of its total internal mass M_o. Conseqently, we have to take notice of the installation's graduation "i" in the shape of the respective mass differences Δm_i between the protocosm resting masses $m_{oPK1\text{-}u)}$ of different levels:

$$\Delta m_i = m_{o(PKu)} - m_{o(PKu\text{-}1)} \; . \qquad (2.13.1,31)$$

Differently given, they decide about the type of cosm. Particles of almost the same mass and charge are only then members of the same type, if they are totally identical with their inside structure – this means genetically identical. This only hits that condition, if it is the same type of programming over the shape of protocosms – like the type of baryons derived by the proton or the type of leptons derived by the shown ones with those conservation laws. Protons and electrons seems to be the clones of one single type of particles of this species, so of one single proton and electron as also neutrino.

If similarities should appear because of a temporary agreement in the charge and the mass, then we cannot interpret it as a type-relationship. The divergence of energies at a quantity of different particles does not lead then to one common "primeval particle" as an apparently "initial unity of structure" but only to a multiple number of unstable particle states, which are similar but in these things the types (species) remain totally identical, because they are programmed structurally and independently:

> In the high-energetic initial unity, the particle types as agreed are divergently similar by their properties, but they have never been one common object.

This cognition has legal value. It is able for a generalization. And it may have importance and correcting influence of the observation of the so-called "evolution" of organic life.

2.13.2. Quantum Numbers

From almost every section of our theory, we see the *problem of spin*. Here we want to try to connect the fathoms to one road junction. We define:

The **SPIN** serves as an equivalent concept of the intrinsic **angular momentum** or of the **effect** of a particle. It is led from the existence of *electromagnetic momentum* of the particle. According to our theory, there we expect the **electromagnetic momentum** and/ or the **gravitomagnetic momentum**.

The spin is always caused by relative **orbit magnetic momentum** $\boldsymbol{I}_B$ of an electric charge e_o or a gravitational mass m_o within its receptacle cosm. That orbit's magnetic momentum is part of a hierarchic order of orbit's angular momenta. Each projection of a sub-effect onto a higher hierarchical plane is named "intrinsic momentum" or "intrinsic angular momentum", if it ever exist as such a one.

Our theory knows gravitational and electric effects as explained in section 2.7. We therefore can split up the spin into both causal fields:

1st the **gravitomagnetic effect quantum ħ** = $1.05458866 \times 10^{-34}$ Js as *gravitomagnetic spin* (g. m. spin or g-spin or Planck's effect quantum);

2nd the **electromagnetic effect quantum** $\bar{\mu} = 9.08773171 \times 10^{-45}$ Am² as *electromagnetic spin* (e. m. spin or q-spin).

Mathematically, we understand the spin as a quantized magnitude:

$h = m \, v \, u$	$\hbar = m \, v \, R$	$u = 2\pi \, R$
$\mu = e \, v \, u$	$\bar{\mu} = e \, v \, R$	(cf. section 2.12., eq. (2.12,8-14)).

If its movement magnitude as the amplitude R or the wave length $u = \lambda$ will be *cut off* the angular momentum, than one gets the gravitomagnetic or the electromagnetic **momentum of the wavequantum**:

$$p_{g.\,m.} = m\,v \qquad p_{e.\,m.} = e\,v \qquad \text{(cf. eq. (2.4,11))}. \qquad (2.13.2,1)$$

Well, momentum analyses are subject to the spin-opinion.

Projecting a cosm by the integer spin n = 1 we call a **primary spin**. If the spin in multiple numbers results from the movement of an elementary cosm inside its receptacle cosm less than vacuum light velocity, then we classify it as ***secondary spin***.

The coupling of g. m. and e. m. effect quanta cannot fundamentally be seen parallelly as proved in eq. (3.2.1,20). **Electromechanic parallelism** seems to be a remnant of classical physics, which was caused most on empirical values. Macroscopic observation of electromechanic parallelism of effects led to such an experience that a charged body rotates producing the angular momentum and also the magnetic field with inseparable necessity at the same time. This observation is caused by the small difference of the integer number n relatively to the g. m. spin of about $n = 10^{50}$ to 10^{80} in relationship to the e. m. spin of about $n = 10^{70}$ to 10^{100}. Therefore, transitions of the energy steps are felt as apparently analogous signals in the macroscopic associated field.

