o(PK)} = 333\,700 m_E$.
 The mass of the present sun amounts about $333\,099 m_E$.
 Proto-mass could also eject the difference of about $700 m_E$
 in the feature of hydrogen/helium coming from
 protosatellite systems etc. From the outside it took about $99 m_E$
 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 737 earth masses. Additionally we estimate Oort's cloud including Kuiper's ring would have about 1 000 earth masses, together then 1 700 earth masses. About 1 000 earth masses must be particles of supernova dust coming from that SN which was birth of our sun system. So about 700 earth masses remain ejected from the inside of the sun protocosm. Partially the ejected subprotocosm mass was firstly active forming the protoplanets actually

$$\Sigma m_{Pr.} \approx 110 m_E .$$

Then the center of protosun collapsed and emitted the sub-rate protocosm of Oort's cloud, which moved away about 228 earth masses locked under the sphere of externally 3.48×10^{-43} kg following our thesis. About 362 earth masses could be carried from expanding protosun shell upwards to proto Saturn. So the central proto-body got the remaining mass M of the rest of subprotocosms of about

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

About 100 earth masses of interstellar dust fell into the protosun, how it took the above called mass of 333 099 m_E . SN-dust of 98 earth masses, coming from the outer protosatellite systems and about 2 earth masses coming from the internal protosatellite systems, was collecting at gas-pregnant protosatellite systems, so that the total mass reaches 737 earth masses finally for installed inner planets and outer satellite systems. During the collection of SN dust the hydrogen was drifting away of the protosatellite systems.

Sun protocosm was installed as sub-rate system with 0+1, 0+1, 2+1, 2+1 and 2+2 following. We order the protoplanet functions and proto-masses to subprotocosms in relations to the present earth mass (cf. illustration 4.10.3;3):

| | | | | | |
|----------|------------|--------------------------|------------|------------------------|----------|
| 0+1, | 0+1, | 2 | +1, | 2 | +1 |
| Neptune | Saturn | Jupiter Uranus | Earth | Mercury Venus. | Mars |
| 16 m_E | 14.5 m_E | 13.5 m_E 13.5 m_E | 13.5 m_E | 13 m_E 13 m_E . | 13 m_E |

After the principle of mass index along section 2.13.3, p 145, the proto mass sum is following the step of our assumption of 110 m_E . Inner protoplanets gave 23 m_E to Jupiter and Saturn in sun hurricane. About 28 m_E remained for them. Now Jupiter and Saturn have together about 51 m_E . The difference of about 362 m_E to the present 413 m_E from 318 m_E plus 95 m_E mostly comes from the elementary sun mass of hydrogen and helium.

Interstellar dust coming in, not only distributed fine, but also in shape of chunks expanding the mass with heavier chemical elements and combinations 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 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 with 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 the sun system destroyed by SN before. (/Q 3/, p 94)

Oort's cloud followed the secondary collapse of the proto-sun center. The total substructures of the dark world were created at the margin of the sun system also storing the products of that supernova which made our sun protocosm. So we come to the comet cloud which is structured inside. Assumption of Kuiper's ring is correct. Only at comets the calculations of theorists can be approximately confirmed when small pieces are binding **loose-packed** while moving into a common direction. This process is based on cometesimals, which had never make planets completely, so they kept comets. Big protoplanets made from hydrogen collected cometesimals!

In the sun core seem 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. Those protocosms may be measured with some ten millimeters radius. Then they would include up to $1/100$ of the earth mass. These protocosms are exported into the sun shell. There they anticollapse relatively early because of their rela-

tively 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 shell. Some momenta produced there, reach upwards to the sun surface where they are observed as protuberance.

The sun core has a charge difference from its e.m. quantizing producing the corresponding electromagnetic momentum. Sub-rate protocosms are charged with multiple 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 like a swivel which 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 descendents exist in the sun as well as externally by escape. For example, it has influence to the earth 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 were formed from their own subprotocosm. They included then proto-satellites and again proto-subsatellites etc. down to the physical bodies rotating and having the task to install determined bodies up to organic life for later planets. Like at protosun happened, the most central layers of anticollapsed protocosmic hierarchies could be changed into the central body, which is not a compact body but 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 like on earth is one complete system of one complete body. Human beings are only a small part of earth life. Every living being is a piece of our possibility to be allowed to live.

