

## Ether-Physics and -Philosophy

### Second Part

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## 02.01. Basis and Objectives

### **Starting Basis**

At previous part 01. Introduction of Ether-Physics and -Philosophy was worked out, it's strongly to differ between real certain knowledge (and terms for naming these facts) and pure abstract terms (for logical handling like communication). A theory may only be founded at real facts and (unspoken) further assumptions are to avoid.

By this understanding, as real certain knowledge is only valid, there is something existing and there is movement existing. This Something here is called ether and lastly only ether can be in motion. Ether is single real substance, all other appearances are only result of multiple ether movements.

As decisive criteria were worked out, ether indeed is real continuum. This means, ether by itself is not build up by parts, but universe-wide is one coherent substance. Ether is completely gapless and undividable, so ether is neither expandable nor compressible.

### **Most limited possibilities**

Naturally, number of possibilities of movements is rather limited by these criteria. At this second part, at first is shown which ether movement's possibilities are not allowed - practically all we know of material world.

At sciences, many affects are only named by abstract term of 'field', nevertheless (mostly unspoken) certain movements are assumed. Also these models of movements are not possible at level of ether.

However, it's just limitation which is essence of nature-laws (like any law is restriction of all theoretical unlimited possibilities). Forced behaviour of nature couldn't exist by any movement's possibilities within a world-of-parts, but is determined by extremely restricted facilities of only one substance (ether) and its most restricting property (of undividability).

### **Universal**

No doubt however, there is movement within ether. Opposite, multiple kinds of movements must really exist, so numberless most different occurrences are resulting of. On the other hand, there must exist one common basic kind of movements, of which other movements are deducible.

This movement must also exist there, where 'obviously' no material occurrences exist resp. 'no' physical forces are working - far outside at 'empty' space. Movement's pattern there - like anywhere - is called movement of Free Ether resp. here is named 'universal movement'.

This motion can not be a simple one, cause otherwise one would know major axis or a centre within space. This basic movement must be 'holistic', must turn around many axis resp. must show multiple centres. At earlier workouts, I called this kind of movement 'spiral clusters' with motions are un-repeated processes, nearby 'chaotic'. Criteria of this movement pattern are spiral tracks, around tumbling axis, steady varying turning points and radius and speeds. Most adequate picture of these movement's tracks is band of DNA.

Distances of basic movements of Free Ether however are most small, at scale of quants, cause occurrences of material world are overlays resp. extensions of. These 'coarse' occurrences of Bounded Ether thus are movements at larger scales (e.g. from electron to galaxy).

## Global Scaling

These ideas of 'chaotic' spiralclusters now however are complemented by an integrated systematic. Reasons for non-chaotic processes are obviously existing 'harmony' resp. 'resonance' within universe. These problems recently were discussed intensively as subjects of 'Gravity Waves' resp. 'Global Scaling' (especially by workouts of Dr. Hartmut Müller, mostly at periodical raum&zeit).

By these considerations resulted, many occurrences appear preferably at certain scales. 'Attraction' of nodes of standing waves would be cause of, so these waves (some misleading) were also called gravity-waves (before term of Global Scaling was used in general).

Objectives of this second part thus are descriptions of universal movements of Free Ether, however now including system of universal frequencies, based at previous theory of Global Scaling. At following chapters however, at first are to eliminate these kinds of movements that are not possible for ether by itself.

## 02.02. No Shockwaves

### Longitudinal Waves

Easy to understand and well-known shape of waves are these like sound spreads. Molecules of air are pushed, locally compressed, this 'pressure-wave' runs through air, until ear registers sound.

Characteristics of longitudinal waves (resp. shockwaves) are, parts are swinging into spreading direction, i.e. parts run ahead accelerated, afterwards coming back to old position. Speed of spreading sound differs depending on medium.

### Example Sound

At picture 02.02.01 schematically is shows a section of medium (e.g. gases or liquids) and some parts within are marked (linearly arranged, in reality molecules naturally would be in chaotic motions). At upper row, same distances represent normal spreading of molecules.

If a source of sound brings additional movements from right side, pressure front (marked by positions of parts more narrow) will move from right to left through medium (as marked by arrow upside).

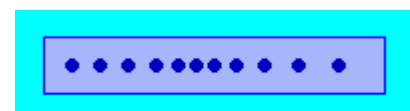
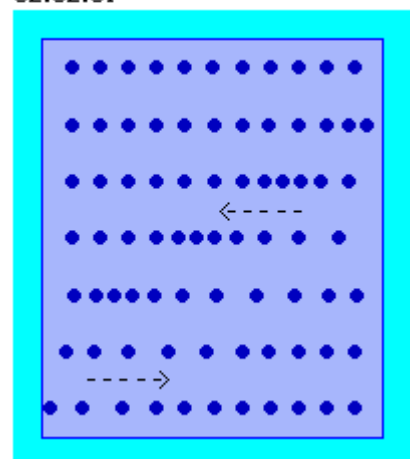
Opposite, compression of medium will disperse, i.e. parts will swing back again to right side (as marked by arrow downside), until lastly starting situation exists again.

So, area of higher density (moving through space) is followed by an area of less density, until lastly differences of pressures are equalized again. At this animation, this movement's process is visualized: one (sound-) movement from right to left is followed by second balancing movement back to right side.

### Only at Level of Parts

This kind of movements demands existence of gaps between parts resp. compressible medium. At least there

02.02.01



must exist some elasticity of material, so parts can swing that kind, e.g. by spreading of sound within solid bodies.

Ether however is gap-less and part-less substance, there can no 'ether-parts' swing ahead and back, there are no areas of more or less density, there is no elasticity (by previous understanding) within ether substance.

So shape of longitudinal waves is impossible within ether. This kind of waves only are possible at occurrences of material world (like previous molecules of fluids or stable bodies) resp. these waves are restricted to materia of parts. Within medium of ether however, this kind of movement is not allowed.

## 02.03. No Crosswaves

### Transversal Waves

Second well-known shape of waves is circled spreading of waves at water surface. This movement e.g. is started by stone thrown into water. Water below stone is pressed downside, compensated by waters aside moving upwards. Upward directed stoke-movement also takes upward parts of water outside (at larger distance to centre of waves).

Based on gravity, afterward this hill of water falls down (deeper than normal level of water, based at its kinetic energy of falling movement), thus again moving upwards waters aside of. Ring-shaped water-hills and -valleys thus wander outwards (radially to wave's centre). Based on friction within water lastly differences of levels will decrease, i.e. swinging will fade.

Characteristics of these cross-waves (resp. transversal-waves) thus are, parts swing cross (here up and down) to spreading direction (radially outwards of centre). Motions up and down are accelerated and decelerated again between 'dead-points' of movements.

### Example water waves

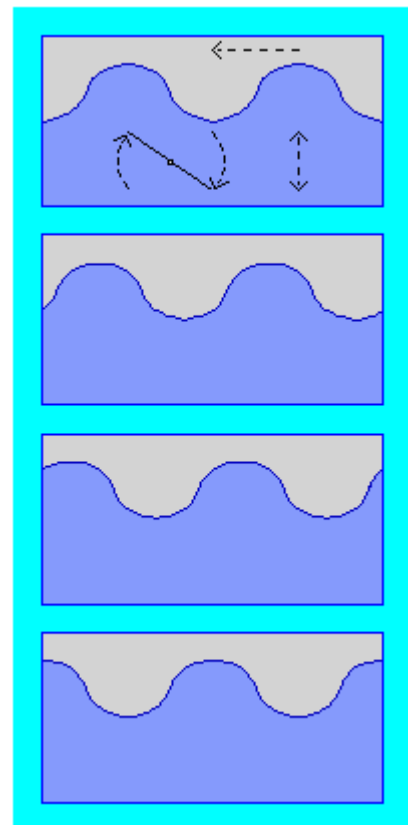
Picture 02.03.01 schematically shows a section of water tank with simplified marked waves at water surface. Right side of this picture, wave movement could be initiated by stone above. Wave (hill like valley) moves from right to left side (marked by arrow upside). Three more phases of motion are drawn below. By animation downside, this process is visualized by some moving pictures.

Movement cross to spreading direction is marked by vertical double-arrow. If one valley and one hill is regarded same time, this movement could also be looked as rocking motion (marked by up- and downward swinging seesaw).

### No Dead Points within Ether

These movements are well known by mechanics of solid bodies and parts of waters here behave analogue to movements of solid bodies. Above this, transversal waves (e.g. Hertz-

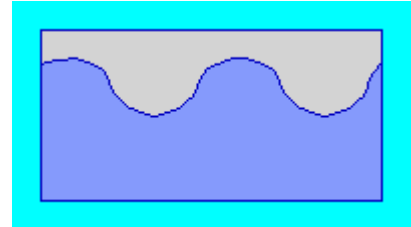
02.03.01



Waves of electro-magnetism) are common shape of waves. However within ether by itself, movements like these are impossible - cause ether don't allow dead points.

All ether is in steady movement. As everything with anything is coherent, there can't be any 'portion' of ether without motion. In addition, there are no separated 'components' of ether, that e.g. could do these abruptly changing of movement's directions (change of up and down). Within ether, only continuous movements are possible.

At these water's movements, indeed any motion is 'dead' at upper and lower point. Movements are not finished in total, cause gravity is affecting, levelling potential energies of heights. These 'gravity-forces' however, at the final end, lead to death of all movements - when waters rest silent again.



### **No Heat-Death**

Known considerations about 'heat-death' of universe are quite consequent. Within material world is nothing done without spreading- or friction-losses. So finally, all movements are levelled down to most low common level. So at area of material world, indeed energy can be 'destroyed' as opposite directed forces are resulting to null.

Opposite to that point of view, universe appears really creative by steady production of diversified structures (and thus building up energy-differences). That's clear approval for fact, substance of universe can not be build up by parts, but ether must show properties quite opposite to these of material world.

If amount of energy within universe should at least be constant, so this matter of fact can only be founded at 'unusual' properties of ether. Only by gap-less-ness no single motion can 'got lost' or is compensated mutually.

As within ether nowhere standstill can exist, within ether transversal waves (with periodic standstill) are no possible kind of movement (also not by additional turnings, see next chapter). 'Ether-Waves' show much more complex shape (like discussed at further chapters).

## **02.04. No Circle, Straight Line, Torus**

### **Linear Movements**

Movements in straight direction are everyday's experience by handling of solid bodies like at processes of many machines. At picture 02.04.01 for example, a 'Boxermotor' schematically is shown at which pistons move linear within cylinders (accelerated and decelerated like at stroke movements of water waves above).

Materials are moving relative to each other at surfaces between pistons and cylinder. However, just these border surfaces are not available within ether, cause ether is 'border-less' (internal) universe-wide. So no ether-portions can shift alongside each other, and not linearly by guarantee.

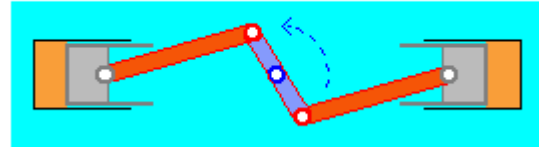
Fluids exist of parts and between 'flux-bands' exist border surfaces, so movements in different directions or of different speeds can glide alongside each other. Also ether is 'soft' like gases or liquids and within ether is movement possible, even without friction losses.

Opposite to fluids however, ether is real continuum and thus doesn't allow that possibility of relative movements of parts with mutual sliding surfaces.

### Circled Movements

This example also shows circled movement, as central crankshaft (blue) is turning around system axis. Naturally also there are border surfaces moving alongside each other, e.g. outer end of that crank versus surrounding area (here air or oil, like at any turning wheel). Above this, an other essential point of view is demonstrated by this example.

02.04.01



Whenever a body, moving at circle, comes into new direction (here e.g. upside left), 'masses' there must be shifted aside (like connecting rod (red) via piston presses air to left side). This process occurs at both sides of this boxermotor, in principle however at each direction around centre of circled movements.

Same fact is valid at ether, however circled movements have not to kick-off only (light) surrounding air, but all around is ether of same 'hardness'. So whenever an ether point (remember: mental unit instead of not existing real ether-parts, see introduction, Special Terms) is moving at circled track, same time other ether points must be moved aside (analogue to mechanical example of connecting rod above).

However, nowhere are 'free gaps' for immediate storage of surplus volumes of ether. That's why these simple circled movements (at even level) are not allowed for ether by itself. That's valid also for previous waves, when in addition to swinging movements also rotating movements around longitudinal axis of spreading direction are assumed.

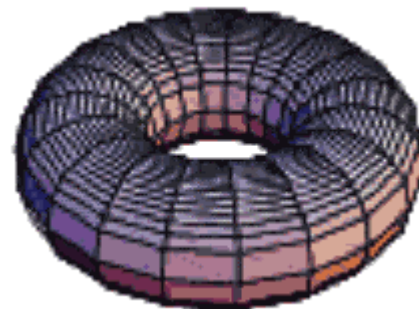
### Outside-inward

Often are discussed movements in shape of torus (general design is shown at picture 02.04.02) as alternative model of atoms or as carrier of energy etc.. Indeed, combination of movements around central axis of system and movements around (round) axis within ring does result most interesting movement's patterns.