In the proximity of 1ħ for example in the movement of the electron already 10^{21} $\bar{\mu}$ can be generated. Here, the g. m. effect quantum ħ gives the clearly discreet character of the signal while the e. m. effect quantum $\bar{\mu}$ makes possible the adaption of apparent analogous signal transitions. Deviations of the classical parallelism are working, which are as follows:

- gyromagnetic momenta from the electron to the nucleons;
- adjusting of spectral levels in the electron shells of atoms;
- adjusting of spectral levels of the strong interaction in the spheres of nuclei.

Solutions of high precision were given today by the statistical “Quantum Theories” of electromagnetism beginning by Schrödinger, extending by Dirac and completing by the “Quantum Electrodynamics, QED”.

Corresponding to the distinction of fields given here with electromagnetism and gravitomagnetism, we must lead back the problem area of ***movement*** of *rotation* and the problem of *rotation* onto the general concept of *angular momentum* while we divide it into both following features:

1. **Primary Angular Momentum $\boldsymbol{l}_p$ = Cosm Spin**

   (cf. (2.12,4), (2.12,6) and (2.12,19))
   It is created from the projection of the external oscillating movement of the receptacle cosm. The oscillation certainly is a function of isolated relationships. But this influence doesn’t work to the outside concretely. Generally, only the fact is externally acting that there a spacetime is oscillating and forming a new single Planck-quantum $h_{(1)}$ to reflect this effect.

That cosm spin is a *relativistic dipole,* because cosm oscillation is running with vacuum light velocity. Corresponding to this, it connects all the other cosms, standing beside it ideally and indissolubly. So the cosm spin is forming the positive or negative charge of a cosm in gravitational or also electric feature. An observer can see it from all sides, but he cannot change the *primary connections* of finitely high forces of cosms - invincibly by limit values - over the connections of the vacuum bodies also invincibly bound. The sum of cosm spin means the external compact mass of all cosms taking part: $\Sigma\, \boldsymbol{l}_p \Rightarrow m_{compact}$. All cosm spins are forming the primary field and its invincible direction in vacuum. Each movement changes that mass magnitude relatively.

In this respect, from the point of view of the observer, the **cosm spin** remains a **monopolar spin**. This also means that the present specifications made by physics of the apparent “general spin" as cosm spin in positive or negative order were arbitrary, because of the electromagnetic order mistake (such a kind of arbitrariness as one could say to our type of matter antimatter instead of coinomatter,

later we would change the name from antimatter into coinomatter). Physics really means the wavequantum spin in the form of a really electric property of particles without that it would be able to tell the cause of it consisting in the absolute reference system of cosms – in stationary vacuum.

Cosm spin is divided into the gravitational primary spin at purely gravitational cosms (g-spin) and into the electric primary spin at purely electric cosms – the free charges - (q-spin). All cosms of gravitational as well as electric origin have the primary boson spin in $|\hbar| \times s_p = \boldsymbol{\hbar}_{(1)}$ measured (s_p as primary spin quantum number; $s_p = \pm 1$: boson). For the primary q-spin, the calculation can be referred on $|\bar{\mu}| \times s_p$. Electrogravitational cosms have the gravitational primary spin but no electric primary spin but then an electric secondary spin I_s, which is a wavequantum spin.

2. Secondary Angular Momentum I_B = Wavequantum Spin

(cf. (2.12,7), (2.12,8) and (2.12,16))
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 intrinsic 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 as also its gravitational orbit spin I_B as well as its electrogravitational orbit spin complex I_B – because it carries an electromagnetic charge – are adjusted onto the field directions of its environment.

Remark! The concept of the momentum causes the idea of an uncompleted something, which claim of existence seems to be doubtful: the wave energy includes the momentum $E_w = p \times c$. If we detect the angular momentum, than that momentum isn’t able to be described as such a one but a completely new physical magnitude that includes the momentum $h = p \times 2\pi \times R_w$. In our theory, the momentum always merges in rotation movements.