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 gets 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 couldn't be hold by their inner planets. This way they came into 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 was emitting 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 the protoplanets of Neptune until Mercury. The annihilation radiation 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 like protosun would "fire" its T tauri stage how astronomers call this unexplained state today. The acceleration of Galaxy gravitation acting onto all the born bodies made shifting the concentric system. A part of the ejected bodies came next to the protosun. But the electric multiple charges of the ejected subprotocosms represented the stronger repulsion and attraction forces. Thy determined the differences of heights of protoplanetary orbits. In illustration 4.10.3;3 this is shown schematically.

We have to repeat the expressions of section 4.2 after which each deeper step of the subs cuts further asymmetries 0+1 for each position of the e.m. asymmetries showing into the same emission direction like the upper two asymmetry systems 0+1.

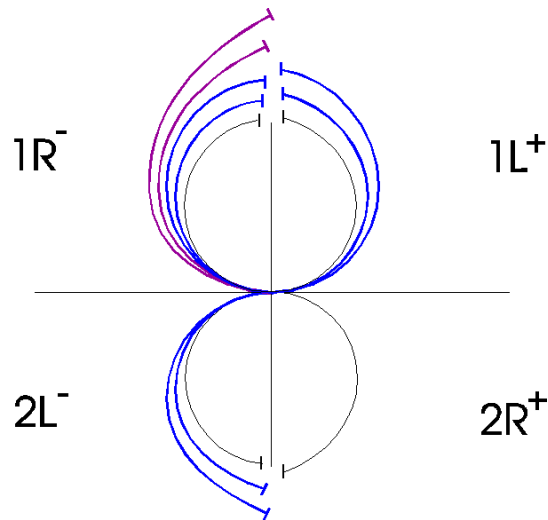
While the protosystems already showed their own protosatellites and their „soft skin", the merciless radiation hurricane of anticollapse was blowing and taking away large quantities of gas from them. The same happened to the protosatellites so that gravitation wasn't able to bind them at their protoplanets. 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 because of gravitation. So ring systems are made. 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 like the asteroid ring. Externally of it, we have to find one satellite at all, which reflects the analogon on a gas maximum. Further 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 combinations. We call this process **sedimentation of death**.

Consequently there hadn't come the complete heavier matter from supernova but only a certain part of it which 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 center of protoplanets. New life forms of universe were living on them, life forms being adjusted to follow after gravitation into the denser medium partially and to remain in the thinner medium with the

other par. This behavior one can see at every plant and at animals living in water but taking atmospheric air or living in both media. But the exception rules cannot live without the other medium: no bird without earth or water, no human being without solid bottom under his feet.

Illustration 4.10.3;3: Anticollapse



Legend:

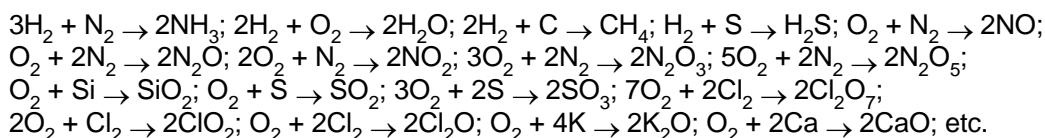
Horizontal center line marks the run of double jet. Vertically there is the shortened ejection line of subs. It shall show the last symmetry system 2+2 in the center. Here are following two asymmetry systems 2+1 and two asymmetry systems 0+1. At the finishing ends of the orbits, the equator positions are marked as distances. They show the inclination angle for future orbit plane.

The most importance has the event of meeting of 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** mostly;
2. **Oxygen**, *carbon* and neon;
3. *Silicon, sulfur, chlorine, argon, potassium and calcium*;
4. Titan, vanadium, chrome, manganese, iron, cobalt and nickel. (/Q 3/, p 347)

The most heavy chemical elements up to the transuranium elements will be synthesized during the phase of supernova itself. The unfertilized protosystem has its movement. Suddenly the **gas** and dust front of SN meets the surfaces of *high-temperature* hydrogen-helium balls with different velocities, where it is reactively absorbed or „cut out“. So the determined process is running which is able to see like a meeting of „sperm“ and „eggcells“ 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 combinations **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 combinations including the organic

combinations 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 surplus of elements.