Mostly well-known smoke-rings are presented as clear example, by which e.g. a candle is to blow off at some metres of distance. Medium in motion however is (invisible) air and within that air-vortex (visible) smoke-parts are enclosed.

Ether-medium however can't move that kind, because no ether volumes can be pressed through central small hole (in order to expand later). Here must shift border surfaces alongside each other - and ether-continuum has no internal borders at all.

02.04.02



At level of material occurrences, movements at circles or straight lines or outside-inwards etc. are well possible, however not possible for ether by itself. Ether is not only 'materia a little bit different', but is single real existent substance with unique properties. To find solutions for unsolved problems of physics (resp. so these phenomena can exist at all), ether has to be quite other kind - e.g. may not show possibilities of movements like any 'vulgar' materia.

## 02.05. No Standing Waves

### Blackbox

Physicians often abandon concrete explanations of physical occurrences (for example of electric resp. magnetic forces or gravity) and work with 'dummy-term' of fields. Nevertheless, forces of fields are calculable by known formulas (and thus abstract term is to accept), essence resp. real background of these occurrences however remain unexplained.

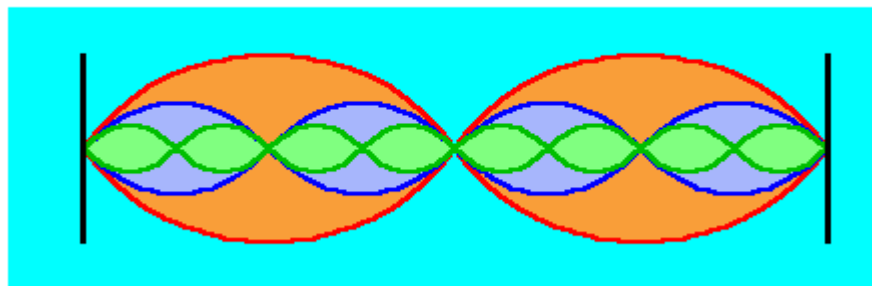
As a 'blackbox' even less precisely defined, at the moment more and more is used term of 'standing waves'. For example, electromagnetic waves are described as existing of fields (or one switches to mechanical elements as particles e.g. of photons or neutrinos), above this however and in addition, 'standing' waves demand certain prerequisites (mostly not defined or not spoken about).

### Technical Applications

Standing waves technically are used in many applications, effects were achieved, which otherwise wouldn't be possible. However, installation, continuance and usage of standing waves are bound to very narrow parameters.

At picture 02.05.01 schematically is shown as an example, how three waves could be build up standing 'in space'. Inevitably necessary is arrangement of mirror surfaces (black vertical lines) exactly

02.05.01



positioned corresponding to wave's length. If distance is multiple of wave's length, 'standing nodes' come up (like at this picture). If distance is odd multiple of half of wave's length, wave completely is mirrored. Above this it's absolutely necessary, mirror surfaces are exactly right angled to spreading direction of wave.

So standing waves can exist only by directed radiation of certain frequency in relation to exactly adjusted mirror surfaces. If these conditions are not given, no standing wave will result but just normal jumbled reception (German 'Wellensalat' which means 'wave's salad'). Concerning technical realisation, these demands are fulfilled without problems by many units (i.e. at systems more or less closed) and wanted effects are achieved.

### Natural Realities

However, standing waves meanwhile are also 'hold responsible' for occurrences within 'free nature', i.e. within open systems resp. at no laboratory-like conditions resp. at circumstances not fixed by mechanical equipments.

For example, some explorers assume standing waves as source of gravity. Others assume electrons around atom nucleus being standing waves. Lastly, theory of global scaling is based on existence of standing waves within whole universe. There are more ideas of other scientists, assuming standing waves as source of many occurrences.

In my opinion, many of these considerations don't care sufficiently about prerequisites (transmitter, frequency, spreading direction, mirror surface). For example, at wide space

these prerequisites merely exist (wandering transmitters, unregular frequencies, distorted spreading, meanwhile reflected radiation, not resting or not right angled mirror surfaces etc.).

So standing waves of natural sources merely won't exist within ether of wide space like especially near celestial bodies - nevertheless all technically used standing waves naturally are lastly based on ether movements.

At universe, practically there are no waves running in any direction, are properly mirrored and standing constantly within space (strictly speaking, that's just impossible within three dimensions, cause standing waves would cross each other from most different directions).

### **Mirrored by Nothing**

Just this problem of mirroring demonstrates confusion of understandings. At the one hand one thinks by abstract fields, on the other hand one assumes ideas of mechanics (by inadmissible analogy). So there is assumed on and on (or even unspoken), waves could be mirrored at 'diluted areas' (with precision demanded above).

Most simple mechanical example of waves is using a rope, build up swinging movements by hand at front end of rope, while backside end is fixed at a wall. So e.g. are to produce standing nodes easily.

This picture of wave (by some skill) is also to achieve, if backside end is loose. Wave then runs through rope - however doesn't come back by mirroring, but cause hand at frontside end affects remarkable pulling forces. If also front end would be loose, wave would run out of rope at backside end and never ever would come up standing nodes.

So it's only stability of rope (and pulling hand), that makes wave run back, even backside end is 'vacuum'. At (electromagnetic) waves of abstract fields however is just negated any medium would be involved (capable to take pulling forces). This mixing-up of abstract terms (inclusive negating concrete medium) and experiences of mechanical world (with only partly fitting analogy) inevitably results insufficient understanding.

Conditions for building up and stable existence of standing waves, thus at universe merely won't exist. Following chapters however will show alternative 'standing waves' omnipresent without spreading nor mirroring.

## **02.06. Spiralcluster**

### **Local Movements**

At previous chapters, movement's shapes were excluded that are impossible for ether substance by itself. There are no ether portions that could move relative to others, neither as longitudinal nor transversal waves, neither purely circled nor straight linear, neither outside-inward nor by standing waves.

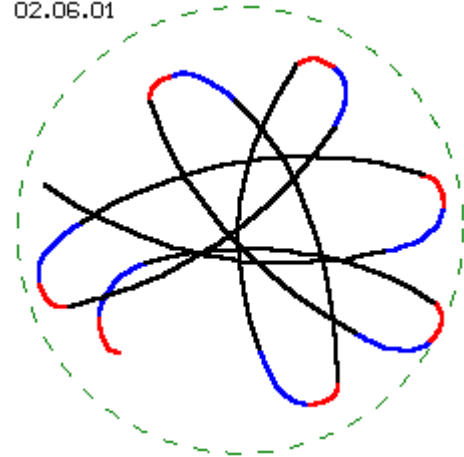
These kinds of movements are only possible at material level of occurrences. Clear differing between movement's possibilities of ether versus these of ether's occurrences is essential, cause it's inadmissible to transfer experiences of material world by analogy (or unspokenly) onto quite other conditions valid at quite different substance of ether.

Naturally exist previous waved and circled, straight and twisted movements, also standstill within world of material occurrences. However, these are secondary appearances, here called 'local movements' and described at following third part (while here at second part of workouts, at first universal movements of ether as a whole are considered).

## Universal Movements

At earlier workouts I made these following statements. Different local movements require basic-movement, which can be overlaid resp. 'underlaid' by diverse patterns. At one case, more coarse shapes of movements result (material occurrences, comparable analogue to amplitude-modulation), at the other case more finer shapes of movements result (mental and spiritual appearances, comparable analogue to frequency-modulation) of that basic movement (analogue to carrier frequency, by rough comparison).

02.06.01

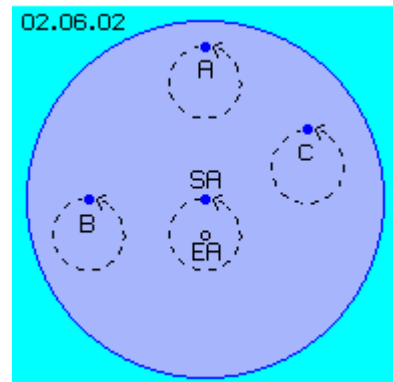


This 'basic-swinging' must exist universe-wide as general shape of movements of Free Ether. At previous workouts I used this picture 02.06.01 for demonstration of motion of ether at spiral tracks with differing speeds (different colours of tracks) and changing radius around wandering turning points. Idea was, it should exist nearly chaotic movement which only by overlays could get certain characteristics.

When deducing these curves that time, I did assume some elasticity as property of ether. Today however, I understand ether to be really pure continuum with overall constant 'density'. That's why at the following these 'spiral-cluster-tracks' are argued other kind and also result of considerations is some other kind.

## Synchronous Swinging

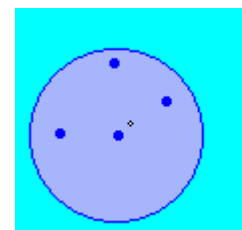
At picture 02.06.02, blue disk represents whole universe, its centre is marked as system axis (SA). Whole block of ether is turning around an axis, eccentrically to system axis. Universe however is not rotating around this eccentric axis (EA) but all ether points always show into same direction (radially to system axis).



This eccentric axis is pure mental location within space, thus could be coordinate's zeropoint. (Meaning of here used special terms like space, coordinate or ether point are described at part 01 Introduction at chapter Special Terms).

Marked ether point A for example always shows upward, B to left and C to upside right. Not only central point, but every ether point turn parallel within space, all same sense, each around its own turning point, each at circled track, all by radius corresponding to eccentricity (distance SA to EA). Ether as a whole can do this kind of movement without problems (even outside of universe might be Nothing).

As previous basic-movement, thus whole universe could show that steady swinging motion, like visualized by this animation. Eccentricity here is overdrawn extremely, in reality radius of movement will be below scale of elementary particles. We wouldn't feel these 'vibrations' like we physically don't register rotation of earth.

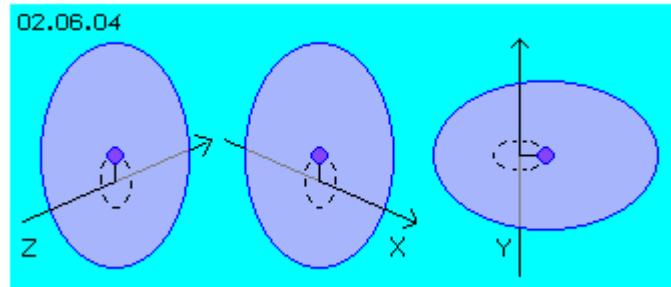


Nevertheless, we can determine earth's rotation, e.g. by wandering of stars 'around' Pole Star. However without stars we could register earth's rotation, e.g. by earth's magnetism (which is other kind than common understanding, discussed later).

Previous vibration of universe (that kind) however could be registered, e.g. by behaviour of electrons or atoms. All material parts can move into any direction of space. If however universe would have one direction dominating above all others (here parallel to eccentric axis above), movements of material occurrences would be directed correspondingly by sure.

### Three Axis

Eccentric axis above stands right angled to picture-surface (paper or screen), thus would correspond to Z-axis of picture 02.06.04. There now is shown, analogue to swinging around Z-axis same time could exist swinging parallel to X-axis.



Each ether point then will not only move at circled track, but will move at bended eight-shaped track within space. This movement is easy to simulate by holding a ball between two fingers, turning ball around this axis, same time turning hand. In addition, naturally this movement's process can be accomplished by turning parallel to Y-axis (one had to turn around one's own axis in addition - or one should take place within a 'gyroscope' and let's turn around all three dimensions same time).

If these three circled movement's processes are combined, each ether point moves at spiral track. Ether as a whole can do this pattern of movements indeed. However all turnings should be done likely sense (in reality to left), so no abruptly changing directions of movements come up, all movements smoothly are done at bended spiral tracks, however by steady changing radius.

So no direction within universe dominates, turning movements occur around extremely high number of axis same time. Like this, previous idea of spiralclusters would produce practically chaotic processes of movements.

### Ordering Factors

Opposite to this idea of chaos, universe obviously shows some order. Already upside was mentioned, nature-laws are expression of limitations (based on properties of ether) resp. only these limitations result nature-laws. So it's seems logic, not only ether by itself but also its basic movements should show properties that kind, some order will come up resp. is perpetuated.

Like each movement of real ether is to describe sufficiently by only three linear coordinates of abstract space, also only three axis of movements in principle could be sufficient. Each ether point thus could move at any location (of given turning radius).

At each of these three axes, radius and speeds of turning movements could vary, at each axis could overlay many turnings (with different radius and different speeds). At the one hand there would exist ordering factors, on the other hand would exist huge variety.

### DNA-Band and Global Scaling

Thus if only three turning axis in principle would exist, including multiply overlays, tumbling movements with steady changing directions and varying speeds would result. At this pattern of movements no direction would dominate, movements would show 'chaotic' processes, even movements at a whole would show like symmetric unit and finally would represent strict order.

Finally as I had worked out these ideas about spiral-cluster-tracks as universal movement pattern of ether, I recognized cluster of DNA-band as best comparison. Also that band presents 'chaotic' impression - but lastly there are coded most strict like various order.