Each external adjusting of velocity also works out isolated conditions of protocosmic movements along the vacuum. An all over isotropic delivering of protocosms from the main emphasis of the receptacle cosm is just possible in rest to the vacuum. Each external movement change forces the isolated spatial shape of spherical oscillation to take a contrary deformation to the movement direction of the cosm, which maximally can diverge to the horizon $r_{o(GK)}$ of the receptacle cosm, because the receptacle cosm also diverges only to vacuum light velocity with its intrinsic velocity. 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 body. An unbelievable phenomenon results. An externally light mass m_o with its outer momentum (3.2.4,1) transports an internally gigantic mass M_o with that inner momentum (3.2.4,2) at the same time.

The force couplings of wavequantum spins I_B are reversible and able to separate into both sides of those poles with their non-relativistic dipole behavior. That wavequantum spin is measured by $\pm\hbar \times \mathbf{n}$ or also calculated of electric wavequanta by $\pm\bar{\mu} \times \mathbf{n}$ (**n** as *main quantum number*; integer number). From **n** = 2 the *secondary quantum number* ***l*** and the *magnetic quantum number* **m** appear (today without having a solution of 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* **j** of coupling of e. m. spin and orbit spin. Instead of wavequantum spin and *orbit angular momentum,* we use a shorter concept of the *orbit spin* in the following text. We distinguish the quantum numbers into these features as follows:

1st Primary spin quantum number $\mathbf{s_P} = \pm 1$ as absolutum being of subordinate importance of the isolated quantizing but essential of the sum of electric and gravitational resting 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 of electromagnetic momenta $\bar{\mu}_B$ of a particle, which is made most as half-number components of an integer number: $\mathbf{s} = \pm ½ ...$, the gravitomagnetic momentum $l_t = ½\hbar$ is behaving analogously (***wavequantum number*** **s**, Pauli's 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**,

(Remark: between 1st and 2nd one has tried to make a connection explaining Stern-Gerlach experiment and Hamilton's function, which seems to be unreal.)

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

s -- Secondary spin $\mathbf{s} = 0, \pm ½, \pm 1, \pm 3/2, ...$ extreme
of the electromagnetic order (electromagnetic momentum $\bar{\mu}_{½}$ of the particle itself);

t -- Tertiary spin $\mathbf{t} = 0, \pm ½,$
the tertiary spin causes the **gravitomagnetic order** in $\hbar_{½}$,

n -- Number of main level: $\mathbf{n} = 1, 2, 3, 4, ... , n$
of electromagnetic and of gravitomagnetic order,

l -- Number of secondary level: $\mathbf{l} = 0, 1, 2, 3, ... , (\mathbf{n} - 1)$
of electromagnetic and of gravitomagnetic order,

j -- Inner quantum number of 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: $\mathbf{j} = \mathbf{s} + \mathbf{l}$
of electromagnetic and of gravitomagnetic order,

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

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

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

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

ζ is the angle between the vector of the main level wavequantum ("main field direction" ***B***) and the respective vector of the second level wavequantum (orbit angular momentum ***l***):

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

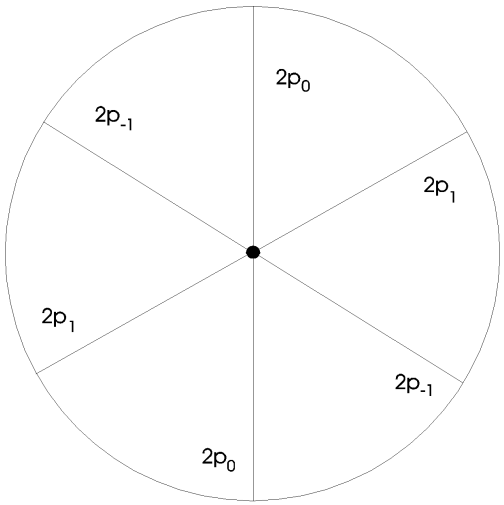
For l = 0, the angle cannot be defined. We consequently think that there is no angle. In this respect, we define all the levels, which value gets l = 0 positioned in the same plane. For example, those are the sizes of 1s, 2s, $2p_0$, 3s, $3p_0$, $3d_0$ etc.

