

## MFT Part 2

“Everything we call real is made of things that cannot be regarded as real.” - Niels Bohr

### Paradigm shift

The foregoing, Part 1 of the **MFT** (Matrix Field Theory), creates a completely new basis for axiomatic assumptions and forces a paradigm shift for the understanding of physics. The part 2 here show the physical topics from the new prospect, the matrix structure of the medium, previously called empty space.

### The compelling clues of the 4th space dimension

In the further description of the theory, assumptions are made demonstrating the feasibility of various electro-magnetic mass particles in relation to the matrix, As shown at the beginning of the book, space, time and pulse are first and foremost human concepts whose reality must be determined. In space, it is the cycle that needed the negative time to add up to zero as a whole. The (-) time, however, requires the acceptance of the antimatter or here the backside of the 3. space dimension. A logical evaluation of CERN's experiments documents the (-) time of antiparticles, as Feynman graphs show. The current image of super-symmetry (SUSY) is wrong, because it sees antimatter as separate particles and not the back side of our space. The 4 states of a whole cycle, which are compulsorily required in the matrix and add up to zero, demand the (-) time state, which means that each fermion is also its antiparticle in this state. The first one who find out was Girac, a Swiss who spent his life as a physicist and mathematician in Cambridge.

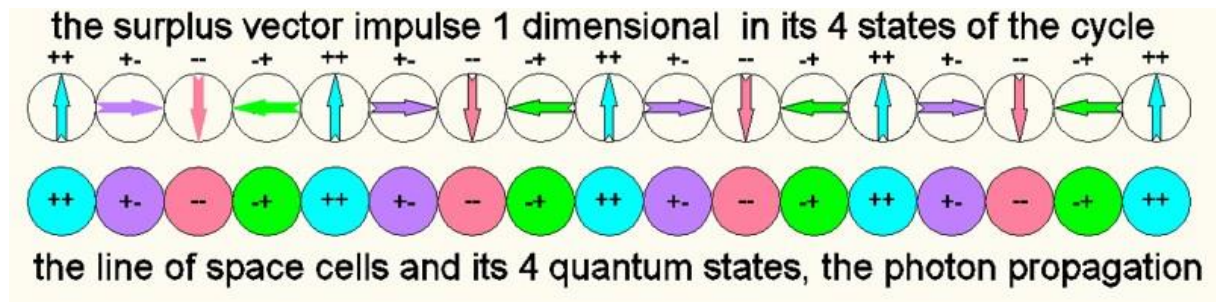
Now it can be easily imagined that the concept of a 2nd dimension becomes a backside by imagen a sheet of paper and thus becomes (as thin as ever) 3 dimensional. Exactly this is the state of our 3 dimensional space, which must also have a backside (SUSY) in the 4th space dimension. These clues prove the existence of a 4th dimension, but only scratch the surface there. When the paper becomes a book or a ball that has been crumpled up, we find ourselves in the 4th space dimension. Einstein's theory of relativity calls for a curved space to correspond to its density. That would be the sum of all oscillations with vector perpendicular to the 3D coordinates. From the point of view of the matrix, that would not be a bend, it would only be a value in the 4D coordinate.

### Relative simultaneity in time

As we have seen in chapter **Light, its deepest nature**, in the state of entanglement, and in the upper article about scales have seen, simultaneity becomes necessary for logical reasons. It is **independent** of the speed of light. We should reverse the question and explain how the phenomenon of the speed of light arises. In principle, this question was answered in 1905 by Einstein. There are 2 frames of reference, the outer and the inner. In the space size S1, c is infinite or simultaneously. In space S2 it is infinite within size S1 - S2 and in space S7 it is infinite within 1-7. In space size 262144 it is infinite within 1 - 262144, but outside it is always recognizable as c.

The path of light through the various space cells depending on the frequency of the light is under the rule of the matrix and its phases. These are the medium of light.

The scheme below shows the status of the photon cycle in accordance with the space-size cycle:



Since the logically required simultaneity is only possible inside of a reference system, the question now arises as to how the state of entanglement appears there? This can only be explained if hyper fields exist over the fields in action, more or less like the overtones or better the undertones of the music. A close examination shows us that the hyper fields can have any size and that ultimately the simultaneity can only be an apparent simultaneity.