Just recent years, problematic nature of order-structures within universe was studied by many scientists. Essential knowledges were contributed by 'chaos-research' resp. considerations about fractal structure of occurrences. Other researches got known by term of 'gravity-waves'. Finally intensive discussions are going on concerning 'global scaling'. So next chapter will research possible ordering factors within 'Spiralclusters of Free Ether'.

## 02.07. Global Scaling

### Gravity Waves

It's often assumed, standing waves would exist within universe, e.g. affecting gravity. At the other hand was stated, no equal spreading exists within universe, but special sizes of occurrences prevalingly exist (from much large to most small scales). Term of 'gravity' thereby is also used in sense of affecting attraction.

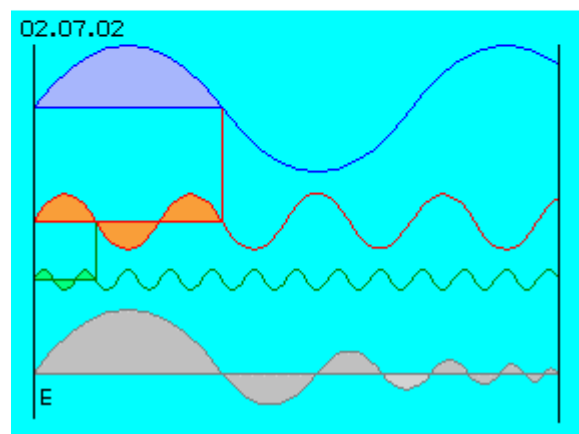
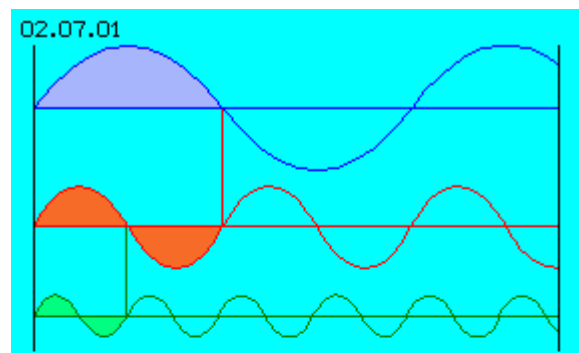
These points of view recently were intensively discussed e.g. by subject of 'Global Scaling', especially by many publications of Hartmut Müller at periodical raum&zeit (by Ehlersverlag, special 1, Global-Scaling, also available in English) and others, e.g. Eduard Krausz. At the following are mentioned only these basic facts of that theory, which are relevant for further considerations here.

### Nodes and Bulge

Radiations whirr through universe into any direction by various frequencies, all overlaying somehow, mutually levelling to 'wave-salad' in general. If however waves run parallel with 'harmonic' frequencies, swinging can be build-up.

At picture 02.07.01 for example are shown waves, each next with half of phase-length of previous wave. If waves like this overlay, no longer will exist wave-bulges same size (but phases with reduced or increased amplitudes) and nodes of only one or of several waves same time. If waves like these show same direction of spreading, 'standing' nodes will come up. If these waves are mirrored, also complete standing waves could come up.

At picture 02.07.02 frequencies are shown with phase-length each one third of previous wave (marked by colours here are only phase-halves). Overlays will have analogue effect concerning amplitudes and nodes. Naturally, these 'third-waves' could also overlay 'half-waves' above, so each six phases would come up especially 'strong' nodes.



## Euler's Number

Not only half- and third-waves above can overlay, but naturally also waves with other fractions. At this picture this is shown by a follow of waves each shorter than previous, marked by E.

One kind of addition has special importance at physics:  $1 + 1/1 + 1/1^2 + 1/1^2 \cdot 3 + 1/1^2 \cdot 3^4$  etc., where sum is  $e = 2.7182818...$  (Euler's Number). This value thus includes any possible fraction, here e.g. any frequencies. At this natural-constant is based Natural Logarithm (ln) and this 'Logarithmic Number-Space' is ideal scale for many occurrences of physics.

At theory of global scaling for example, place of nodes of overlays of any frequencies is easy to calculate by this technique. Nodes there are not spread equally at all but are concentrated 'hyperbolically' within phases.

## Statements

Far reaching deductions are made, e.g. by following statement of texts to following pictures of raum&zeit 104/2000 (begin of quotes):

At nodes of a standing wave exists no swinging movement, it exists stillstand. At swinging-bulges, globally standing gravity wave pushes off materia, so materia is concentrated at nodes. That's why universe shows fractal shapes of galaxies, stars, planets, organism, molecules, atoms and particles. ...

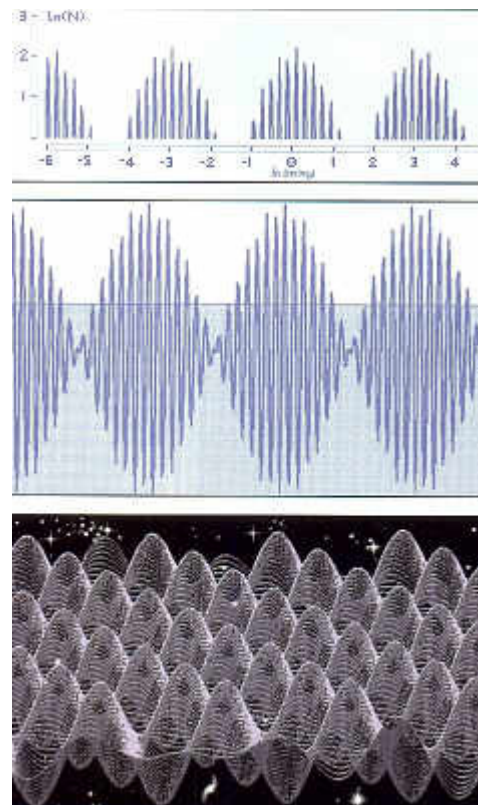
By characteristics of these patterns results global synchronism resp. standing gravity waves affect morphogenetic. So spreading of stable numbers are determined at all physical, chemical, biological and social processes. ...

By this picture is obvious, distance between neighbouring nodes of compressive wave are each 3 units long and each area of nodes are 2 units of natural logarithm wide. ...

These are only tops of 'Eisberg' of standing gravity wave within gravity-ether (at middle part of picture), resulting of overlays of two waves with frequencies exactly 1/3 differing. Picture downside shows structure of gravity-ether within logarithmic space (end of quotes).

Spreadings like these exist at diverse areas, e.g. spreading probability of sizes of living beings. Calculations did achieve good results at many applications, so this theory is approved by multiple cases. Without any doubt, this theory essentially contributes to explanations of fractal structures of real world.

At the other hand, calculation-technique is dominant part of this theory, so direct relation to real facts are but hard to realize. For example, statements like following are more confusing than explaining (begin of quotes):



Global standing compression-wave of logarithmic space of physical scales is a sound-wave. It's different to acoustical sound-wave by fact, it doesn't spread within linear space, but is standing within logarithmic space. ...

As consequence of logarithmic fractal isomorphism also most extreme physical vacuum is not absolutely free of materia. Vacuum thus is not homogeneous and is also not isotropic, but heterogeneous and anisotropic, so there exist border layers. There materia-waves are reflected and standing waves come up. ...

Logarithmic space of physical scales is one-dimensional. That's why by transition to linear space  $e = 2.71828\dots$  fractal dimension are given. Based on topologic model has to be rounded to integer, so Euklid's space is topologically three-dimensional and there can't exist fourth space-time-dimension. ...

Logarithmic space is 'assembled' by 27 logarithmic linear lines, relative size of most small logarithmic space is 162 logarithmic units, it's limited (finite), only within finite space standing waves can come up. (End of quotes).

### **Open Questions**

Obviously, theory of global scaling assumes existence of ('gravity'-) ether, consisting of parts, so compressive waves (longitudinal waves) are possible (like sound waves). By this assumption, all questions about gaps between parts are open, thus also concerning Nothing and affects through Nothing, also of diffunding of Something into Nothing etc. (like discussed in details at part 01 Introduction).

These ether-gravity-waves of global-scaling-theory are assumed to be standing waves - within one-dimensional logarithmic space of physical scales. It's already hard to imagine 'one-dimensional space', in addition as picture above shows two-dimension surface (where amplitudes into third dimension probably will only mark extent of density).

These nodes determine concentration of materia - thus within real, three-dimensional space, thus also these gravity-waves would have to 'stand' within three dimensions or at least should have effect within. However, result would be an ether-wave-grating (three-dimensional) - and at grating's nodes materia within space would be concentrated (factually, nevertheless within space by strict right-angled order). It's questionable, these ideas are conform to movements obviously showing into all directions of space. In addition, universe just does show no rigid grating structure.

By statements above is assumed, also within vacuum exists materia, inclusive border layers, at which materia-waves are mirrored. However, this theory doesn't assume materia-waves, but concentration of materia within calm areas of nodes of swinging gravity-ether. So no answers are concerning all questions of mirroring of waves within ether (or of materia), as discussed in details at previous chapter 'No Standing Waves'. All problems also still exist, which are base at view of here-materia-and-there-ether (like also discussed at part 01 Introduction).

By properties of abstract mental tool (logarithmic space, assembled of 27 logarithmic lines) is deduced finity, as prerequisite of existence of standing waves. However it's not clear, within which space by which medium waves really are standing. This logical deduction by laws of projective geometry, based at ideal bodies, is rather impressive. However that will remain abstract, if within real ether no single straight line is existent.

Obviously global scaling assumes Euklid's space, within which real materia exists (and also ether should be within). However there is no convincing relation between base of  $2.7182818\dots$  of that one mental tool (scale) to deduce at 'rounded'  $3.0000000\dots$  dimensions

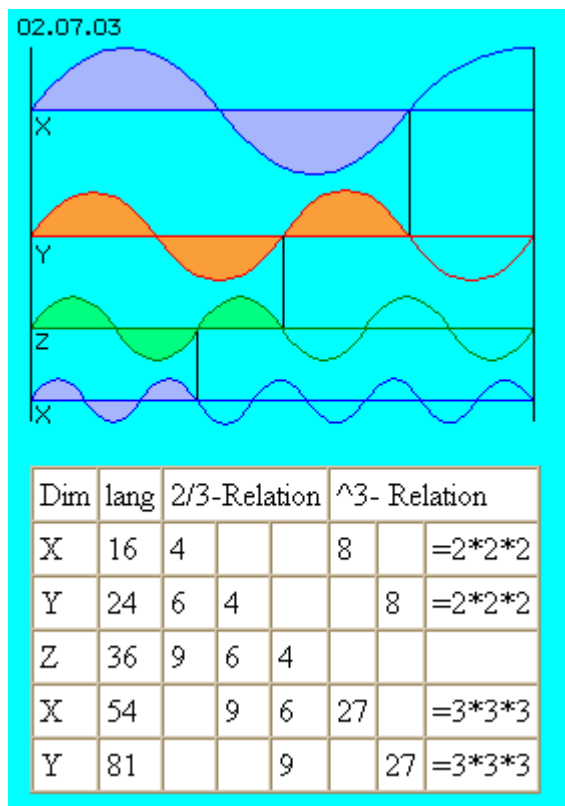
of other mental tool (space). Above this, understanding of global scaling is that 'linear' space would be reality, so from one mental tool (scale) is made logically conclusion concerning reality.

It's hard to understand, mathematics calculate by many numbers totally exact, no matter whether  $10^{-51}$  or  $10^{+55}$  - and at the other hand by 'surprising coup' logical operations of previous kind are done. It's absolutely necessary to make purely mental operations with abstract terms (e.g. for easier calculations). As soon however terms are involved without direct relation to real facts, results no longer are to transfer onto reality (as already discussed at part 01 Introduction).

### Making Thirds

Very real however global scaling did approve, relations of thirds resp. two thirds are very important in reality of universe. Nature-laws always are restrictions and thus it well could be, total system of global synchronisation is based only at concept of two thirds, in direct relation with three dimensions of space.

At picture 02.07.03 once more are shown waves with phase-lengths of  $2/3$  of each previous wave. These waves could be spread around three dimensions of space, thus at direction of X-axis, Y-axis, Z-axis, then again at direction of X-axis etc., as much we like it. For example, following values would result: If in turn each wave length one half longer (16...81) are spread, relation between each neighbouring axis (in turn) always is 4 to 6 to 9, so spreading by  $2/3$ -law is applied concretely and continuously to three dimensions of space.



At each axis thus would exist waves, increasing by cube, each in relation of 8 to 27 resp. by  $2^2$  to  $3^3$ . On the other hand, at global scaling are most striking values of 27 or 81 (where 81 stable chemical elements are often taken as approval for any hypothesis).

In addition,  $4 + 6 + 9 = 19$ . This number is important e.g. at order of chemical elements and compounds. Especially Peter Plichta with his 'Primzahlkreuz' did point out that fact. This point of view will be discussed at later parts concerning model of atoms.

### Restrictions

Theory of global scaling by sure is essential contribution for explanations of fractal structure of physics of universe. This theory offers mathematical basis for systematic calculations about probability spreading of many occurrences.