In opposite of the present opinion of the distribution by spatial angles we noticed the following conclusions:

In our system of protocosms, magnets of parity orbits are turning themselves on the perimeter of a tube line thought as being circular. At a cosm, the tube radius amplitudically has the amount of $½R_o$. Its perimeter on the middle line takes πR_o. In a protocosm, the divergence is valid therefore $>½R_{o(PK)}$ or also $> \pi R_{o(PK)}$. 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.

The symmetry systems 2+2 will be supported by the electric force. Only the asymmetry systems 2+1 and 1+0 form the unusual feature. While both 2 are attracting themselves contrarily and then they can run just as on a circular arc, the 1 is moving itself in the electromagnetically neutral state. In this respect, it ejects especially into spiral arc. Resulting, protocosms are opened asymmetrically, too. The simple system 1 has one systematic inclination of the equator to the orbit of more than 22,5° in the state of transformation. We guess at the start of about 23°, which are increasing while running away by repulsion. One should compare the inclinations of the four planets Neptune, Saturn, Mars and Earth in section 4.10.3. The double systems 2 take multiple numbers of inclination angles dependent on their rotation around their common gravity center and revolved to the countermove of rotation.

Illustration 2.13.2;1: Orbit's Areas in 2p



Those spins $\mathbf{s_p}$ or **s** and **t** are qualitative axioms although their magnitudes, the rest mass m_o as well as the rest charge Q as primary spin or wave masse m_w and the wave charge e_w, naturally are quantized magnitudes. Consequently, we mean to accept Pauli's principle by setting different quantities of mass of each spin repetitions. The newly appearing of the primary spins **g** in the next cosm sentence is connected to heavier mass of the protocosms rotating there.

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

$$N_{PK} = 4\ \mathbf{n}^2. \qquad (2.13.2,6)$$

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

$$N_e = 2\ \mathbf{n}^2. \qquad (2.13.2,7)$$

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

$$Z_{PK} = 4\ (1^2 + 2^2 + 3^3 + 4^2 + ... + \mathbf{n}^2) \qquad (2.13.2,8)$$

$Z_e = 2\ (1^2 + 2^2 + 3^3 + 4^2 + ... + \mathbf{n}^2)$ in electron shell.

Currently, spin orders were chosen by observer's point of view, which are senseless for the primary orientation in a primary field. Only in a secondary field, wavequantum orientations to each other have importance. For primary momenta, we define in addition as follows:

Gravitation:	Electrition:
g = + gravitational	$q = + e_o$
$\bar{g}$ = - gravitational	$\bar{q} = - e_o$.

The rotation of a cosm (as a primary dipole, primary quantum, apparent monopole) is forming the wavequantum (secondary dipole):

1st When a **positive something rotates to the right** then a positive vector follows forwards into observer direction and a negative one backwards (dipole). That vector shows into observer's direction; but it consists of both vectors of equal magnitude in natural sum on one effect line.

2nd When a **negative something rotates to the left** then a positive vector follows forewards and a negative one backwards (dipole again). This vector shows into observer's direction, too; it also consists of both vectors of equal magnitude in their natural sum on one effect line.

Connecting the movement of gravitational charge (g-load) and of electric charge (q-load), the *electromechanic parallelism* (now as **electrogravitational parallelism**) follows always if both get a forcing cause of common movement, because it was historically created this way:

The g-spin and the q-spin have the same sign in the same relationship.

The force coupling of g-wavequanta or g-spins forms a parallel state (symmetry); the coupling of q-wavequanta or q-spins forms an antiparallel state (antisymmetry). Referred conservation of momentum and *angular momentum as orbit angular momentum,* the consequences follow:

I. Coinomass against coinomass (positive gravitation):

Two particles are pushed to each other.

shock + antishock or	turn + antiturn
$\rightarrow\leftarrow$	
$+p + (-p) = 0;$	$\hbar_{(n)} - \hbar_{(n)} = 0$

II. Antimass against antimass (negative gravitation):

Two antiparticles are pushed to each other.

antiantishock + antishock or (shock)	antiantiturn + antiturn (turn)
$\rightarrow\leftarrow$	
$+p + (-p) = 0;$	$\hbar_{(n)} - \hbar_{(n)} = 0$

The left turned to the left is equal to the right turned to the right.