How to understand this: The term **time** is incompletely explained in physics. Time as a physical concept, like space, has a theoretical application and a reality. In this view, it has a reverse side in the 4th dimension. It makes things to appear real if they give them a full cycle it means with a sub cycle in the (+) time and a completion in the (-) time. From our point of view, this can only be observed in particle physics. It is the main reason why fermions in principle have no age and maintain their oscillation forever lossless. They form a full cycle of simultaneity with the 4 stages. Although they are sequenced in a larger cycle, they can respond simultaneously by disturbances or other actions that belong to the larger cycle. This becomes understandable when the field cycle is no longer seen as an ultimate thing but as the product of the environment or matrix of cycles.

## The 4th dimension

a question in Quora caused me to answer as following:

Dimensions are tools of our consciousness. To understand the world, we need 3 dimensions and the zero-dimension to make all real. Without the Zero-dimension or with the assumption that it is zero, all will be zero and dimensions are only a concept. If you want to imagine the 4. spatial dimension, you need to flat one dimension to zero, e.g. you put the z coordinate to zero and look instead to the n-coordinate of the 4. dimension. Minkowsky replaced it by time. But don't forget; the zero-dimension counts too, you have to deal always with 4 dimension, even you see only 3 dimensions.

There are 3 common uses for dimensions: the geometrical , the physical and the spiritual meaning. I can't explain all but pic out here the physical. Einstein put relativistic values as an add to the radial distances of mass center. This he described as a tensor towards the 4. dimension and called it space warping. But this interpretation does not have to be necessary . He could also used the zero dimension to increase the value ( $>h$ ) of the unseen zero dimension. All of the quantum mechanics is based on 1-dimensional interaction (1 quantum or  $h$ ). By changing  $h$  means using the zero-dimension instead of the 4. dimension. With this version of the story we have no conflict with the spiritual version, what claims the 4. dimension as a higher consciousness.

The term **dimension** is seen in the context of the matrix not only as a spatial dimension, but as a new spheres of action of space, time and force. Here is an example: A field area (base size 1 in the matrix structure) is created by an expansion phase in the sense of an entropy seeking the equilibrium in the environment that exceeds the zero point (entropy pressure) by the created moment (force • v) and as a vacuum (opposite of the expansive phase) presses into the environment, is forced by this to action standstill (entropy v) whose resistance (the environment) in turn reverses the moment of expansion (the vacuum) to collapse into a center (smallest entropy of space, time, maximum momentum force/space). From there, however, the entire process is repeated with the opposite sign. The second process, however, is in (-) time, and therefore on the back of our 3D space, which only makes sense if our 3D space is in a 4D hyper space. To understand this better, here's an example: The concept of dimensions starts with dimension 0 (D0) and is called a place. The place is information, nothing else. The other dimensions remain information only if D0 has no physicality. To make the dimensions physical, D0 should be physical. It becomes physical when it has a space size what is smaller than the measurable, but that develops if it is summed up a physical value. In this sense we look at D2. Physically, it is an area if it has a back side like a paper side or is a side of a D3 body. In short, a dimension becomes a real physical quantity if it can transfer its value to the next higher dimension. So suppose that our D3 space is real then this becomes also valid as proof of the 4th dimension.

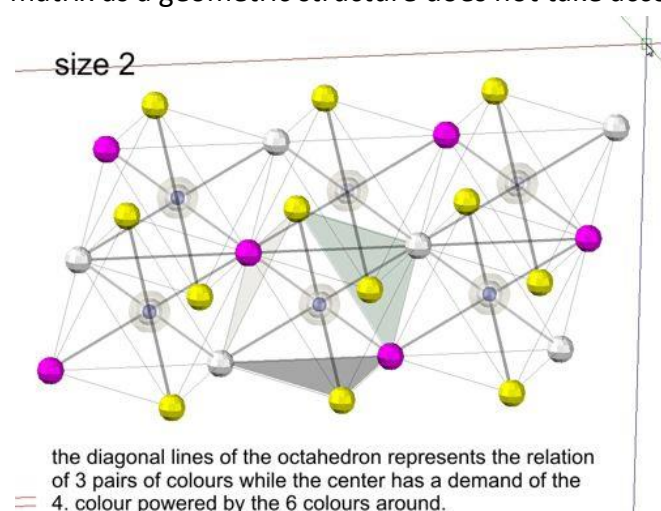
### The vibration vector in the 4th dimension