However critical are prerequisites concerning real existence of standing waves and especially concerning mirroring. On the other hand, this spreading-structure can exist not only within abstract, 'one-dimensional logarithmic space', if resulting of are really relevant consequences, approved by observations at many applications.

These laws must be embodied within real ether quite concrete. It well could be, not every kind of wave-structure is admitted, but e.g. restrictions in shape of two-third-law are valid.

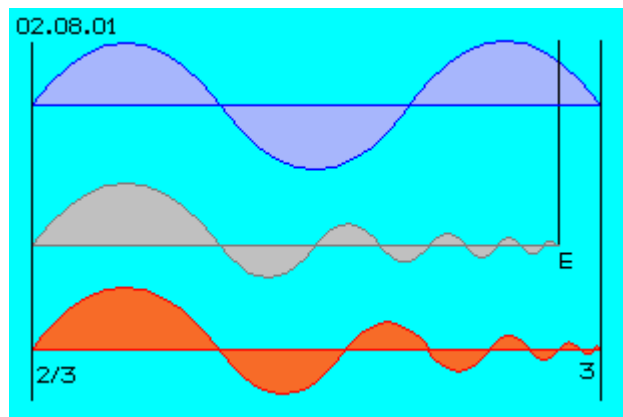
Previous example does show only one of many possible shapes. Diverse alternative representations of likely laws within ether are discussed at following chapters.

## 02.08. Two Third and Three

### Euler-Number or exactly Three

At picture 02.08.01 are shown three phases (where here only half phases are drawn and counted) like at previous chapter. There was mentioned Euler's Number with value of  $e = 2.7182818\dots$  resulting of addition of all fractal possibilities (thus by  $1/1 + 1/1*2 + 1/1*2*3 \dots + 1/n!$ ). Concerning waves, this value includes all possible frequencies. Positions of nodes especially easy are to calculate by Natural Logarithm (thus based at previous  $e$ ).

At this picture is schematically shown a mixture of different frequencies resp. that 2.7-fold (E) of basic phase length. At global scaling was recognized, frequencies by thirds (or frequencies in relation of 2 to 3) have special importance. At this picture downside are shown phases each 1/3 shorter.



Special fact of continuous addition of two thirds (so  $1 + 0.66 + 0.44 + 0.33 + 0.22$  etc.) is, total sum exactly is 3.0. As at theory of global scaling from 2.7182818... was rounded to integer of three dimensions of space, this two-third-law would automatically and exactly represent waves within three-dimensional space.

### Waves within resting Space

It's common understanding, space is real and resting (at least within frame of this universe) resp. relative to waves within. It's commonly assumed, waves are movements of material parts, or even of abstract fields, or of ether-particles. As these are swinging relative to space (no matter whether by longitudinal or transversal waves) waves are really build.

As order obviously exists within universe, it's correct to assume waves responsible for. In order to function as order-factors, waves may not only run-away but must come back and build standing waves resp. (centres of) nodes.

Indispensably demanded precise mirroring is rather problematical. These wave's structures well are to build mathematically within 'one-dimensional logarithmic space of physical scales', nevertheless are just impossible within real three-dimensional space (besides strict right-angled grating-structures, which however are defeated by observations at universe).

Naturally there are sound waves etc. at level of material occurrences. However one can not deduce from these waves onto basic 'order'-waves of general importance (otherwise will come up real problems above, which are not to eliminate by any mathematical-abstract 'transformations').

### Waves within swinging Ether

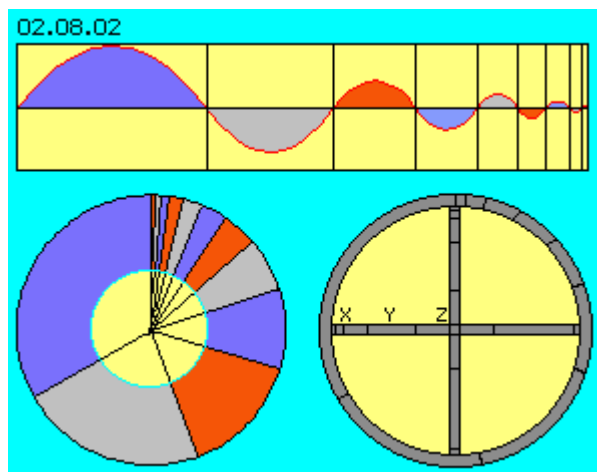
Opposite to these common understandings, here ether is seen as real continuum, as gapless single real substance. Space however, here is seen as pure mental abstract tool, serving only to describe movements relative to fictive system of coordinates (see part 01 Introduction).

Resulting of this understanding, 'order'-waves are really built by real ether, by its own swinging movements. All ether points move parallel to each other, i.e. its swinging is only relevant (as 'wave') for everything behaving other kind (than this basic ether movement).

'Behaving other kind' practically are all occurrences of ether, as enlarged vortex-structures e.g. appearances of material bodies, as enlarged waves e.g. electromagnetic radiations, and also all 'vibrations' of mental-spiritual appearances. All these occurrences and their special kind of movements are described in details at later parts.

### Ether swinging by itself

Here however subject is shape of universal basic movement of ether, at the following deduced by diverse points of view. At picture 02.08.02 wave-band above with these 2/3-frequencies is show once more (like - by common understanding - it swings within absolute space until 'infinity', with its problematical mirroring, questionably build by materia-parts or ether-parts or only by abstract fields).



Real and clear alternative now is, this band is given as closed loop, within which all waves always run in loops. That closed band in reality is represented by ether as medium of these order-waves, by ethers swinging as a whole.

In order to put in concrete understanding step by step, this picture left side down at first shows, waves of previous linear band could run at a disk (-surface). At this picture right side down for example is shown next logical step, three wave-bands could run around a sphere, each band closed. So these bands could be 'large-circles', e.g. equator, degree of longitude at 0 degree and at 90 degrees (so this picture might e.g. show view at North Pole). These three bands at a whole represent all three dimensions (here marked by X, Y and Z).

### Twisted endless Band

Abstract logical operation is as follows: central straight line at wave-band (yellow) above represents (one-dimensional) logarithmic line, at which structure of nodes and bulges of waves are present. This straight line now is seen as closed loop.

This straight line at first is portrait as three round circles, right-angled to each other, so standing within three planes of space. In order to get one continuous closed band, these circles must merge into on another. Everybody well knows picture of closed and twisted band. This shape is easy to produce, e.g. by a rubber band, put into three loops and each ring sifted versus each other.

There are still represented three revolutions, each one into each direction, while smooth transitions (at previous example from equator to 0-degree-meridian, from that to 90-degrees-meridian, from that back to equator) content both directions proportionally.

This bended band thus represents three dimensions. It's closed within itself, so all patterns of movements at this band revolvingly are repeated. At global scaling, patterns repeat on and on with same structure after each three logarithmic units. These repeated blocks show all times same fractal picture, only by different scales.

### Only one fractal Pattern

However, it's just decisive characteristic of factual occurrences, its law resp. regularity is stored only once. From that only one pattern are resulting repetitions and duplications in each next or all possible self-similar occurrences, same or different sizes.

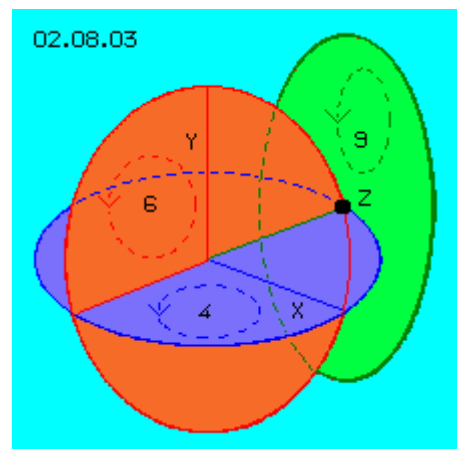
So it's absolutely sufficient, if pattern is stored (represented by movements) only once at that closed band of scales resp. regularities. Pattern's length is, based on knowledges and experiences of global scaling calculation techniques, three logarithmic units.

More must not be represented at this straight line of scales above, which now is shaped as closed loops. All other occurrences are only copies or extensions of that model. Real copies of that pattern however can prove success only if shaped analogue to original structure of model. At following part 03 Local Movements is discussed, how these structures of material occurrences (as enlarged copies) are build and look like.

### Real Swinging

Nevertheless it wouldn't be sufficient, if this logic structure would only be abstract picture. If these 'laws' shall show real effects, also these laws must be represented quite concrete and quite really. At second step of these considerations thus is to approve, how ether has to behave so patterns above are really compelling model for all occurrences.

At picture 02.08.03 are shown three planes of abstract space. Within these three planes ether is swinging, not as three separated movements but same time at all three directions.

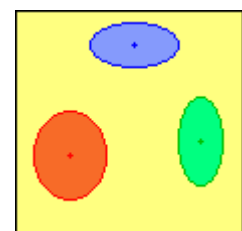


One ether point (black point) is marked at outer border of plane at X-axis (blue). This point is also situated at outer border of plane at Y-axis (red) and same time is situated at plane of Z-axis (green). All these planes (these disks) are swinging coordinately, so that point will move at three-dimensional curves.

These disks won't rotate but are at swinging movements, like described at chapter Spiralclusters at picture 02.06.02 and visualized by animation there. Here again are used relations like at previous chapter Global Scaling are shown by picture 02.07.03. So at X-plane are done four revolutions each time unit, right-angled at Y-plane six and again right-angled at Z-plane nine turnings same time.

This animation here visualizes these swinging movements of three planes (however only 24 pictures are used, so green disk turns only eight (instead of nine) times). One can recognize certain repeated patterns, e.g. by watching each two planes. Here these swinging movements are shown separately, in reality however ether point above does these movements at common spirally bended track.

This track in principle corresponds to twisted (rubber) band above. Now however, this band no longer exists only of three likely rings with smooth transitions, but these bands now represent 2/3-law. This track is hard to visualize, only most skilful headwaiter has movements like these under control:



By left hand he holds round tray (blue disk) horizontally within space. By right hand he holds serviette and steady wipes border of tray. Cause an other waiter rushes to meet, he gets out of way by swinging tray elegantly at horizontal circled movement (red disk) - still wiping by

right hand. He walks through swing-door without delay, only drawing tray some towards himself, afterwards again some ahead, naturally also by elegant circled movements (green disk), all this steadily same time, all circled movements by different speeds, each in relation of two to three.

Movement of right hand (that serviette) moves at track of ether-point above. Parallel to this point, whole ether of universe is moving (what naturally only is possible by gapless ether, with no compressions etc.), all movements similar and simultaneously.

### **Real Law**

These swinging movements thus no longer are only abstract calculation sheet, but are represented by real ether's basic movements (by this sense 'material' law). This basic movement is real regularity for everything moving other kind (as a rule more extensive movements). Only these other movement's pattern can 'survive' long-term, which are in resonance to that basic swinging.

Now, no longer mirroring is demanded for building out standing waves. Three 'waves' above with all overlays and corresponding nodes steady run around resp. exist continuously. This pattern is really existent anywhere within universe, affects anywhere at all directions and dimensions and distances, for all occurrences and 'copies' of, e.g. for all photons up to all galaxies. This pattern resp. law thus is stored really 'holistically', quite opposite to mostly 'nebulous' usage of this term.

At next chapter, these basic movements are visualized once more by details. Above this it's to check out, whether this simple overlay of 4-6-9 at three axes is really sufficient for all occurrences or how this principle of model could be extended.

## **02.09. Sections of Track**

### **Three Waves**

At previous chapter was worked out, all ether of universe shows basic-movement, at three axes of space same time, with graduated frequencies. Frequencies of waves are each  $3/2$  of previous resp. by view top down waves show  $2/3$ -law.

This assumption is based on results of global scaling, where at overlays of waves graduated like this, does result spreading of nodes, which correspond well to probability spreading of occurrences at many areas. Most small follow of integers, corresponding to that  $2/3$  regularity, are wave lengths of 4, 6 and 9.

Opposite to theories of gravity-waves and of global scaling, here is assumed ether itself serves as order-waves by its own swinging movements. So regularities are build and represented totally real, affecting all other movements within universe. These other movements practically are all occurrences of material world, however also of spiritual world.

### **Components of Movements**

At first, sections of tracks of these basic movements are to describe by some further details. Picture 02.09.01 therefore shows diverse sections of movements. These are based on previous assumption: each time unit will occur at plane of X-axis four 'steps', at plane of Y-axis 6 steps and at plane of Z-axis 9 steps.

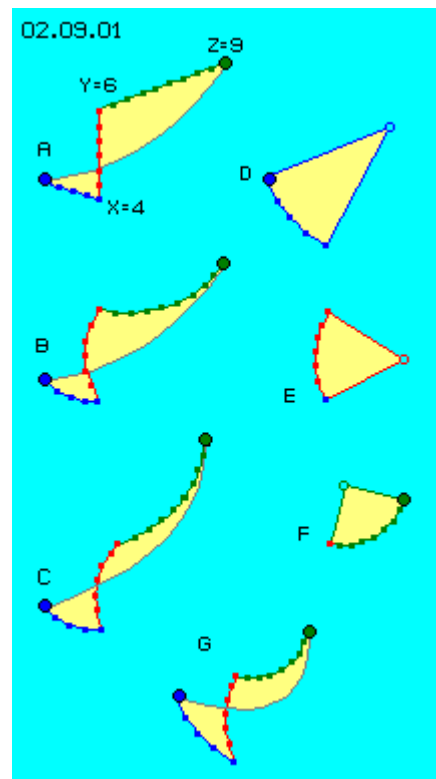
One unit of steps is comparable with one move of knight at chess. Chess-knight is allowed to go two steps ahead and one step aside. Here at three-dimensional 'chess-game' third direction allows / demands additional movement, again right-angled like previous directions. Assumed is left-turning in general (as many observations show and are discussed later).