III. Coinomass against antimass:

a) A particle hits an antiparticle (base of momentum doubling).

shock + antiantishock or	turn + antiantiturn
$\rightarrow\rightarrow$	
$+p + p = 2p;$	$+\hbar_{(n)} + \hbar_{(n)} = 2\hbar_{(n)}$

b) A gravitational particle comes together with a relatively resting antiparticle (base of annihilation at electric attraction condition).

shock + antishock or	turn + antiturn
$\rightarrow\leftarrow$	
$+p - p = 0;$	$+\hbar_{(n)} - \hbar_{(n)} = 0.$

Momentum and angular momentum are traced by the vectorial velocity. *Primary spin* of the coinomass forms the correct inverse of the primary spin of antimass.

I. Coinomass m: $+\hbar$ II. Antimass $\bar{m}$: $-\hbar$.

Coinomass and antimass repel each other purely gravitationally. The contrary state has to be valid for the orbit angular momentum.

2.13.3. Quantizing of Particles

At first, we look at the quantized building of the electrogravitational cosm. Its mass body of the central elongation masse M forces the protocosm masses $m_{o(PK)}$ to be curved gravitationally, although the e. m. orientation is giving an order to this space:

	INNER ORBIT		OUTER:	$I_p = 0 \times \hbar_{(1)}$, $I_s = 0 \times \bar{\mu}_{½}$ $I_t = 0 \times ½\hbar$
1st quadrupole	PB 1 L	$-\hbar_p^+$	$-\bar{\mu}_{½}$	It is an undisturbed state.
in first cosm sentence	PB 2 R	$+\hbar_p^-$	$-\bar{\mu}_{½}$	
2nd quadrupole	PB 1 R	$+\hbar_p^+$	$+\bar{\mu}_{½}$	
	PB 2 L	$-\hbar_p^-$	$+\bar{\mu}_{½}$	

2nd cosm sentence till nth cosm sentence repetition of the first cosm sentence
including all cosm momenta till the mass M_o has come together. The gravitational orientation of the inner orbit is also the rotation direction of gravitational mass of protocosm at the same process. If a protocosm is missing in KS1 in the parity orbits PB 1, 2 then that protocosm, which determines the asymmetry also determines the sign of the e. m. momentum of cosm. When inside the cosm sentences all the places are filled than no momentum can result. More missing positions are programming that cosm on multiple momenta like less than two times $\bar{\mu}_{½}$ or less than three times $½\bar{\mu}$. The remaining part works as electromagnetically almost compensated and gravitationally additional mass block.

If one had to expect only *three* isolated particles (there are only three wavequanta of electric interaction and therefore a secondary half-spin of $I_s = \pm\bar{\mu}_{½}$ again) like the quarks theory practice it with its ignoring of the real “quanta", say **cosms**, furthermore we had to make only the *unreal model tricks* with the *third charge conception* and the *color charge conception*.

Consequently, we systemize the first cosm sentence of an electrogravitational cosm of the above called example of asymmetry 2+1 with the primary spin $+2x½\hbar_{(1)}$, on a double puls in which the protocosms (PK) appear in the following systematics, L-counterclockwise, R-clockwise:

	INNER:	OUTER:	$I_p = ½\ \hbar_{(1)}$, $I_s = \bar{\mu}_{½}$ $I_t = ½\ \hbar$
1st quadrupole	PB 1 L: (PK_L^+)	( )	
in first cosm sentence	PB 2 R: PK_R^-	$-\bar{\mu}_{½}$	

2nd quadrupole	PB 1 R: PK_R^+	$+\bar{\mu}_{½}$
	PB 2 L: PK_L^-	$+\bar{\mu}_{½}$ ...

In the first cosm sentence we get the **asymmetry system 2+1**. From the second cosm sentence the parity is given in the **symmetry system 2+2**.