Those planets which were rotating contrary to the direction of dust front only had little time periods for collecting elements. Additionally, bigger protoplanets a priori can have much more hydrogen and less heavier elements than smaller planets. Proto-Jupiter was pregnant with collected hydrogen gas from the first sun. It cannot have collected bigger quantities from dust front like also the protosun. We find 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. Though 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 for all small planets and asteroids and comets. At first they were packed with water and the other chemical combinations above called in determined reaction series. Then their proximity to the sun decided of the gases were to be vaporized as only solid substances remained or of they were frozen into bodies of ice and finishing their existence this way. Multiple interactions like pushes in asteroid ring also led to reduction of liquid and steam parts. Only far away of the sun at the satellites of the outer planets having a small internal heat or freezing their steam at different sub-bodies now living as comets. The interstellar dust enriched the menu of chemical elements and combinations. Protosun could just get a smaller part (of arsenic hydrogen for example) how astronomers found in the meantime. Alone this observation make planetesimal theory intolerable. A primeval disk of a homogeneous mixture would have represented homogeneous distribution of elements and combinations. But after our opinion the collecting protobodies consisting of hydrogen-helium gas were bombed with substances externally coming from supernova shell for each rotation direction and position.

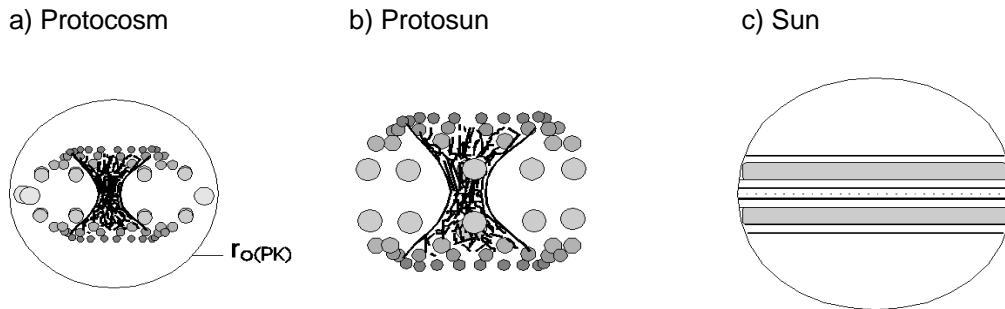
Proto-earth obviously was moved along the gas and dust front in which it enriched itself like its proto-moon with masses in slow speed. For proto-Venus we must assume that it reached the dust front rotating along, but in an area, which was richer with more sulfur instead of oxygen. This can be happened 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 Io of Jupiter got a sulfur maximum, while protosatellite Europe collected much more water similarly to the earth. Ganymed 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 before the coming in of dust front. Expansions of protosun ejected gas masses enriching the protosatellite systems. This way protos were „eating repletely“ in the descent from Jupiter to the Saturn being protoplanets of Jupiter classification. Obviously one found planets of Jupiter classification at one of the stars in our proximity. But 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 for 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 with 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 had to be attracted by the gravitation of Jupiter and which was "eaten" by it. Evidentially, today Jupiter is decorated by the "Big Red Spot" similarly to the „frozen sunspot“ in monopolar shape. It has the extension of maximally 40 000 x 15 000 km, certainly the magnitude of a protoplanetary diameter! (/Q 3/, 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. Or 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 3/, pp 236 and 296)

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

Illustration 4.10.3;4: The origin of spots



According to the following collapse T-Tauri outbursts can appear as phenomena of protocosm production. Still inside of the sphere of the protosun the anticollapsing products were annihilating. So 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 got first gas maxima for their protoplanets acting their energies far or next to the star. 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:

| Planet: | before the 1 st sun collapse: | | after 1 st collapse: | | after SN-dust: |
|---------------|---|--------|---------------------------------|--------|---|
| Mercury | 13 | -12.99 | 0.01 | +0.045 | 0.055 |
| Venus | 13 | -12.98 | 0.02 | +0.795 | 0.815 dust maximum |
| Earth | 13.5 | -12.96 | 0.04 | +0.96 | 1.000 dust maximum |
| Mars | 13 | -12.93 | 0.07 | +0.037 | 0.107 |
| Asteroid ring | | | | | |
| Jupiter | 13.5 | +292.4 | 305.9 | +12 | 317.894 1 st dust maximum |
| Saturn | 14.5 | + 72.7 | 87.2 | + 8 | 95.184 + dust maximum |
| Uranus | 13.5 | + 0.5 | 14 | + 0.5 | 14.537 |
| Neptune | 16 | + 0.5 | 16.5 | + 0.6 | 17.132 |