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Is the space of the matrix with its hexagonal, orthogonal and trigonal aspects of its structure hardly conceivable, but how should the vibration be presented in the 4th dimension, above all why? Well, in the world of vibrating vectors, the higher dimensions cast their shadows over the deeper ones. There are signs of transitions. D-zero must have a size, even if this size is below the measurability and remains unprovable. A D1 line must have a right and a left side to transfer to the 2nd dimension. An area D2 must have a back to form the 3rd dimension. So the 3rd dimension has to have a vibrational direction that uses all other vibrational values as a tensor field and also gives you a reality in a new dimension. In short, we are real, even if our components are just vibrations.

The main problem with the presentation of the 4th space dimension is that different things have the same x, y, z values. 4 cubes in 4 colors with the same sizes in the same place x, y, z show us only 1 cube with one color. In D4 we would see 4 dice in 4 colors. Unfortunately, the matrix as a geometric structure does not take account of our limited conception. It just

determines there.



As described above, the matrix has 2 forms sharing the colors and centers of the primary fields. Depending on the allocation of triangular surfaces we see a structure of tetrahedral or octahedral. Although the tetrahedral have space-time scaling, since they always form a perfect equilibrium, force scaling is not

possible. For this, the octahedral structure of the same space provides everything necessary for a force-scaling of the space. Each 6 field centers, the corners of the octahedron, have an incomplete cycle and move the central space-place of the octahedron with the force that completes the Equilibrium. In the above example we see red, yellow and white vibrating in the axes of the 3D space, which here form gray (a cyclic condition). However, this no longer has the base distance of 1, but  $\sqrt{2} / 2$ , which makes the force = force unit \*  $\sqrt{2} = 1.414$  force. This would cause the space to explode in principle, since these new force centers, here referred to as a manko color (or potentially missing color), again form octahedral at base distance  $\sqrt{2}$ , which also form manko colors of the size  $\sqrt{2} * \sqrt{2}$ , and so on. However, this does not happen because all neighboring colors are normally perfectly balanced. They do not belong to the octahedron. This is just a gap in between. However, as described later, if an additional force (over the entropy) dominates the neighboring spaces and exists over the capacity of the color spacing stability, then this force will act as a deficiency color in the center of the octahedron.

After each generation the manko-color increases by  $\sqrt{2}$ , after x generations the manko-color increases by  $\sqrt{2}^x$ . Even in the first generation, Planck's quantum of action would be changed, after the second generation the corresponding Compton wavelength and, in this episode, also the theory of relativity. As we see later, this will not happen, it becomes equalized by the 4. dimension.

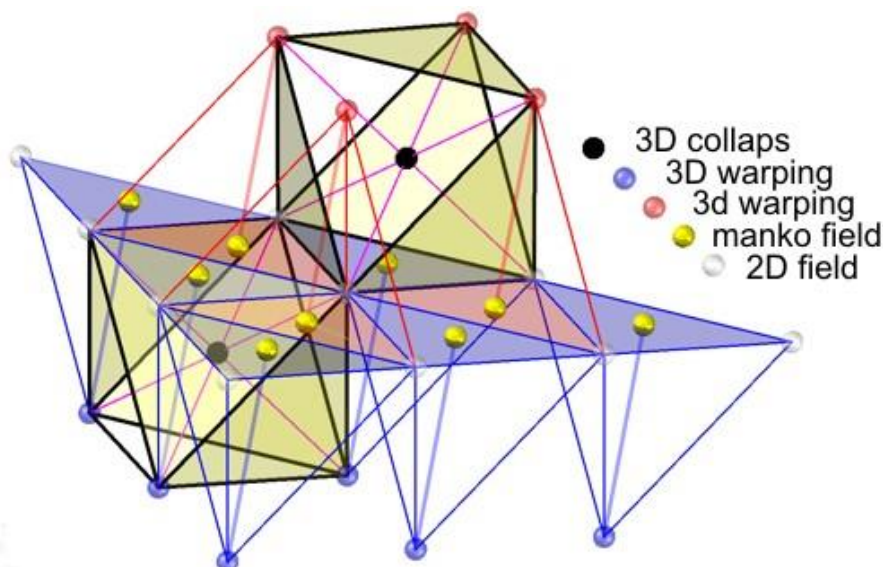
#### Why do we follow this idea when all existing theories are violated?