If we only had **anti**protocosms, which would rotate with the *same rotary directions of orbit* L and R like shown in the above called example and with reversed charges then the outer cosm momentum would result to $I_p = -½\hbar_{(1)}$ (inside the negative mass is working), the electric magnetic momentum would be $I_s = -\bar{\mu}_{½}$. When we would make a coino and such an anticosm congruent because of their electric attraction from a reference observer position, then the cosm momenta are able to be compensated. In addition the magnetic momenta of contrary nature are totally able to be compensated. **Essential** is here that this system does not allow mirror symmetry. Annihilating pairs come together externally with compensation of their spin and must really annihilate with their isolated matter on their orbits in relative rest to each other. Certainly, here is the cause that physics in vain currently looked for mirror symmetries.

Both features are built with electric charges of protocosms by which electric wavequanta and electric charge sums or differences are resulting. We take the condition watching the first construction as electrogravitationally positive cosm and the second construction as electrogravitationally negative cosm (as electrogravitational anticosm). They carry the necessary quality of relative congruence of isolated structure. When bringing congruence to both with their isolated structures, then all the isolated protocosms and antiprotocosms are meeting for annihilation in relative rest at the inside of the cosm-unit by what the gravitational and negatively gravitational inner cosms are binding to gravitational and electrical vacuum that transfers their special photon energies $E_{w\gamma}$ as interacting electromagnetism. The simplified isolated quantizing we symbolize as seen below. There are:

KS - number of the cosm sentence that content reflects each one fill;
QN - quadrupole number;

g - positive or negative mass of elementary cosm, together taking part at isolated mass, addition of signs is senseless – it only leads to isolated masses; externally its movement projection is simply valid as mass or antimass (gravitational quantum number, QZ); The quantity is decisive because mass charges are not elementary there as electric charges do.

$\mathbf{I_B}$ - Internal *gravitational* wavequantum of different protocosm in form of orbit momentum (gravitomagnetic quantizing) in $\pm½1\hbar$; (gravitational wavequantum number, WQZ); symbol B;

e - electrically positive or negative elementary charge $\pm e_o$ of the observed protocosm; internally and externally observable, addition of signs is full of sense (electric quantum number, QZ);

$\mathbf{I_s}$ - isolated as well as external *electric* wavequantum of protocosm orbit as electromagnetic momentum (electromagnetic quantizing); addition of signs is full of sense (electric wavequantum number, WQZ); each arbitrary I_s causes half an I_t;

$\mathbf{I_t}$ - external *gravitational* wavequantum of external mass turning in $\pm½\hbar$; addition without sense leading of a positive or negative half-spin I_t from secondary spin I_s, which is turning the mass itself. I_t is secondarily moved I_B.

( ) - non-filled protocosm positions (blanks):

Order in mass block of M:

- Two pairs of parity orbits 1R, 2R; 1L, 2L, are running in the same rotation radius $R_{rot(n,m)}$.
- Each parity orbit 1R or 2R or 1L or 2L is giving an electrogravitational dipole. Two of the dipoles, for example 1R and 1L, are giving that pair of parity orbit, which we named quadrupole:
- Two quadrupoles form a cosm sentence.
- Those two pairs of parity orbits lay above each other so that they are running together in the

semicircle of the four orbits directly: $1L^+$ onto $2R^-$ and $1R^+$ onto $2L^-$. The contrary electric charges supply the attraction. Each parity orbit gets an electromagnet, which has a contrary pole against the other orbit – that is the condition for the spatial distribution of the orbits.
- The filling turn of cosm sentences gets its law with *anti-Hund's* rule;
- Each cosm sentence the exclusion principle for wavequanta is valid.
  In one cosm sentence all the quantum and wavequantum numbers are different.

… Each cosm sentence has the same structure corresponding to its quantum numbers….