(/Q 3/, p 259)

The inner protoplanets lost mass; the outer planets took the gas mass of inner protos and of proto-sun. This way the initial state of the real protoplanetary mass will be veiled. But where does the second action dust maximum with a 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 the dust. So one thinks it 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. It's possible that it comes from a secondary collapse from the center of Oort's cloud or from the 2nd sun collapse. Its orbit inclination against ecliptic is unusually high with 17.15°. Just extreme like this its orbit eccentricity seems to be. If we order planet pairs we can see clearly the systems of the past:

| Proto order | | | present mass: | early mass and quantum numbers | | |
|---------------|-----|---------|---------------|--------------------------------|--------|----|
| Asymmetry () | | | m_o (round) | $M_{(SSPK)}$ | Area | KS |
| 2+1 | (2) | Mercury | 0.06 | 13 | $3p_0$ | 5 |
| | (2) | Venus | 0.8 | 13 | $3p_0$ | 5 |
| | (1) | Mars | 0.11 | 13 | $3p_0$ | 5 |
| 2+1 | (2) | Jupiter | 317.9 | 13.5 | $2p_0$ | 3 |
| | (2) | Uranus | 14.5 | 13.5 | $2p_0$ | 3 |
| | (1) | Earth | 1.0 | 13.5 | $2p_0$ | 3 |
| 0+1 | (1) | Saturn | 95.2 | 14.5 | 2s | 2 |
| 0+1 | (1) | Neptune | 17.1 | 16 | 1s | 1 |

Angular momentum at big gas masses of 13 to 16 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. It's possible that the area $2p_{+1/-1}$ was installed along the same mass instead of the area of $3p_0$. We will research it later. Neptune made the head because it was the upper subprotocosm of the sun protocism.

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 like Mercury and Venus, if we look into the outside of sun 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.

Each protocism, forming protoplanets, includes either four negative charges $1R^-$ like Venus and Uranus or four positive charges $1L^+$ on base of the upper construction. At orbit character one can see that six relatively negative magnetic momenta of two positive momenta μ are compensated to relatively four magnetic momenta -4μ . The strongest momentum shows into the center of the orbit. If the protos Venus and Uranus appear at its contrary partners Mercury and Jupiter, then the momenta with common denominator are standing there. This leads to the angular momentum: all the magnetically negative interlinked partners rotate into the same direction: Neptune, Saturn, Jupiter, Mercury, Earth and Mars. The magnetically positive oriented partner will be forced into the other rotation direction.

Multiple charges at Neptune, Saturn, Jupiter and Mercury lead to the repulsive splitting of distances. Otherwise, also earth and Mars increase their distances electrostatically repulsively. Contrarily, the

most upper positive charges of Neptune and Saturn still attract both protos Venus and Uranus, to extend their orbit. This way the orders of orbit radii are given consequently like we can observe them today at the planets: Neptune (strongly pressed to the outside), Uranus (attracted to the outside), Saturn (elevated over Jupiter's orbit), Jupiter (elevated), Mars (pressed to the outside by Neptune), earth (increased referred to Venus and Mercury), Venus (attracted by Jupiter, Mars, Neptune), Mercury (pressed down).

| Protoplanet | Proto-momentum (μ): | Present magnitudes (rounded by author, not sorted for distance) | | |
|----------------------------------|-----------------------------|--|--|--|
| | | Rotation period: | Inclination of orbit against ecliptic: | Inclination of equator against orbit area: |
| <i>Cosm sentence</i> | | | | |
| <i>KS 4, n=3, l=1, m=0</i> | | | | |
| Mercury | (+ μ) | + 58.6 d | 7.00° | 7.0° |
| Venus | (- μ) | -243d (R) | 3.39° | 177.4° |
| Mars | (+ μ) | +24h 37 m | 1.85° | 25.19° |
| <i>KS 3, n=2, l=1, m=0</i> | | | | |
| Jupiter | (+ μ) | + 9 h 55 m | 1.31° | 3.1° |
| Uranus | (- μ) | -17 h 14 m (r) | 0.77° | 97.92° |
| Earth | (+ μ) | +23 h 56 m | - | 23.45° |
| <i>KS 2, n=2, l=0, m=0</i> | | | | |
| Saturn | (+ μ) | +10 h 39 m | 2.49° | 26.73° |
| <i>KS 1, n=1, l=0</i> | | | | |
| Neptune (/Q 3/, p 259) | (+ μ) | +16 h 07 m | 1.77° | 28.8° |