At this picture at A that 'knight's move' is shown: 4 steps into direction X, 6 into direction Y, 9 into direction Z. As all three movements are done same time, an ether point would move at grey curve within space (from thick blue location to thick green location).

Ether can't move linear, but all movements are done by turnings (multiply integrated). At B, correspondingly these sections of movements are drawn as sections of circles. Again is drawn grey curve as resulting movement of an ether point, at bended spiral track.

As turning speeds at each axis resp. plane are different, each circle section around each axis does show all times into different directions. At C for example is shown, turning at Y-plane shows some more to right side, while curve-section at Z-plane shows some more upward (compared with situation at B). Correspondingly results some other shape of curve of ether point.

So there are differently shaped sections of track of ether points, based on different frequencies at each plane (concrete based on different revolutions each time unit, around these three axes). Shape of sections change all times, however all times movements occur at three-fold twisted spiral tracks, by shorter or longer distances each time unit, thus also be different speeds.



Even these movements represent strict order, as a whole are resulting tracks of spiralclusters, like already described at earlier workouts. Whole process of movements is compound of many of movement-sections above, each section showing other shape within one complete cycle. This track might make confusing impression, however is no 'chaotic cluster' at all, but mirrors really real and really concrete previous 2/3-law.

These tracks are no longer simple (large-) circles around a sphere with only smooth transitions from one circle to next (like at first logical steps of considerations above). These tracks now are looped tracks of most different shape within a fictive sphere. Nevertheless, based on two-third-regularity, all transitions still are smooth, all times bending more or less into all three dimensions of space, all times more or less left-turn.

### Different Radius

It was already mentioned above, probably additional degree of movement's possibilities could be different radius of different turnings. This alternative possibility is shown at picture above at right side.

At D is shown movement of X-plane, which for example could do this angle of 40 degrees each time unit, at a radius of 9 units. Below at E is shown section of track at Y-plane, which shows 60 degrees at radius of 6 units. Below at F is added Z-plane with turning of 90 degrees at short radius of only 4 units. Below at G lastly, these three elements are added and resulting track of ether point again is marked by bended spiral curve. Tracks as a whole would be some shorter than previous tracks with equal radius.

Movements of different revolutions (resp. angles-speeds) at equal radius result different turning momentums at each direction. However might be necessary, all turning momentums are same amount, so towards outside there are no resulting forces, thus universe as a whole could be stationary 'within space' (of probably Nothing outside universe). By corresponding relations of angles-speeds and radius this is easy to achieve (however I leave this problem to experts for detailed calculations).

**Wishful Thinking**

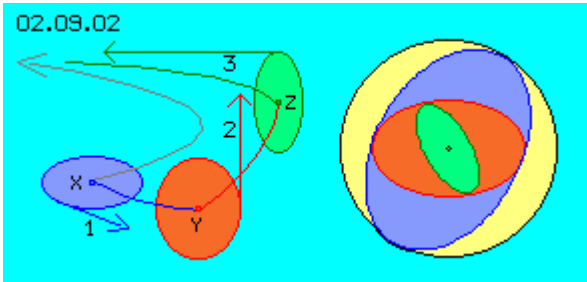
Upside at considerations about standing waves I mentioned, wishes could be father of thought (without checking out real possibilities). Without doubt there are standing waves or at least standing nodes, multiple within universe. Without clear adjusted mirror however, these standing waves can not exist continuously.

Analogy now I had 'strong wish', ether as a whole shall do basic movements. I deduced this opinion logically from several points of view, however one still has to ask whether it could really be possible or it is real fact indeed (indispensable act for exact approach, like mentioned at Introduction).

So now it's question, whether and why universe indeed is 'stationary' within space, even 'vibrating' on and on like discussed above. So once more we have to take 'divine position', looking from outside at sphere of universe. At picture 02.09.02 this view is shown.

**Rotating but up and away into Nothing**

At this picture left side is shown, how Tennis-God would handle universe-ball. At first, he would carry out hit (1) at X-plane tangentially towards ball (always drawn only disk of diameter). Ball would start rotating, however also flying curved ahead.



Tennis-God is running fast, hitting (2) ball tangentially upwards (at Y-plane), afterwards one more hit (3) right angled to previous (at Z-plane). If hits were done by different speeds, 'universe' would turn as wanted, however would buzz off into 'wide Nothing' (grey curve).

At this picture right side schematically is marked, how a God familiar with atom-model would set to work. He would bear universe 'cardanic', thus like ship-compass is beared or even a gyroscope is build. At first, he would set central sphere into turning movement (marked by green disk), afterwards would turn axle-bearing right angled (red disk), lastly also outer axle-bearing. That three-fold turnably mounted 'globe' resp. whole universe would do movements at tracks wanted, also by different angles speeds.

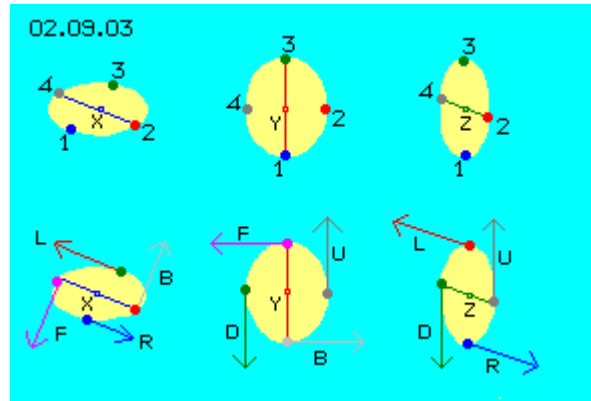
However, Tennis-God like Atom-God wouldn't have achieved movements as really wanted, cause universe by its circumference would rotate. Opposite however, all ether points shall not rotate around central axis, but must swing synchronously like describes upside at Spiralcluster at picture 02.06.02 and visualized by animation there.

**Swinging instead Rotating**

This process of movements, only God of previous elegant headwaiter has under control - like shown at following picture 02.09.03 at upper row. With both hands he holds tray (resp. universe) at X-plane and leads it as a whole in circled movement. One ether point thus is at locations 1, 2, 3 and 4, at one spot after the other, then again at location 1, 2 etc. Universe thus don't rotate but is only swinging at circle. Then, with both hands same time, he does analogue movement at Y-plane, lastly in addition at Z-plane.

Again one ether point, at one moment after the other, will each be at positions 1 to 4 - however not like shown at this picture separately, but all locations 1 are identical, all locations 2 are congruent etc., i.e. ether point is moving at each resulting section of track as discussed above. All ether points of whole universe move synchronously that kind, at different sections of track, however at one moment all do same curve.

If now 'divine hands' let go universe, universe will hang free within Nothing (as out there is no gravity). Nevertheless it's questionable, universe will go on swinging. This question is answered by picture 02.09.03 at downside row.



Arrows there mark turning momentums, all same lengths, so of same amount, as movements are done by different speeds and correspondingly different radius. Axes resp. planes here are drawn by side-view (some diagonal). However as usual, X-axis shall show from left to right, Y-axis from bottom to top and Z-axis shows right-angled to picture-plane (into screen or paper-surface).

### Directions of Movements

Movements within plane of X-axis occur at a circle horizontal to picture-plane (one half circle in front of and one half circle behind of picture-plane resp. paper or screen). Ether point in front of screen moves to right (R), then moves into screen thus backward (B), behind screen it moves to left (L) and again forward (F) to and through screen.

Movements at plane of Y-axis reach vertical into screen (like above one half circle in front of screen and one half behind screen). Ether point in front of screen is lead downward (D), then back into screen thus backward (B), behind screen moves upward (U), lastly again forward (F) through screen.

Movements at plane of Z-axis are easy to understand, cause circled movement is done at surface of screen. Ether point downside is moving to right side (R), then upward (U) and upside to left (L), lastly again downward (D).

### Balanced Turning Momentum

Special appearance of this movement's process within three planes now is, each of these six directions is done twice. There are two movements to right (R) and left side (L), upward (U) and downward (D), backward (B) and forward (F).

Opposite to each one left-turning-momentum exists one right-turning momentum and correspondingly at all other directions. Based on different turning speeds e.g. two movements to right side can overlay, but also one right- and one left-movement can compensate mutually (so at this moment, movement only at each third plane is done), correspondingly at all other combinations of movements.

Like at normal waves, momentary 'stillstand' does not mean end of movements. Both movements still exist, at this very moment only build standing node. Even diverse turning momentums occur at different moments, in total all are balanced as a whole. This will mean, whole universe well can be stationary regardless of complex movement's processes, at the other hand steady 'vibrations' can go on and on, cause balanced totally.

### Disciplines of Sports

These movement's processes are complex indeed, however not only godlike but many

sportsmen (like -ladies, like normal working population) have artistic skills for controlling 'movements-figures'. Complex figures like these e.g. are known at aerobatics and gymnastics, at figure skating and springsport diving. Actually, steady new figures are created e.g. by freestyle snowboarders. Naturally most creative are sportsmen resp. artists with most expensive (sports-) equipment: 'quarks-sport-fishermen' found some 300 'elementary particles'.

Already at chapter Real Certainty at paragraph 'Quarks & Co' (title of German TV-program) was mentioned, one merely can't talk about 'particles' by 'survival-times' below nanoseconds. It's rather probable, these are short moments of movement's 'figures', analogue to movement's sections above.

Already terms used or names of quarks are significant: up, down, bottom, top, strange, charmed (it's rather 'strange' something disappears into screen, but one is 'charmed' it appears again). At quant-mechanics are usual terms e.g. spin (0, 1/2 and 1) or bayon-number (+1, 0 and -1) or elementary charge (1/3 and 2/3, normally only 1). For example, three quarks build one elementary particle, by fiddle steady interplay. Sub-elementary particles 'disintegrate' into other particles and all show mutual 'interactions', by different forces.

### **Basic pattern and enlarged Copies**

All this remembers more at movements above than at real solid parts. At least that's important hint, how and why 'material' shapes mirror ether's basic movements, as enlarged copies of basic pattern.

Structure of elementary 'particles' is described at following part 03 as 'local movements'. At following chapter however, at first is to check whether these three movements are sufficiently complex or which kind extensions could be.

## 02.10. One-Two-Three-Four

### **Three large Circles**

At previous chapter essential characteristics of basic movements of ether were worked out. These movements are composed by track-sections of different kind, with steady smooth transitions. There are frequencies with relations of 2/3-law, where 4, 6 and 9 are sequence of most small integers. Turnings occur same time at all three axes of space, at different radius, so turning momentums in total are balanced.

These complex movement's processes were deduced by considerations, band of all possible swinging movements must be closed within itself (thus loops). As most simple shape, fictively were put three large circles around a sphere (at previous chapter Two-Third and Three at picture 02.08.02).

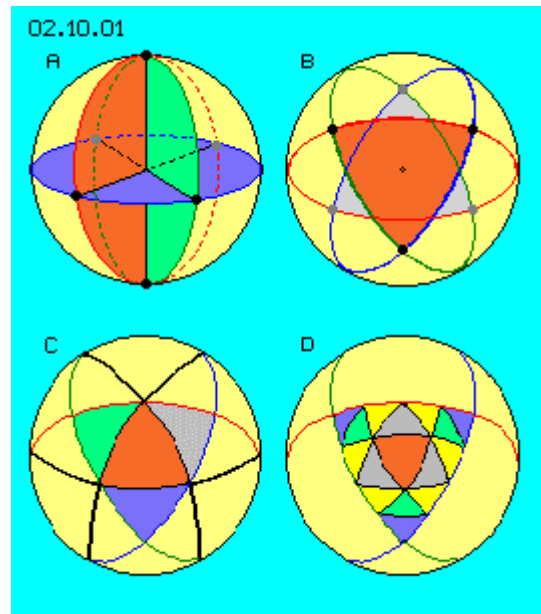
In retrospect, this picture shows 'unravalled' shape of complex spiral-cluster-tracks. This simplified model here once more is used as starting basis for additional considerations. Also simply is assumed, all three large circles show same radius.

## Eight Triangles

At picture 02.10.01 left side at A is shown a 'globe' and three large circles are marked resp. diameters are drawn schematically as disks. Horizontally lies disk of equator (blue), vertical stands 0-degree-meridian (red) and right-angled shifted 90-degree-meridian (green).

These are three large circles, which cut each other at six points (North and South Pole, each on point at equator at 0-, 90-East-, 180- and 90-degree West). Views at all six points of intersections show same picture.