… This turn of n stands on the head like also Hund's rule, which is well-known from the areas of atomic shell. Here firstly an area of main level will be filled, for example, $2s^2$ after filling of $1s^2$. Then the next secondary level is following with each electron, for example, $2p_x^1$, $2p_y^1$, $2p_z^1$. Finally, these secondary levels are paired starting from the lower energy upwards to higher energies. In cosms, this energy increase is running from the amplitude to the inside, this means reversed to electron shell of an atom. Starting calculation from the gravity center of the cosm R = 0, one had to begin with a multiple number of n and would reach the level n = 1 on the amplitude of that cosm. In this thinking reversed to the electron shell, an area of the main level **n** will be filled in the end if it is the smaller one of the number; for example, 2s after $3s^4$; 1s is the last. In this respect, firstly those secondary levels are double paired, which are given to each **n** – fourfold filled, for example $2p_0^4$ without filling of $2p_{+1/-1}$. So it may happen that in 2s still protocosms are missing. Because of the installation of the receptacle cosm by anticollapse, 1s must already be given, where also the protocosms are missing (see proton and neutron). Therefore here this *Anti-Hund's Rule* is valid:

> All levels must be given. Filling of them only can have less missing. Then the first levels are filled in the end.

Mass block, not mirror symmetric, but reversible from the other point of view of observation:

KS	QN	QZ, WQZ
u n l m		g e s t
1	1 L	+ + − −
1s	1 R	+ − − +
	2 R	+ + + +
	2 L	+ − + −
2	1 L	+ + − −
2s	1 R	+ − − +
	2 R	+ + + +
	2 L	+ − + −
3 **$2p_0$**	...	
4 **$2p_{+1}$**	...	
5 **$2p_{-1}$**	...	
Σ		+ 0 0 0
	=	+g $0\bar{\mu}_{/2}$,0ħ/2

KS	QN	QZ, WQZ
u n l m		g e s t
1	1 R	+ + + +
1s	1 L	+ − + −
	2 L	+ + − −
	2 R	+ − − +
2	1 R	+ + + +
2s	1 L	+ − + −
	2 L	+ + − −
	2 R	+ − − +
3 **$2p_0$**	...	
4 **$2p_{+1}$**	...	
5 **$2p_{-1}$**	...	
Σ		+ 0 0 0
	=	+g $0\bar{\mu}_{/2}$,0ħ/2

The antimass block of an anticosm (antiparticle) starts as shown by inversion:

KS	QN	QZ, WQZ
u n l m		g B e s t
1	1 L	− − − + +
1s	1 R	− + + + −
	2 R	− + − − −
	2 L	− − + − +

KS	QN	QZ, WQZ
u n l m		g B e s t
1	1 R	− + − − −
1s	1 L	− − + − +
	2 L	− − − + +
	2 R	− + + + −

One recognizes the result that each of the cosm level **n** = 1, **l** = 0 can show one missing protocosm. The secondary levels at first only get a quadrupole from L and R. Then they are filled with further quadrupoles from **m** = -**l** to **m** = +**l**, or the last of R = 0 or the first of R = R_o only remains equally as at proton. The next table shows the order of areas of cosm sentences better. Each secondary level n, l forces of a new mass index x.

In every cosm sentence, two angular momentum pairs of protocosms are given so-called two pairs of quadrupoles of respective wavequanta. The main and the secondary levels will be determined by the quantum number of external protocosm mass while inside the secondary level order only the spatial position **m** is actually working of a determined main level as wavequantum number. The trial of mirroring of a particle only changes the orientation of direction R and L but it does not change the primary spin s_P. Therefore the charges also do not change but the electric secondary spins $\mathbf{l_s}$ ($\bar{\mu}_{½}$) do it. Mirror symmetry does not exist here! Instead of this state we find a congruence of movement direction, which is laid upon.

We are explaining the mass index in that following table:

Level			KS-no.		m_x		
n	**l**	Area	**u**	**m**	Index x-no.		
1	*0*	*s*	*1*	*0*	*1*	*m_1 min.*	*M_1 max.*
2	**0**	**s**	**2**	**0**	**2**	**m_2 > m_1**	$M_1 > M_2$
2	***1***	***p***	***3***	***0***	***3***	***m_3 > m_2***	$M_2 > M_3$
2	***1***	***p***	***4***	***+1***	***3***	***etc.***	
2	***1***	***p***	***5***	***-1***	***3***		
3	0	s	6	0	4	$m_4 > m_3$	
3	1	p	7	0	5	$m_5 > m_4$	
3	1	p	8	+1	5		
3	1	p	9	-1	5		
3	2	d	10	0	6	$m_6 > m_5$	
3	2	d	11	+2	6		
3	2	d	12	+1	6		
3	2	d	13	-1	6		
3	2	d	14	-2	6 ...		