Earth, Mars, Saturn and Neptune are in relationship because of their orbit inclination of their equators against the orbit area of 23.45° to 28.8°. Each the outer partner of a common cosm sentence reached the relatively larger angle with its initial momentum of its orbit area rotation in its given time, Neptune : Saturn = 28.8° : 26.73° and Mars : Earth = 25.19° : 23.45°. The relations of both quotients only deviates round around 0.3%: 1.0774 to 1,0742. Only the originally negatively orientated planets stronger forced by interactions, show hardly any agreement here. At all Venus and Mercury are similar with 177° (3° because of negative rotation direction) or 7° intrinsic inclination. Uranus reached 98° (82° because of negative rotation).

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° against ecliptic! At both sides of the sun equator of $\pm 8^\circ$, the sun is free of spots. Only the cosm sentences of the subprotocosms of 4 and higher gave spots to the sun remaining in the gas shell of the sun. Similarly, we observe spot structures, swirls and streams at Jupiter, but also at big outer planets.

If quantizing of sun system gave the same relations to the satellite systems then a projective behavior of about 10 to 100 would be the result after equation (2.5,1a) $F_{\text{grav}} = G_v m_i m_l / r^2$. 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. During the sun protocosm could eject its subprotocosms up to 6600 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).

Why do all the planets rotate into the same direction, 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 theoretically 1 : 1 left and right orbits had to be installed. Two protoplanets of one common orbit direction are surplus. They determined the total system running to the right direction. This way wave quanta 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. Firstly emitted satellite protos are running into the same direction around their protoplanet. But now it's possible that their proto-subsatellites are ejected into two contrary directions. During this, the first half of them is accelerated into the contrary orbit direction each for the position of the acting central body. Four of the significant Jupiter satellites Io, Europe, Ganymed and Kallisto could have ejected each two subsatellites into contrary directions. Lexica didn't give information about inclination of equator areas against some orbit plane of the satellites. Based on certain comparisons with asymmetries we mean that their protos should have similar inclination angles like earth, Mars, Saturn and Neptune next to. 20° to 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 here: Ananke, Carme, Pasiphae and Sinope with the average of -28° inclination of their orbit to the equator of Jupiter.

A protosatellite which orbit inclination tends to its protoplanetary equator against zero, emits a sub-protosatellite from its equator position with the inclination of about 27°. The inclination angle of the sub, running into a quasi-satellite orbit, would be able to be calculated from the triangle of planet-satellite-subsatellite-(planet) at straight ways. At distances of satellite-subsatellite, relatively becoming large, the inclination angle of subsatellite orbit can approximate to the emission angle. This way one can imagine how both outer subsatellite-quartets are forming themselves. The scattered smaller bodies collect themselves on a multiple number of orbits each after action of radiation of the central body. The position of the orbits is dependent on different factors. Consequently, one cannot have a fundamental comparison between the orbit positions of different systems. Asteroid orbit lies for example above the cause-orbit of Mercury, Venus, earth and Mars. Here one knows the gravitational action of Jupiter. If different gravitation relations are given, subsatellites and their subs can be found in form of dust rings in completely different relationships.

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 may be a certain quantity of small bodies, perhaps identical with Kuiper's ring. 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 **quasisatellites** because they haven't remained subsatellite. The differences of satellites are caused in their prestructure.

Triton doesn't seem to be an own first-rate satellite of Neptune. It could be an analogon to Oort's cloud ejected from a secondary collapse of protoplanet core to be a single part. Now one had to examine how far their subsatellites were active either as known smaller bodies like Proteus and Naiad or if they even had quantized fine dust into the orbits like well-known by the dust rings.

The overviews of the satellites show to their group-like order of pairs or to orders of four of two pairs. Loner come from the given structure of 2+1 or 0+1. Nevertheless of the interactions of the past, we mean here to see the electrogravitational quantizing of groups in the origin instead of a chaos.