These three large circles divide sphere divided into eight likely parts resp. surface is divided into eight likely triangles (naturally with bended lines). These eight surfaces remember at 2 plus 6 electrons at inner spheres of atom model (however this subject is discussed at later parts).



At this picture right side at B, view centrally at one of these eight triangles is shown (and also here, views onto all eight triangles would show same picture). Triangle at front is coloured (red). There are drawn three large circles, also their parts at backside of globe. On can see, also at opposite backside of globe a triangle exists (marked by grey colour), however shifted by 180 degrees.

## Fractal Division

If now more possibilities of 'order-criteria' than previous only three large circles are wanted, fractal division of triangles would be good idea. As an example, at this picture left side at C is shown, further three large circles (marked black) divide that triangle into four smaller triangles of likely shape (however here are only drawn curves at frontside of sphere).

By additional large circles naturally also new triangles could be built, e.g. each previous triangles once more is divided into four even smaller triangles at picture right side at D (by this view, triangles seem to be different, at surface of sphere however all are same size and shape).

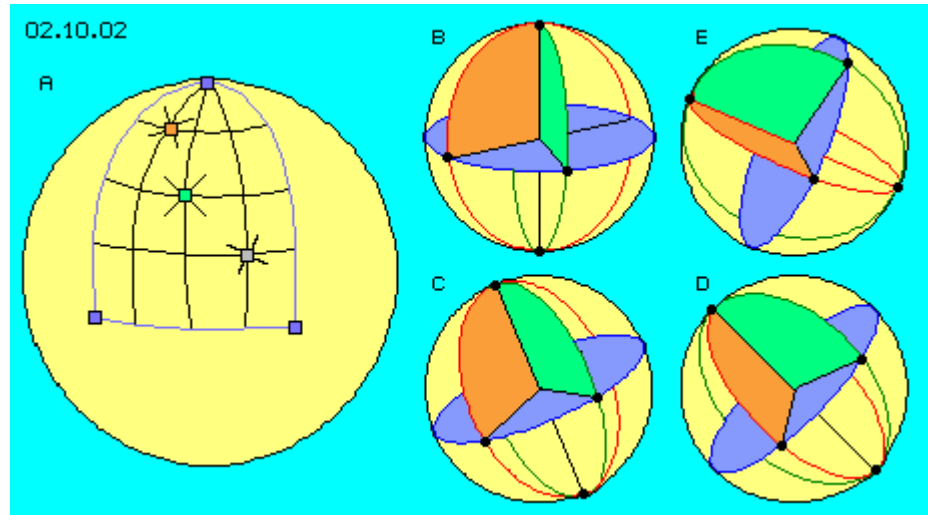
Each additional large circle thus would allow additional turning direction of ether. At first division (C) are added three large circles, however four are necessary to divide all eight surfaces correspondingly. At second division (D) are added six new lines, however again not all parts of surface are divided same kind.

So this fractal division would be possible for producing additional order criteria. This method accentuates likely shape of surfaces, however demands differing numbers of additional large circles. Preferably however should be achieved most systematic extension of first three large circles, i.e. exactly each three additional large circles should offer new order-units and - possibilities.

## Four North Poles

That first set of large circles has one 'North Pole', at which two large circles intersect right angled, likely at 'South Pole'. Third large circle is 'equator', which is intersected by previous both large circles at four 'poles'. At picture 02.10.02 left side at A this starting basis is shown. Only North Pole is drawn and only one fourth of each large circle is marked, thus only one triangle between three poles is shown at globe.

If now one would install additional 'North Pole' at this globe at different place, all three new large circles inclusive their intersection points correspondingly would be placed at other locations. One could install one or many new gratings at globe correspondingly, shifted versus each other anyway.



In order to create order-functions, however systematic approach is demanded. As an example, this triangle at globe (at A) is divided by three lines as 'degree of latitude' and three 'meridian' lines, each by 22.5 degrees distance. At intersection points of these lines are drawn three additional north-poles (marked by squares).

So all new lines are separated large circles, each new line of new north-poles must show into different directions. Large circles of each new north-pole here are only marked by short lines. These lines show angles versus each latitude and meridian of 22.5, next 45 and lastly 67.5 degrees.

These large circles represent directions of (overlying) turning movements of ether. As now all twelve large circles are shifted versus each other, so turnings of ether into twelve different directions are possible.

At this picture right side at B, C, D and E these 'shifted' directions once more are visualized. Plane of equator (blue disk) is positioned horizontally at B and afterwards (at C, D and E) tilt each 22.5 degrees. Also drawn are here each one circle-segment of Y-plane (red) and Z-plane (green). Also these planes are shifted around north-south-axis by each 22.5 degrees, so show into each different direction.

#### Four times Three

Naturally, basic movements of ether practically could be any kind (analogue to both previous concepts or also quite other kind). Based on previous considerations however, ether will be in swinging movements, i.e. there is present number One as one complete revolution.

This swinging won't exist only within one plane, also not only at two but into three directions of abstract space (cause three dimensions are sufficient for description of any location). So also number Three is really represented.

These swinging movements at three planes won't have same turning speeds, but are 'waves' of different 'frequencies' (however here realized as concrete revolutions of ether's movements). By considerations and observations of global scaling, two-third-gradation was detected being really important concerning real occurrences. If frequencies thus are graduated by relation of two to three, also number Two really is represented within ether.

Number four is next to build corresponding movements within ether. This number is important cause it also is base of  $1/4$ ,  $2/4$  (so  $1/2$ ) and  $3/4$ . That's why I suggest, ether basic

movement in principle (besides Two-to-Three) is based also at that Three-times-Four (or even Three-exponent-Four, what e.g. Peter Plichta pointed out to be essential order in nature).

### Unlimited or limited

Next question now is, by which regularity each three frequencies of additional three 'bands of frequencies' (resp. nine new or all twelve turning movements) are graduated.

After 2/3 now could follow 1/2 or e.g. 3/4, 4/5, 5/6, 6/7 etc. as graduations. However, all facultative possibilities (represented by Euler-Number of 2.7182818...) would demand 'unlimited' turning directions. As mentioned above, laws all time determine restrictions. Just nature-laws reduce theoretically unlimited possibilities mostly at only one admitted relation or value.

So if ether's basic movement represent most basic laws and regularities of nature quite real (no longer only by abstract theoretical space of some numbers), possibilities of movements must be limited rather strong. This would be realized e.g., 2/3-law is used generally, at each of four bands only shifted by 'octave'.

### Four Graduation-Bands

At picture 02.10.03 left side is shown first band of frequency-sequence 4-6-9 (previous starting basis of most small integers). If now most coarse swinging (4) is doubled, next higher integer sequence of swings by 2/3-law is 8-12-18-27.

If three upper values (12-18-27) were valid as frequencies for next band, that 'octave' would be resonant with both previous values (6/12 and 9/18), but would enlarge band by factor three (9\*3=27).

Analogue are installed bands three and four at this picture. At this table thus within vertical bands always factor 1.5 is working, in horizontal row always factor 2 and into diagonal direction always factor 3. At this table thus come up practically all values of importance at theory of global scaling: 9-27-54-81-108-162-243, in addition 4 and 6 and each multiple of.

02.10.03

4	8	16	32
6	12	24	48
9	18	36	72
	27	54	108
		81	162
			243

At global scaling, these nodes are assumed to exist within abstract, 'logarithmic space of physical scales' as result of standing waves (with vague ideas about medium). Here however, these swinging movements plus nodes are overlays of totally real movements of totally real medium of ether (what however only works by understanding ether as gapless continuum - and ether really is).

### Nineteen and Four

It already was mentioned, 4 + 6 + 9 is 19 and this number is important order factor within periodic system of chemical elements and also at chemical compounds, especially of organic chemistry. Especially Peter Plichta with his 'Prim-Number-Cross' did point out these facts (nevertheless put this order into 'four-dimensional space of (prim-) numbers, thus only as abstract model).

Addition of frequencies of second band (12 + 18 + 27 = 57) are 19 multiplied by 3. Just these four (1+3) rows of each 19 possibilities occur at most different appearances. This would mean, these two frequency-bands are (at least resonance-) area of material occurrences of chemistry. There are 19 times 4 'events', resulting of overlays of complex movement's

processes, serving as order-factors, in shape of 'hard nodes', which also are basis for effecting resonances.

Here appears also number 81, that remembers at 81 stable chemical elements. This occurrence however is based at other regularities (by formula detected by Plichta) and is described later at part 'Atom-Model'.

### **Complete Cycles**

Ether basic movement is composed of complete revolutions into these twelve directions. By overlay of all turnings, track of common movements at a whole is multiply twisted spiral cluster, nevertheless previous large circles represent 'un-winded' process into all twelve directions.

At each of these circled tracks, at each time-unit occurs different numbers of revolutions. If 4 and 6 and 9 revolutions occur within same time, one ether point will come back to original location finally after 36 time-units. So complete cycle of that first frequency-band are 36 units. If material area also includes second frequency-band, so complete cycle will take  $36 * 3 = 108$  units.

When elementary particles (electron, proton, neutron) were detected to exist of sub-elementary particles, first some hundred of these 'particles' were found rather short time. However these are no parts at all, by previous consideration it's clear: these are 'movement's section' within space that occur while one cycle (of material occurrences) inevitably.

Next cycle including third band are  $108 * 3 = 324$  units. That's range of sub-elementary particles detected now. So these are movement's sections resonant with nine frequencies. That's astonishing, cause reaching beyond area of material occurrences. Indeed, these movement's sections are not observed direct kind but are only to deduced secondary by symptoms.

Cycle including forth band is complete by  $324 * 3 = 972$  units. So nuclear researches did only half work up to now. However it will be hard to penetrate into this area by material machines - to become aware of these 'high vibrations' are demanded other 'sense organs'.

### **Limited Choice**

By these considerations, thus structure of ether's basic movements is restricted to turnings into twelve directions, each three as one band of frequencies, four bands with overlapping frequencies, all organized by 2/3-law. By overlays results most complex process of movements, which serves as basis of resonances and as ordering factor for enlarged movement's structures.

By previous considerations would exist only some thousand 'variations' (previous 972 nodes) - thus most limited basis. However, huge variety of nature does exist only by diverse different 'conglomerations' of atoms, these exist of only some different compositions of electrons etc., so lastly are demanded only few 'brickstones' (if one doesn't interpret movement sections as hard-core sub-elementary particles).

Indeed, demanded are only one area of electrons, one of photons, one of neutrinos - and one of 'spiritons'. Four bands of each three frequencies and variety of common multiple will do - as discussed at further parts of this workout.

## 02.11. Summary

### **Ether-Continuum**

At first part 01 Introduction of this workout was pointed out, it strongly must be differed between real certain knowledge and only mental-abstract terms. For communication 'with one's self' like with others, real facts are to call by names and it also makes sense introducing abstract summarizing terms as names for likely appearances and characteristics.

However is to pay attention, results of logical operations by only abstract terms are not transferred onto real being, if conclusions not again and directly are conform to real facts.

Single really certain knowledge only is: there is something and something is moving. That Something is called ether and at first part was worked out, ether is single real existing substance (and all other stuff are only occurrences of ether movements). That's why ether can and must have also unique properties (opposite e.g. to materia).

As soon as existence on Something is sure, by strict logic can't exist Nothing. Existence of Nothing (being of not-being) excludes itself by itself (like Gottfried Wilhelm Leibniz already did explain his colleague Isaac Newton). Likely not real is e.g. physical forces could have effect through Nothing. So it's strict logic, ether must show property of un-dividability and is real gapless continuum.

### **Ether-Movement**

Now at second part of this workout, movements of ether were analysed. Again at first was necessary to exclude all kinds of movements known by experiences of material world.

Based on gap-less-ness, ether can not do all kinds of movement. Neither transversal- nor longitudinal-waves, neither pure circled nor pure linear movements and also no outside-inward movements are possible (these movements are possible only at level of 'coarse' movement pattern like e.g. material occurrences).

Ether as a whole is permanently swinging, at distances of scale of quants, at spiral-shaped tracks, with steady smooth transitions. At earlier workouts of ether-theory I called that swinging at 'spiral-cluster-tracks', with turnings around many axes same time, at varying radius and changing speeds around steady tumbling turning axes.

That universal basic movement is inevitable requisite for existence of more coarse ether-vortices, which e.g. represent materia. If whole block of ether would be without any motion, indeed no movements at all could exist. Only by steady 'background-motion' it's possible, local enlarged movement's pattern are 'zoomed' off.

Already that time I had precise idea how e.g. electron would really 'look' like. However I had no conclusive arguments, why obviously all electrons are stable and have certain size.

### **Global Scaling**

Just concerning that problem of spreading of sizes within universe, theories of gravity-waves and global scaling were intensively discussed recent years. Both theories are based on standing waves - however I had and still have doubts about these considerations.

At the one hand it's not defined clearly, which medium should do these waves or it's assumed by parts of any medium (with open questions about Nothing between parts). At the other hand, standing waves demand permanent and constantly working sender and - even more important - proper mirroring. Third, standing waves can exist into spreading direction, however can not exist that kind within a surface and not within cubic space and really not

within a sphere (resp. it would result right-angled grating structures or shell-like waves with only one centre, both not congruent with observations of universe).