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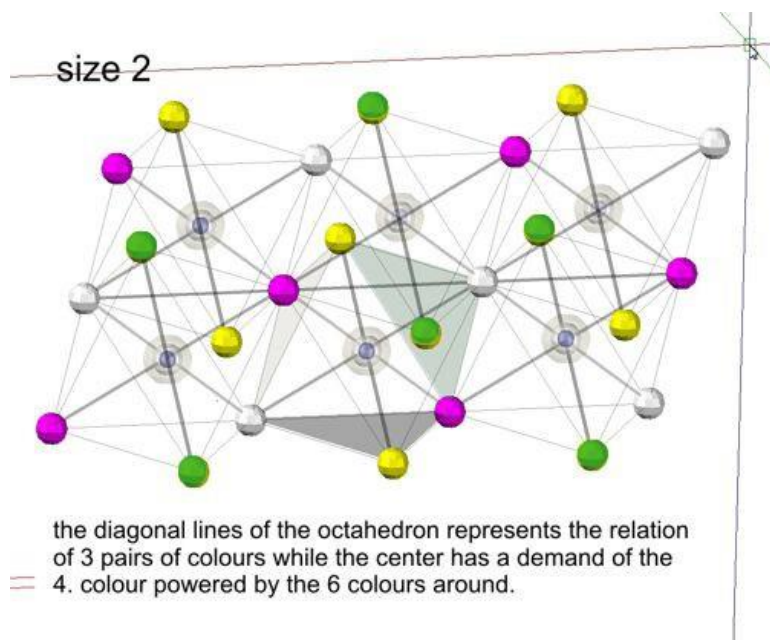
A 4th space dimension would elegantly resolve the node. The diagonals in 3D space would bend to  $\frac{1}{2} * \sqrt{2}$  into the 4th dimension, which together with the length  $\frac{1}{2} * \sqrt{2}$  of the 3rd dimension would again form the unit length 1:

$$(\frac{1}{2} * \sqrt{2} / 2 + \frac{1}{2} * \sqrt{2} / 2)^2 = 1$$

This would prove the fourth space dimension by fact. At the same time, it is shown that any force does not tear the matrix's mesh but only penetrate deeper into the 4th dimension. Here we want to show how the process can be assumed even in the deeper dimensions.



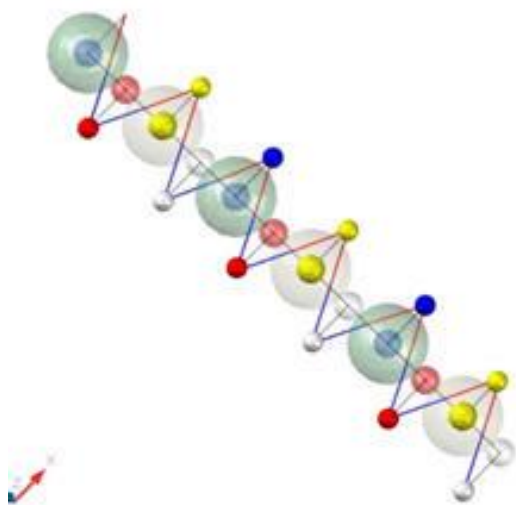




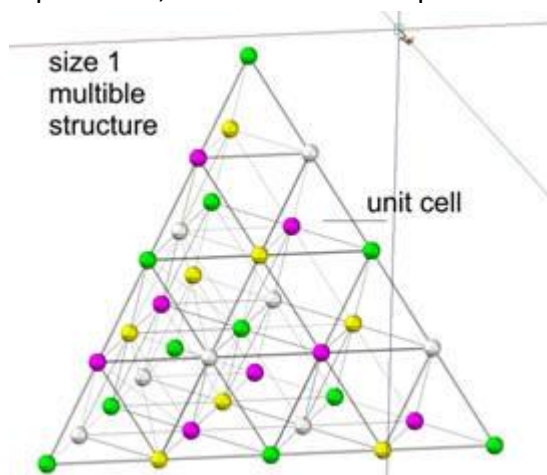
It shows the area consisting of triangles of 3 fields (here as white spheres hardly to see). At the center of these triangles is the manko color (gold) created by the white corner fields. It is bent upwards (red as pressure) or downwards (blue as tension) into the 3rd dimension. The result is 4D space. Through these fields in the 4D space arises the constellation of the octahedron. In its power center, if the energy introduced from the outside is large enough, a