Neptune satellites

| Name | ∅ in km | average distance in km | Orbit inclination in ° against equator of Neptune |
|----------------|--------------|------------------------------|---|
| Ring system | | 17 000 to 32 000 | 0 |
| Naiad | 50 | 48 000 | 4.7 |
| Thalassa | 80 | 50 000 | 0.2 |
| <i>Despina</i> | 180 | 52 000 | 0 |
| <i>Galatea</i> | 150 | 62 000 | 0 |
| <i>Larissa</i> | 190 | 73 600 | 0 |
| Proteus | 436 | 117 600 | 0.6 |
| Triton | 2 704 | 354 800 r | 157.3 (= - 22.7) |
| <i>Nereid</i> | 340 | 5 513 400 | highest orbit eccentricity |

(/Q 3/, p 234)

Uranus satellites

| Name | ∅ in km | average distance in km | Orbit inclination in ° against equator of Uranus |
|--------------------|--------------|------------------------------|--|
| Ring system | | 37 000 to 51 160 | ? |
| VI Cordelia | 26 | 49 770 | 0 |
| VII Ophelia | 30 | 53 790 | 0.1 |
| VIII Bianca | 42 | 59 170 | 0.2 |
| IX Cressida | 62 | 61 780 | 0 |
| X Desdemona | 54 | 62 680 | 0 |
| XI Juliet | | 84 64 350 | 0.1 |
| XII Portia | 108 | 66 090 | 0.1 |
| XIII Rosalind | 54 | 69 940 | 0.3 |
| XIV Belinda | 66 | 75 260 | 0 |
| XV Puck | 154 | 86 010 | 0.3 |
| V Miranda | 480 | 129 390 | 4.2 |
| <i>I Ariel</i> | 1 158 | 191 020 | ? |
| <i>II Umbriel</i> | 1 172 | 266 300 | 0.4 |
| <i>III Titania</i> | 1 580 | 435 910 | 0.1 |
| <i>IV Oberon</i> | 1 524 | 583 520 | 0.1 |

(/Q 3/, p 366)

Saturn satellites

| Name | ∅ in km | average distance in km | Orbit inclination in ° against equator of Saturn |
|-------------|------------|------------------------------|--|
| Ring system | | 60 330 to 483 000 | 0 |
| 1980 S 35 | 22 | 118 231 | ? |
| 1980 S 36 | 26 | 118 269 | ? |
| XVIII Pan | 20 | 133 570 | ? |
| XV Atlas | 30 | 137 670 | ? |

| | | | |
|---------------------|--------------|------------------|-------------------------------------|
| XVI Prometheus | 120 | 139 353 | 0 |
| XVII Pandora | 90 | 141 700 | 0.0 |
| XI Epimetheus | 120 | 151 422 | 0.34 |
| X Janus | 190 | 151 472 | 0.1 |
| I Mimas | 392 | 185 520 | 1.5 |
| 1981 S 12 | 10 | 185 520 | ? |
| II Enceladus | 500 | 238 020 | 0 |
| <i>III Tethys</i> | 1 030 | 294 660 | 1.86 |
| XIII Telesto | 30 | 294 660 | 0 |
| XIV Calypso | 28 | 294 660 | 0 |
| 1981 S 6 | 20 | 294 660 | 0 |
| 1981 S 10 | 15 | 350 000 | ? |
| <i>IV Dione</i> | 1 120 | 377 400 | 0.02 |
| XII Helene | 33 | 377 400 | 0.0 |
| 1981 S 7 | 20 | 377 400 | 0 |
| 1981 S 9 | 20 | 470 000 | ? |
| <i>V Rhea</i> | 1 530 | 527 040 | 0.35 |
| VI Titan | 5 150 | 1 221 830 | 0.3 especially big candidate |
| VII Hyperion | 310 | 1 481 100 | 0.4 |
| <i>VIII Iapetus</i> | 1 460 | 3 561 300 | 14.7 |
| IX Phoebe | 220 | 12 952 000 | r 177 (= -3) |

(/Q 3/, p 294)

Jupiter satellites

| Name | ∅ in km | average distance in km | orbit inclination in ° against equator of Jupiter |
|------------------------------|--------------|------------------------------|---|
| Ring next to Jupiter surface | | 71 400 to 140 000 | 0 |
| XVIII Metis | 40 | 127 960 | 5.6 |
| XV Adrastea | 20 | 128 980 | 0.8 |
| V Amalthea | 200 | 181 300 | 0.4 |
| XIV Thebe | 100 | 221 900 | 0.8 |
| <i>I Io</i> | 3 630 | 421 600 | 0.04 |
| <i>II Europe</i> | 3 138 | 670 900 | 0.47 |
| <i>III Ganymed</i> | 5 262 | 1 070 000 | 0.21 |
| <i>IV Kallisto</i> | 4 800 | 1 883 000 | 0.5 |
| XIII Leda | 16 ? | 11 094 000 | 26.1 |
| VI Himalia | 180 | 11 480 000 | 28 |
| X Lysithea | 40 ? | 11 720 000 | 29 |
| VII Elara | 80 | 11 737 000 | 24.7 |
| XII Ananke | 30 ? | 21 200 000 | R 147 (- 33) |
| XI Carme | 44 ? | 22 600 000 | R 163 (- 17) |
| VIII Pasiphae | 70 ? | 23 500 000 | R 145 (- 35) |
| IX Sinope | 40 ? | 23 700 000 | R 153 (- 27) |