Cosm name: **Electron (e^-)**

KS	QN	QZ, WQZ
u n l m		g e s t
1	1 L	(+) (+) (−)
1s	**1 R**	**+ − −**
	2 R	(+) (+) (+)
	2 L	(+) (−) (+)
2	1 L	+ + −
2s	1 R	+ − −
	2 R	+ + +
	2 L	+ − + ...
Σ		+ −1 −½ +½

Asymmetry system 1+0
3PB are empty. One single PB in 1R
is filled with one negative PK_e^-.
This is the free wander-PK with 1,0011596 $\bar{\mu}_B$!

Symmetry system 2+2
As start of the mass block or the **Electron-body** down to the innumerable cosm sentences.

= +g $-e_o$; l_s > - ½$\bar{\mu}_{(e)}$ l_t = +½ħ

Because spin l_s essentially determines spins l_t we leave off it in the table above. The electron is reversible. So the point of view changes its magnetic momentum and its key signature.

Cosm name: **Proton (p^+)**, (cf. section 4.8.)

-1		
KS	QN	QZ, WQZ
u n l m		g B e s t
1	1 L	(+) (−) (+) (−)
1s	1 R	(+) (+) (−) (−)
	2 R	+ + "+" + +
	2 L	+ − "−" + −
2	1 L	+ − "+" − −
2s	1 R	(+) (+) (−) (−)
	2 R	+ + "+" + +
	2 L	+ − "−" + −...
Σ		+ +1 +1 +2.8 −½

Symmetry 2+0

+1.00013 $\bar{\mu}_{½(p)}$; "+" positive charge cloud,

+1.00013 $\bar{\mu}_{½(p)}$; " -" negative charge cloud,

mutually shielded.

Asymmetry 3+0

+0.7924 $\bar{\mu}_{½(p)}$; "+" positive charge cloud,

= +g +ħ +e_o $I_s = 2.7927 \times \bar{\mu}_{½(p)}$ I_t = -½ħ

In the second quadrupole of the second cosm sentence, the positive surplus charge is working. Two equal charges are not compensated totally in the first cosm sentence. So we see that illustration, which was drawn by Hofstadter when protons collided with smaller energies (cf. section 4.5.): at first a commonly positive potential that is followed by a negative potential and which is finally drawing a hard positive potential close to 2×10^{-16} m. (/Q 7a/, page 208f)

Unstable particle: **Neutron (n)**

That electron-protocosm in proton, which forms the neutron comes into the second cosm sentence where it has to be after quantizing. But its mass magnitude neither looks right for the first nor the second cosm sentence. So it rather moves higher but not as high as the first protocosms of protons. Momentum is just estimated (cf. section 4.8.)

KS	QN	QZ, WQZ
u n l m		g e s t
1	1 L	(+) (+) (−) leer
1s	1 R	δ− 0 0 $\bar{\nu}_{en}$-R −
	2 R	+ „+" + +
	2 L	+ „−" + −
2	1 L	+ „−" + −
2s	1 R	+ „+" + +
	2 R	+ − − PK_n +
	2 L	+ „+" − −
Σ		δ+ 0 +1.9 −½

Asymmetry 3+0

Here is the body: $\bar{\nu}_{en}$-R from PK of $\bar{\nu}_e$

+0.95652 $\bar{\mu}_{½(p)}$; „+" positive charge cloud,

+0.95652 $\bar{\mu}_{½(p)}$; „-" negative charge cloud,

Symmetrie 4+0

+0.87981 $\bar{\mu}_{½(p)}$; „-" negative charge cloud,

+0.87981 $\bar{\mu}_{½(p)}$; „+" positive charge cloud,

-0.87981 $\bar{\mu}_{½(p)}$; „-" negative charge cloud,

-0.87981 $\bar{\mu}_{½(p)}$; „+" positive charge cloud,

$I_s = 1.91304 \cdot \bar{\mu}_{½(p)}$, I_t = -½ħ, charge is zero e_o

Deleted pages from 413 to 419 in the original. Read my newest work "**TBA III**", www.no-quarks.com, please!