second generation of shortcomings is created. These, in turn, would bend into a second layer of the 4th space dimension with another energy surplus, as described above. In this sense, the process can reach far into the dimensions of hyperspace. However, here only a rigid image can be shown, which fluctuates or oscillates in reality and whose distances change to a certain extent. The bending into the next higher dimension can also be called a dimensional collapse. What about dimension 1 and 2?

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equilibrium, the 2D bands clump into 2D surfaces.



Mind you, the geometric dimensions are just concepts without reality. As a reality, the D1 is a string of 4 colored fields corresponding to the 4 conditions of the Equilibrium fields. If D1 is compressed sufficiently, then the distances (here always size 1) will bend into the next higher (the 2nd) dimension. The field chain here consists of blue (in the state of expansion), red (in the state of shrinkage) in the (+) time, in the (-) time yellow (in the state of expansion), and white (in the state of shrinkage). Since the colors in the second dimension are also looking for

As an area of 3 corners, they develop the 4th (deficiency) color needed for a full cycle of the field combination. These deficiency colors are then bent to the next higher (3rd) dimension and form tetrahedral, the smallest field spaces in the equilibrium. We must remember the previously written; they fill 100% of the (for us empty) space. However, a further action of energies takes place in the interstices of the tetrahedral, which have the shape of the octahedral and

whose inner force relationships form the orthogonal (rectangular) space, in whose diagonal a deficiency of color emerges, which, as described above, the transition into the 4th dimension. This closes the circle of a geometric description of dimensional transitions.

## Light, its deepest nature

Einstein postulated the photon due to the electro-magnetic effect in the appearance of images on photographic plates. He called the smallest parts of the light photons, particles that move through space with  $c$  and therefore mass zero. This description is irritating, because a particle can't go with  $V=c$ , pushing the substance of space away

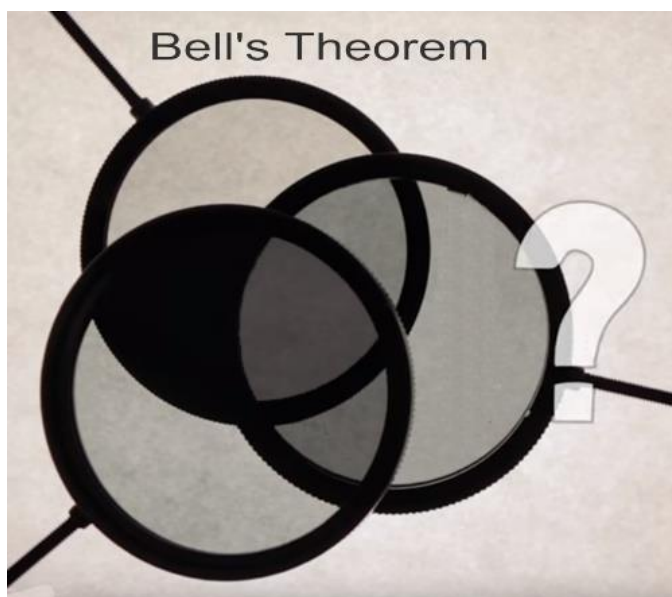
Light is not a particle and it does not move. It is a momentum of an energy quantum that is constantly re-creating or propagating through space; as a vector oscillation from space cell to space cell. The space cell that it leaves will be the same as before, and the one that builds up and establishes the vector momentum that arose a long time ago by an electro-magnetic (EM) process as a surplus-energy in a state of equilibrium. It is a vector-surplus momentum, a vibrational distortion of the equilibrium along space-correlated cells propagating in the spatial structure (matrix).