(/Q 3/, p 163)

Satellite of earth Luna can be an analogon to the biggest Saturn satellite VI Titan with diameter of 5150 km and average distance of 1.2 million km referred to its 3476.4 km diameter and its average distance to the earth center of 384 403 km. It may be possible because proto-Saturn and protoearth came from two different but similar asymmetry systems 0+1 or 2+1. But also this Luna could be a satellite from Venus or from Mercury caught by protoearth.

Protosatellites of inner planets were scattered. The initial sun wind gave its supply. Mostly the protosatellites were connecting themselves in asteroid ring. The other objects are still flying in orbits of small planets. We calculate with the assumption that the four inner protoplanets had a satellite system of 4 bodies in the beginning, then about 16 satellites and their subsystems had to be scattered. If we think at about 10^{22} kg for each gas body without gas maximum - about one tenth of the mass of the Saturn satellite Titan (1.35×10^{23} kg) - then the total mass of the sixteen would amount 1.6×10^{23} kg. Subtracting those three satellite masses of Luna and of two Mars satellites, Deimos and Phobos (for about 7.35×10^{22} kg), the remaining mass of about maximally 9×10^{22} kg could be scattered. During this event the gas was escaping, only a few SN dust could be concentrated at them. In asteroid ring and externally of it, the total mass of planetoids should have only a few above round 10^{-4} of earth's masse (see above), therefore at 6×10^{20} kg. There are enough quanta, to search and to find the inner satellite masses even as comets or problematic satellites or even as Pluto-Charon in different areas than in asteroid ring. Duo Pluto-Charon crosses Neptune's orbit at its eccentric orbit by which our assumption is confirmed. (/Q 3/, pp 65, 125, 163, 174, 230, 254)

Unfortunately, the programmed process of distribution cannot be followed to the individual states why a multiple number of interactions have appeared. Essentially, we can see that each system has a certain similarity. The analogy to the inner protosatellites don't seem to exist at planets of Jupiter classification. Obviously, here the similarity protoplanetary surfaces is based coming from the energy of protosatellites smaller in orders of magnitudes. Following this classification of protosatellites certainly fell back to the central body and left some surface swirls (spots). Those subsatellites, perhaps remained in quasisatellite orbit, seem to be rather mutilated, like one knows it of a few satellites next to their planets. The dust rings as analoga to the asteroid ring are externally lined by satellites with analogy conclusion to planets of Jupiter classification. We find mostly four of them in every system - here bold and italic signs in tables.

Possibility of another asymmetry system 0+1 at subprotocosms for protosatellites is given. Therefore an especially mass-rich satellite can be formed like Titan (Saturn, 2+1) and Luna (earth, 2+1). From present point of view, the Neptune satellite Triton can be explained, because it is retrograde running. Additionally it has a higher orbit inclination. A secondary collapse of proto-Neptune was possible in its initial phase making this big body. Logic comes from the thought that proto-Neptune was the first and the heaviest protoplanet which had enough energy for such a process.

Protos of Jupiter and Uranus were part 2 of **2+1**, so also Mercury and Venus. At both last called planets it's not possible to recognize similarity of satellites. Jupiter and Uranus have each four satellites of a certain heavy type without any especially heavy satellite. Satellites of Jupiter lay more in the proximity of planet's surface than in Uranus orbit. Gas quantities caught by proto-Jupiter led to the attraction of inner satellites of Jupiter after initially the same installation of protos of Jupiter and Uranus and their satellite systems. Therefore below the orbits of Io, Europe, Ganymed and Kallisto hardly rest bodies remained. Its four heavy protosatellites also profited of gas maximum. Following the four analogous protosatellites of Uranus had to stay lighter. These four heavy types of protosatellites of both protoplanets emitted each two subsatellites into differently and strongly inclined orbits. In the beginning of their existence protoplanets had a few mass. Two times four subsatellites got at a far distance relatively. In this time Proto-Jupiter and its protosatellites enriched themselves with gas essentially. So the eight subsatellites were forced into an orbit above of the four. But Uranus shows us nothing of the expected two quartets above the orbits of Ariel, Umbriel, Titania and Oberon. They could not be attracted by the unchanged low mass of proto-Uranus. Their subsatellites are certainly running at any orbit being small planets similarly to Jupiter's group. Further research is the task of astronomers. We cannot go on working about the multiple number of small planets and comets in this fundamental theory.