Often is assumed mirroring at less dense areas (at relative Nothing) - what's really impossible. Or it's assumed mirroring at border layers - what's absolutely possible. For example radio-waves are mirrored at ionosphere (at areas like 'impenetrable' walls for these wavelengths). However just there is obvious, how uncertain and unsteady that mirroring is. Within whole universe are lots of 'disturbance-sources' and thus global standing waves probably can't exist permanent.

Obviously however there exists order-function concerning probability spreading within universe and formulas were developed for spreading of nodes, approved by many observations at diverse applications. It was deduced, these waves are existent within 'one-dimensional logarithmic space of physical scales', based on natural logarithm, which is based on Euler's Number of 2.7182818... (expression of all facultative possibilities).

My reservation against this model is not concerning mathematical approach of this theory, but only concerning opinion, these regularities obviously show real effects - even these laws are only existent within abstract mental 'space'. By my understanding of reality, these laws must be manifest same 'material' kind like its 'material' consequences.

### **Fractal Basic Pattern and Enlargements**

If however these well-founded experiences of global scaling are transferred on ether basic movements of previous spiral clusters quite clear circumstances and consequences are resulting of:

- Swinging is done by single real existing substance of ether.
- Within ether as real continuum exists no fading, i.e. once installed swinging will exist 'infinitely'.
- As spreading direction of wave is not straight linear running off, but occurs at closed circled tracks, no mirroring is demanded.
- Many frequencies well can overlay, so swinging nodes of different 'hardness' exist.
- Regularity of fractals is represented only once by ether-swinging, so no logarithmic repeating of all sizes is demanded (so no abstract 'mathematical space').
- This basic pattern is stored by synchronous resp. parallel swinging of whole ether of whole universe as a real hologram, i.e. anywhere present as ordering-factor same kind.
- Basic pattern of movement can come up as enlarged resp. more coarse copy in shape of diverse occurrences, by any number resp. at any location of universe.
- However will show lasting existence only these occurrences, which are resonant to basic pattern, i.e. are enlarged by multiple of one or several swinging basic movements.
- Especially stable naturally are occurrences, which are integer multiple of most 'hard' nodes.

So previous spiral clusters no longer are chaotic, but these universal ether movements are built by strict laws and are mirrored by all local, more coarse movement's patterns resp. ether basic movements affect as ordering factor really morphogenetic. Real basic movements of real ether thus have real effect at all other occurrences.

## Laws are Restrictions

Every law is limitation of theoretical unlimited number of possibilities. Especially restricting are nature laws, most allowing only one exact relation or appear in shape of certain 'nature-constants'. By this understanding, also basic pattern not all possible swinging movements should allow, but ether's basis movements should show rather restricting regulations.

I want to underline, my considerations and findings are only concerning qualitative statements about properties of ether and its movements. Mathematical exact determination of dimensions, radius and timer units, structure of frequencies etc. I leave to those with better knowledge and resources.

At previous chapters however, essential dates of theory and experiences of global scaling were included. Other structures well are thinkable, on the other hand some essential points of view indicate just these relations to exist in reality.

## Structure of Frequencies

Swinging movements of ether occur within three-dimensional space, so three basic directions stand to reason. Into space however, lots of directions show, so it also could exist turnings into more than three directions (e.g. six, nine or probably twelve).

Outstanding were probability spreading corresponding to nodes of frequencies with graduations of  $\frac{2}{3}$ . So whole system could be based on only number 1 (one complete revolution), 2 and 3 (by two-third-law) and 4 (by four times three directions).

02.11.01

E	P	N	S
4	12	36	108
6	18	54	162
9	27	81	243

Sequence of most small integers with three numbers by this graduation is 4 and 6 and 9, where sum of is 19. If second frequency band is overlapping by 12 and 18 and 27, sum of is 54 or once more 3 times 19.

That number 19 is important order-factor for chemical elements and that  $4 * 19$  again show especially important groups, e.g. at compounds of organic chemistry. So, with that first frequency band (E), probably brickstones of atoms are resonant (especially electron as essential basic element) and resonant with second frequency band prevailing are atomic compounds.

In addition, that second frequency band of photon (P) will be resonance basis for signal speeds of light, probably most low frequency (here that 12). If electromagnetic waves are 'tunnelled', 1.5-fold speed (from 12 to 18) or more-fold speed (from 12 to 27) was measured. Photon is 'brickstone' of electromagnetic appearances, effecting also between atoms (charges, ions, attraction and rejection etc.).

Third band (N) thus would be area of over-lightspeed resp. of those small 'particles' penetrating materia without problems: neutrinos for example. Neutrinos are hard to detect, at the other hand recent years essential progress of theoretical knowledge like practical experiments were achieved, e.g. by Konstantin Meyl with his 'Scalarwave-Physics'.

Fourth band (S) lastly are 'high vibrations', probably not detectable by material machines - however everyday's experience by most sensible 'equipment': living beings.

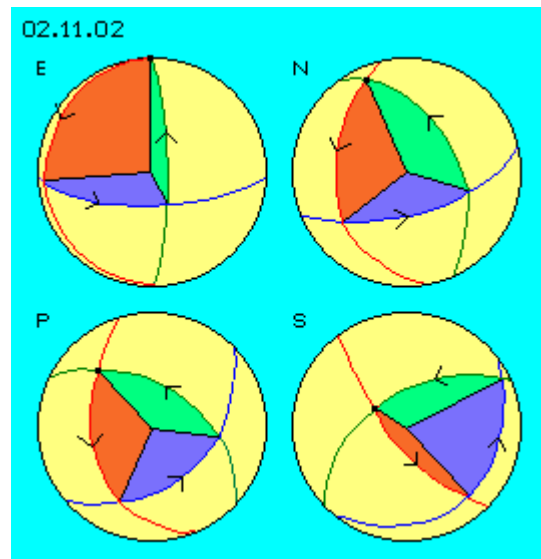
## Structure in Space

At picture 02.11.02 is shown how frequencies of previous four bands probably are arranged within space, i.e. in which directions turnings show. All turnings occur within fictive sphere, so these twelve directions are to draw as large circles around globe for demonstrating principle.

At E is marked normal North Pole and two meridians (at 0 and 90 degrees) and also equator. At P second 'north pole' is arranged, shifted by each 45 degrees and corresponding grating net of three large circles is drawn. Into these six directions thus low swinging movements could show, as a whole representing resonance-basis for material appearances.

At N an additional 'north pole' is installed and its grating net is shifted by 22.5 degrees, correspondingly once more at S, now shifted by 67.5 degrees each curve: resonance basis of higher levels.

Even these details are shown here, it's underlined once more, I describe only qualitative criteria of basic movements of Free Ether. I am not fixing that structure and dimensions of frequencies-spectrum like resulting arrangements in space resp. I want to leave these detailed workouts to others.



Here e.g. all radius of turnings simply are same length, while in reality turnings of higher speed will occur at correspondingly shorter radius. Different frequencies e.g. will be arranged within space that kind, turning momentums at a whole be equalized. Faster turnings e.g. will be winded around slower turnings (resp. will deform these correspondingly).

These details well are to determine exactly, e.g. based at dates and calculations like concrete experiences of global scaling, precise structure of ether-basic-movements are to set precisely.

Nuclear research has even better dates, inclusive 'survival-time' of more than three hundred 'sub-elementary-particles'. If these researchers no longer would search for 'parts', but take these appearances as sections of complex ether movements, concrete results could be achieved within short time. It would no longer be necessary to 'smash-up' nucleus, but would allow concentrating at harmonic resonance for peaceful and sensible usage.

## Doubts

Understandably, these considerations will appear rather strange for most readers, even only most simple and real movements are described - opposite e.g. to 'unreasonable demands' of Relativity-Theory or Quant-Mechanics or actual situation of cosmology (see e.g. Introduction, Special Terms).

Materialists may find most obscure e.g. 'high vibrations' - to others same kind obscure appears e.g. ideas, nature laws could affect without real anchoring or physical forces could interact via abstract fields.

As real as ether-movements are real existence of order-factors within whole universe, likely real all 'spiritual stuff' exists within ether - that's why I called essential 'brickstone' of that area 'spiriton'. Naturally also these 'waves-lengths' will result enlarged appearances, quite analogy to material appearances, e.g. by astral bodies (using this 'empty term' provisionally).

Within same medium of ether, also these fine structures penetrate and overlay material occurrences (like already neutrinos walk through 'normal' materia without problems). Naturally there is smooth transition of material to spiritual world resp. 'interact' these vice versa.

### Free Ether

This basic movement exists universe-wide same shape. This 'pure' shape of regular spiral cluster tracks, practically however is present nowhere within universe, at the most at most 'deserted corner' of universe.

This basic movement is multiple locally enlarged, coarsen and overlaid by large-rang 'vortices' within ether, e.g. by galaxies, sun systems, planets, material bodies and e.g. by each electron. So ether is 'Bounded Ether' at areas of all material occurrences. Above this, ether basic movements are deformed at least temporary and locally e.g. by all electromagnetic waves. Not least however, large movement's structures of high vibrations are omnipresent at all regions of universe, so most various are ether's motions everywhere - where life is present.

### Next Parts

These subjects are described in details at following parts of this workout. At next part 'Locale Movements' are described principles of movement pattern e.g. of galaxies, sun-systems or electrons. Later parts will describe diverse physical occurrences (e.g. unequal turning of sun-surface, gravity, radiation, double-slot-phenomena, model of atoms, magnetism and some more).

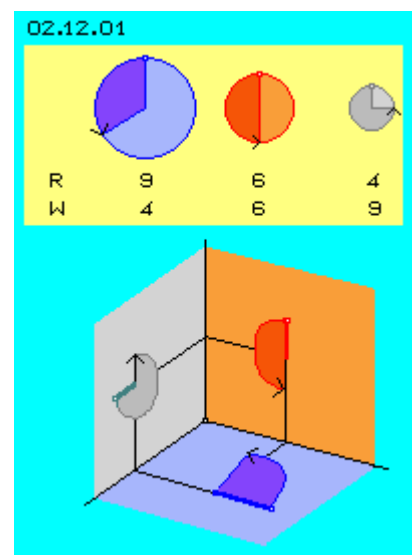
As an appendix to this part of Universal Movement, Raymond Ami made diverse 'Animations' showing rather impressive movements at spiral-cluster-tracks.

## 02.12. Animations

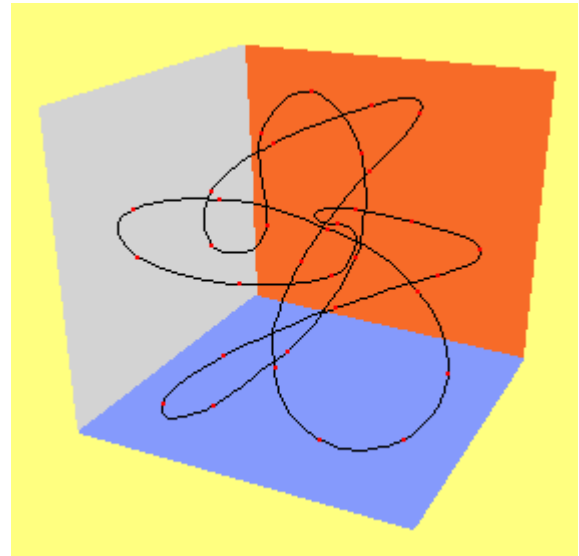
### Visualizing complex Movements

Last year I published my ideas about gapless ether and its universal basic movement. Obviously, most readers didn't find reasons for following argumentations. One colleague however, Raymond Ami, wanted to know precisely, whether and how these movement's pattern should be realistic. He made comprehensive calculations and animations, based on software MUPAD, a tool for mathematical experts. Some of his results are presented here.

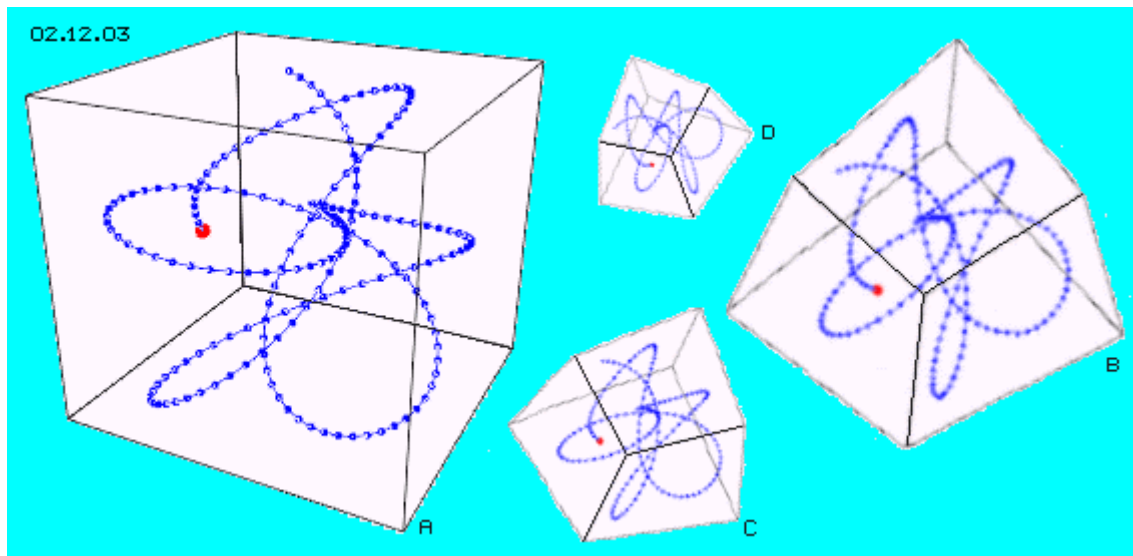
Starting basics schematically are show by picture 02.12.01. There are three movements at circled tracks, where radius and angles speeds (amplitudes and frequencies) are arranged by principle of 2/3 (as essential element of Global Scaling). Here schematic are drawn three 'clocks' and their radius (R) are 9, 6 and 4 units long. 'Hour hands' turn counter clock-wise, each time-unit e.g. by 4 and 6 and 9 'hours' resp. angles speeds (W, German Winkelgeschwindigkeit) of this relation.