The medium of this oscillation is matrix size 2; 4; 6, etc., the basis of EM-space. The space cell size or better; the field size propagates with a force magnitude of  $e = h / \lambda$ , that is, the smaller the field size, the larger the field tension. The field tension  $E$  is linear (1D) since it originated from a vector pulse. This can only have the size of a quantum, since it was created by a field that is integrated in the matrix. As a unit of space it has gotten its size, its unit of time and its momentum in quantum sizes. In this sense, its space size will only change in the way as its momentum in the appropriate time. That means here:

**space** or radius of the field (spherical)  $r=t \cdot c$

**Impulse**  $e=h/r$  and its

**Impulse-time**  $t=r/c$ .



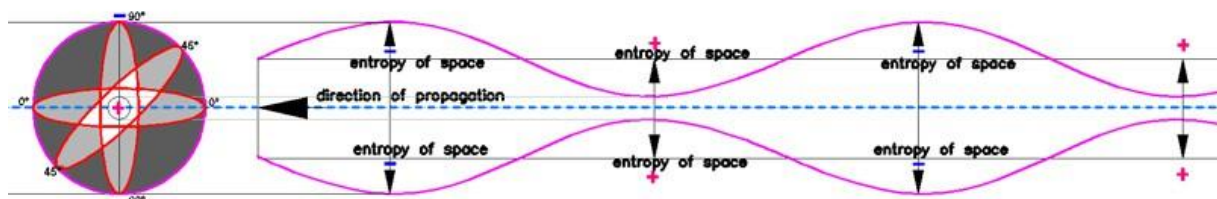
In classical depiction, light is seen as a transverse wave, Now we recognize, the wave is principally longitudinal, so it's a vector oscillation in the direction of its propagation. To understand the paradox, we need to plunge one layer deeper into the nature of light. The birth is caused by an energy surplus in the interaction of a charge fields in EM-charge-field- space of an atom (or electron-orbit). This excess is catapulted radially out from the charge-field center with  $V=c$  and propagates as an E-vector ( $h = e \cdot \lambda$ ) in space. Its field size is determined by  $2 \cdot r = 2 \cdot t \cdot c$ . The

momentum in this field is added to the existing space field in the 4 known states (colors or values = ++; + -; -; - +). But these interactions don't have a vector and act transverse, marked

by the coordinates  $y$  and  $z$ , where  $x$  is the coordinate of its direction. The total  $E$  (pulses) remains the same even if the transverse vectors are mutated by polarization. Suppression of a coordinate e.g.  $y$ - $y$  does not mean that the energy has decreased. By rotating the polarization filter by  $45^\circ$ , the pressed energy or partial torque in  $yy$  is partially activated again, which explains the "Bells Theorem", where the middle field of triple filtering is brighter than the left field of 2- fold overlap (filter 1 =  $0^\circ$ , filter 2 =  $90^\circ$ , filter 3 =  $45^\circ$ ).

### Simultaneity:

Physically, simultaneity means  $v = \infty$ . Of course, it does not have to be infinite in the real world, but is completely detached from the speed of light  $c$ . This is understood when a beginning of the universe is assumed, which, under unthinkable pressure in minute cycles of space and time, was the beginning stage of the universe and expanded into its present state. Everything was entangled or synchronized in the initial state. If the basic rhythm is synchronized over light-years, then interactions within a field that can be any size can give an information rate far beyond the speed of light. This was already described with the simultaneity of the interactions of the color points in part 1. It is a peculiarity of the matrix as a medium.



### Hyper fields:

We should assume that photons (linear one dimensional field momenta) are not only generated from charge field excess, but also from fields of aggregate states and also fields whose existence is not yet known today. There is simultaneity in all the fields. It also has an effect in  $(-)$  time, which reverses the course of cause and effect.

If simultaneity is universal, when does non-simultaneity begin?

Well, a photon is a one-dimensional additive quantity and is added to the states within the current space cell. It is thus not a part of the simultaneity of the space cell.