4.10.3.3. Collapse types

What type of supernova should have produced the star-protocosm PK_S? We call it **SN-Type III**: Hot and blue stars have a collapse. The reason for it is not only the „completely consumed" fusion combustible like assumed today. This is a concomitant: living beings have eaten what ever was given there - the change is near. This SN-Type III (shortly SN III) exists since the beginning of primary protocosmic installation turn, but to this time it was a **superlative SN III**. The cause of the end of this type is called by us **resonant collapse of the star core**. There the cores of the bodies have their collapses supported by radiation:

| | | | |
|----------------------------|----------------------------|--------------------------------------|---|
| 1. Blue superstars | (quasars) | 10 ⁵ ... 10 ¹³ | m |
| 2. Blue super giant stars | (Seyfert's galaxy cores) | 100 ... 10 ⁵ | m |
| 3. Blue hyper giants | (for example SN 1987 A) | 10 ... 99 | m |
| 4. Blue giant stars | (SN III and SN II) | 4 ... 9 | m |
| 5. Young, hot protostars | (invisible shelled in gas) | 0.1 ... 3 | m |
| 6. Young, hot protoplanets | (invisible shelled in gas) | 10 ⁻⁵ ... 0.09 | m |

m = sun mass (1.99 × 10³⁰ kg).

Blue sub giants would just collapse during a SN II ejecting less energy. Because the probability of resonance is important, hyper giants, giants, sub giants, dwarfs and sub-dwarfs can live without SN. So they can really get "old and infirm": fusion combustible is consumed (red dwarfs to red giants, red hyper giants). They inflate into red stars of corresponding magnitude classifications. Later they are falling to the state of a small star, for example to a white dwarf. During contraction red giants can have a collapse with support of radiation heating up before (becoming blue similar to SN 1987 A). Classifications of white dwarfs on the one hand as death caused by infirmity and the classifications of pulsars on the other hand as another living state of a star (mother state) certainly are the last limbs of a chain of changes by supernovae (III, II, I). Here we called the change chain the **transformation law of matter**:

- It decreases the mass of objects.
- It decreases their radiation quantity for each installation time period.
- It increases their life time and stability.
- It increases the enrichment of heavy chemical elements.
- It decreases the flying time of that secondary protocosm coming from SN for each new SN relatively to the primary protocosm, so that the SN-dust and gas fronts reach and feed the new star or sun systems which were arisen from such protocosms.

In HRD (HERZSPRUNG-RUSSELL-diagram) we still find only one so-called main turn caused by the kind of collecting information for this diagram from present view into this cosm. In the past of installation the parallel shift of this main turn of HRD would be noticed downwards to the red stars especially to the red hyper giants. Additionally the main turn upwards in HRD finishes at blue hyper giants, although in past there were significantly heavier blue giant stars in form of blue super giants. Their classifications are extinct in the process of matter transformation.

Along the view into the past, quasars and Seyfert's galaxies reflect the drawing of the SN III. Star systems also were discovered in the spectra of red shift of 4 to 6. This means: superstars of the first ejections from primary protocosms made the start of system in which the frequency of SN III was very high, because the life time of superstars was the ever smallest. So protogalaxies were formed with high star formation rate, in which star classifications existed for a short time, extinct today.

We must distinguish between the *opening of a sun protocosm* and the *supernova of a star*. Both events are radiating extremely and essentially each after their magnitude order. One cannot observe a deviating form of a radiating sphere for SN. But during opening processes of protocosms processes of ejecting matter play their essential role, when the matter comes out of the surface from smaller and concentrated areas in parity. As long as equal installations themselves eject very big energies - like at primary protocosms - they are significant but not more striking because short-living and mostly covered of gas. Instead of them, one can see better the secondary effects of low-energy systems. One gives them the attention.