These three turning movements are arranged right angles to each other. Actual position of turning movement is defined by each both coordinates. As each two like coordinates are added, actual point of combined movement within space is defined by three values of coordinates. Sequences of actual points after each time unit represent track of 'Spiral-Cluster'. At previous animation development of track is visualized (however rather simplified, e.g. track will not come back to starting point thus fast in real universal movements).



At Universal Ether Movement, not only these three motions overlay. I suggest, four 'bands' like these are overlaid, where frequencies and radius again are arranged by principle of  $2/3$ , and surfaces are shifted each by  $22.5$  degrees (like shown e.g. by pictures 02.10.02 and 02.10.03 of chapter 'One-Two-Three-Four'). At this picture 02.12.03 previous spiral-cluster-track is drawn four times, each one third smaller and correspondingly 'tilt' (original edge right side down is marked by A to D). Around 'coarse' track thus would wind finer tracks, so 'trembling' of universe as a whole results.



### Media-Player Animations

At the following are shown some animations designed by Raymond Ami. There are available some ap0213xx.mpg-files, however rather large, so downloads might take some time. These files are opened and shown by actually installed media-player.

## Trembling Universe

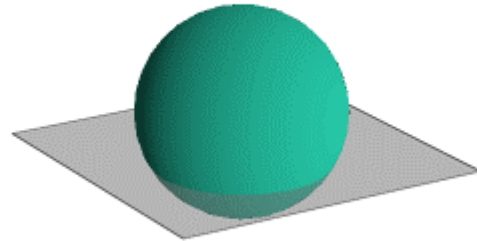
Based on ideas presented here, whole universe shows steady motions, where all points tremble parallel to each other at spiral-cluster-tracks.

At picture 02.12.11 universe is shown from 'outside', thus by point of view purely fictive. Grey surface serves only for orientation, that ball represents universe.

At this animation, ball moves trembling, however only at spiral tracks of simple parameters. Naturally, ways of movements are oversized extremely and speed is extremely slowed down. Ball does not turn, but only swings into diverse directions.

Click at 'Trembling Universe' starts download of file ap021311.mpg with 118 KB, afterwards animation is presented by media-player.

02.12.11



## Overlay of two circle Movements

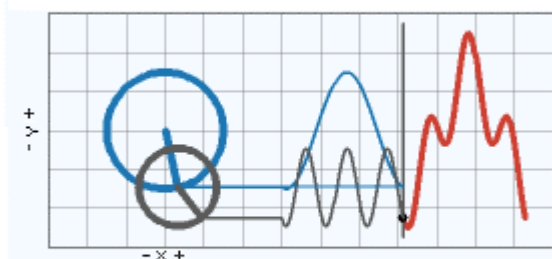
Picture 02.12.12 shows overlay of two circled tracks. Both movements run at one surface by different radius and angles speeds.

These simple overlays are well known, e.g. at electronics or at rotor systems, these movements also occur e.g. at ocean waves discussed at next part of workout. However, by principles of movements of potential vortices clouds shown there, movement occur not only at one level but stand right angled or diagonal to each other.

At this animation here, 'turning of both wheels' is shown in process, where red and black sinus-oscillations are added to red curve.

Animation of 'two overlaid circled movement' is available by file ap021312.mpg with 255 KB.

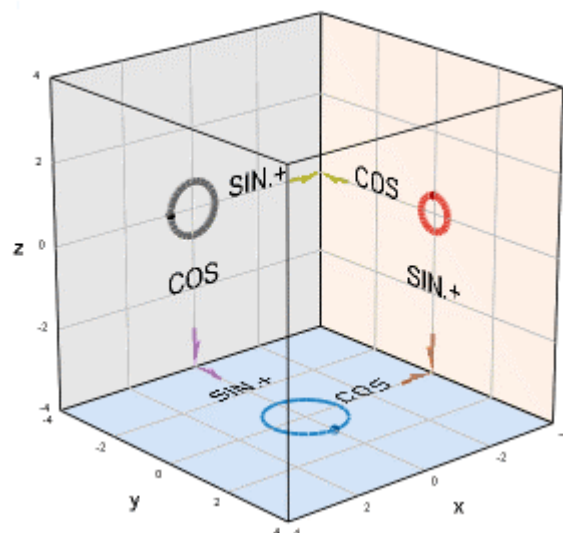
02.12.12



## Sinus plus Cosinus

At picture 02.12.13 previous three movements are marked by circles at three surfaces of coordinate system. Actual position of a point results of sinus resp. cosinus of actual angles at each radius.

02.12.13

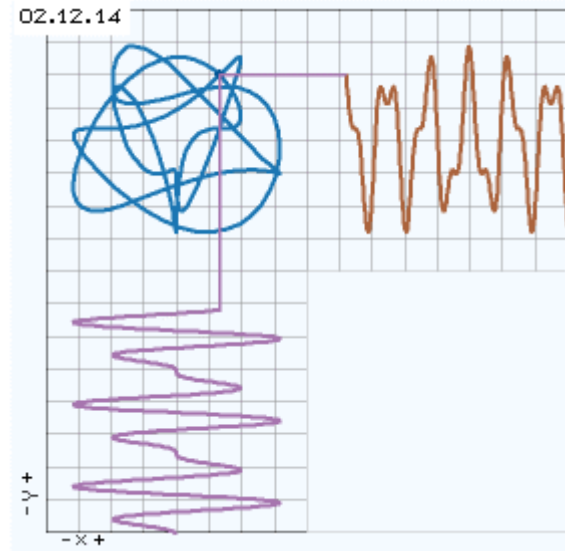


Sinus resp. cosinus values of like coordinates are added, thus resulting coordinate of actual point. Instead of previous addition at only one surface, here now values are added 'around corner'. As a whole, three coordinated mark actual position of point, resulting of overlaying three circle movements.

Raymond Ami used program MUPAD, an expert-system of comprehensive mathematical functions. (There is no animation corresponding to this picture).

### Addition of two Oscillations

At picture 02.12.14 are added two more complex oscillations to new curve. Pictures and animations like this were used for considerations about 'phase-shifting', cause most different curves result, depending on starting conditions. Also effects concerning 'turning left or right' were analysed by these techniques.

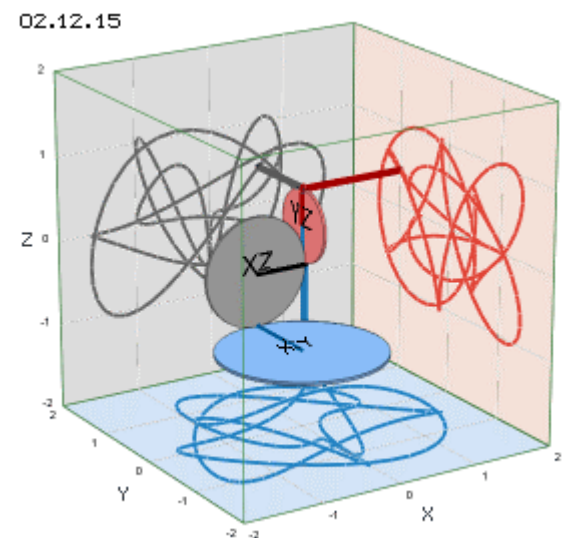


It's rather astonishing, overlays of simple circled tracks, suddenly can result most strange or even 'confused' tracks of combined movements. Based on my considerations, e.g. these hundreds of 'sub-elementary particles' represent sections of Universal Ether Movements - lastly remaining by detection (resp. destruction) of 'particles'. If data of these investigations would be 'puzzled' together, real data of overlays within spiral cluster track of universal ether movement would result.

This animation 'Addition of two Oscillations' are available by file ap021314.mpg of 394 KB.

### Three Wheels

At picture 02.12.15 is demonstrated, how three movements - right angled to each other - are combined. Turnings here are marked by three connected 'wheels'. Blue wheel turns at horizontal surface, grey wheel stands upright, red wheel again is shifted right angles.



Starting at position of 'hand' of third wheel, three coordinates are marked by pointers, drawing curves at each surface. These three cluster-tracks thus are projections onto each surface resp. opposite, spiral cluster track within three-dimensional space results of addition of these three curves.

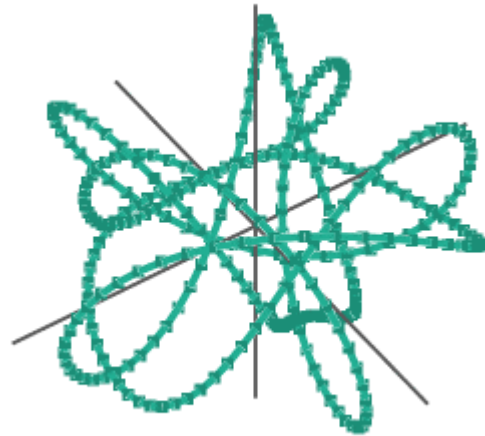
Also this program allowed investigations of characteristics of curves, resulting on variations of parameters.

This animation 'Three Wheels' is interesting and rather complex, so file ap021315.mpg takes some 781 KB.

### Spiral Cluster Track

Picture 02.12.16 shows result of previous 'wheel-system' resp. again only one simple version of spiral cluster track. Here in general is assumed, frequencies are in relation of 4-6-9 and radius are of opposite relation. Depending of phase shifting and turning sense of circled movements, again most different curves result - and question remains, what's left-side within universe.

02.12.16



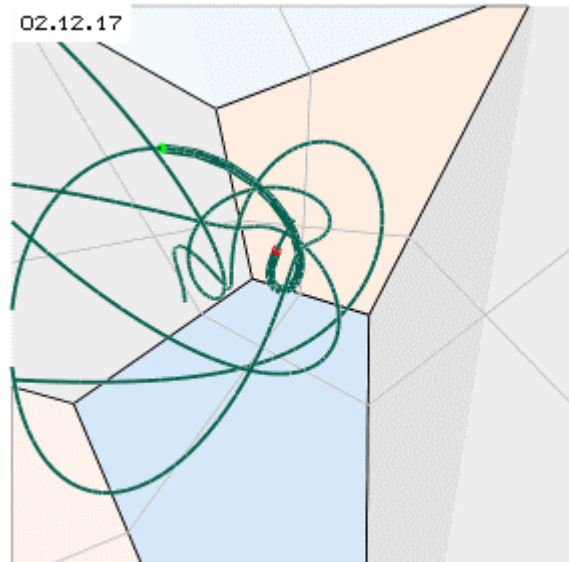
Raymond Ami made also simulations with more than these three basic movements, however results are rather difficult to understand resp. visually to interpret. So these relative simple curves present rather good impression (while real universal ether movements are too complex, at least for visual analyses).

This demanding animation 'Spiral cluster Track' thus represents real conditions much better than simple animation upside of this chapter. So it will be interesting to download file ap021316.mpg with its 361 KB and to study movement's processes.

### Roller Coaster

At picture 02.12.17 shows view from track onto track. At the one hand, Raymond Ami wanted to test complex functions of MUPAD-Systems, at the other hand he wanted to get most real impression of movement's processes. I told him, 'at my dreams I always surf left side' - until he send me this animation and question, what now should be 'left-side' within universe (discussed at next part of workouts).

02.12.17



Again, this is no very complex track, nevertheless presenting most impressive sight. So one can imagine view of an observer, riding at track, looking at further sections of track, 'floating within space', space by itself is tumbling around, relative to observer.

This ride at 'Roller Coaster' is for free - costs only download of file ap021317.mpg with 999 KB, thus download-time.

### **Universal and Local Ether Movements**

These animations complete points of view of previous chapters by impressive processes of movements, so understanding of spiral cluster tracks becomes much more realistic. Workouts of analyses of these Universal Ether Movements will go on - however it would be fine, if also professional research of micro- and macro-cosmos would take and check these ideas.

Next part 'Local Ether Movements' of this workout investigates, how other movement's pattern fit into this 'tumbling and swinging' universe. 'Roller Coasting' of these further considerations are likely exciting - at least were rather exciting for me.