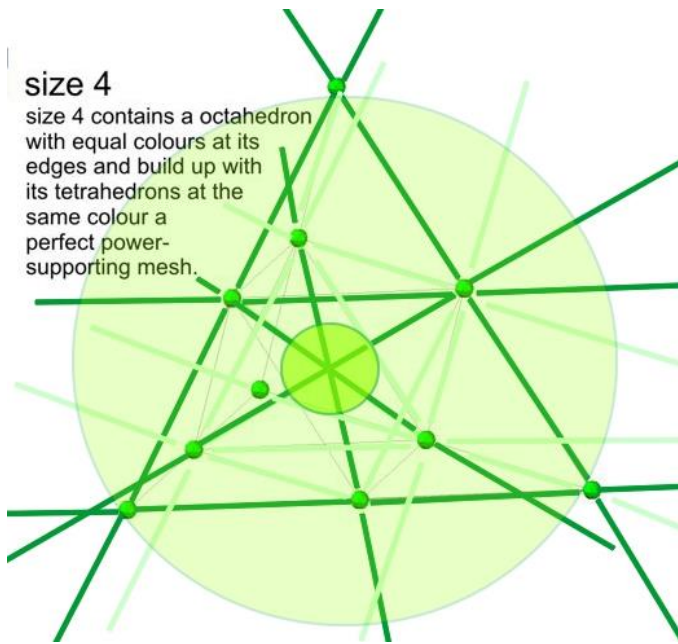
**How** can a one-dimensional longitudinal additive quantity be polarized?

Well, as an additive quantity, it has no effect on the radial effect of the current field states. These but are the ones that are polarized. Thus, the effects (colors) are polarized, which are dependent on the simultaneity.

**How** then explains the passage through 3 polarization filter? Simultaneity causes all 3 filters (or more) to act at once, so the calculation is:  $A+B+C$ .  $A+B+C$  have more open gaps for light to go through than  $A+B$ .

### 2 slot experiment

Now that we have received so many additional elements for an explanation, the answer is no longer difficult. Even Broglie realized that there had to be extra waves in the interference



of electrons. The matrix theory offers here the hyper fields. The electron or the photon does not interfere; it is the space cell that interferes. And it is this that allows the existence of the photon (one-dimensional momentum) or not. The photon passes only one slot, but the area of the interfering can be phase-shifted, thus giving the moment (the photon) no realization vector in space but the momentum is still in effect.

every field scale of size 2;4;6;8 etc. is an perfect momentum carrier. Its pulsation into the 4 properties of pace

causes a zero crossing twice during a cycle. In this phase, the moment also has zero. It is the area of interference.

## 8

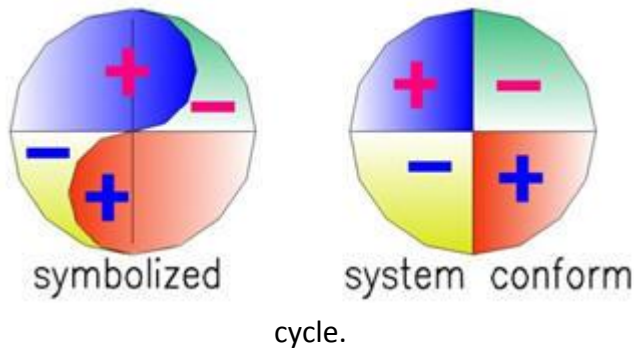
### The force

Force is only a concept without reality as long as it receives its interpretation through other concepts such as mass, inertia, time, distance. To integrate it into the reality of the matrix field Theory, it must explain its role in the 4 conditions of the basic cycle.

The official physical interpretation is manifold depending on the relation to distance, area, velocity, acceleration etc. The most general description is:  $F \rightarrow = \frac{dp}{dt}$  or pulse / time unit. Now  $\frac{dp}{dt}$  should only be seen at pulse / cycle. Since these processes happen at the speed of light, it is clear that with a very small value of the cycle or time, the value of the pulse number is higher and thus also  $F$ . This is analogously  $E = h \cdot f$  or  $h \cdot \text{frequency}$ , the quantum of action.

The philosophical explanation is more comprehensive: it is essentially the elasticity of the medium we call the fabric of the universe. To see this in the right light, we should look at the actions of the oscillations in a medium. Oscillation as a change of push-pull does not move in a medium, it propagates. Air-sound carries the impulse with  $\sim 300 \text{ m / s}$ . However, the air does not move (an air blast of  $300 \text{ m / s}$  would destroy the lab). If we consider steel as a medium, then the momentum is carried on at  $> 5000 \text{ m / s}$ . Light pulses (photons) propagate at  $\sim 300'000'000 \text{ m / s}$ , whereby the elasticity of the "empty space" is  $\sim 60'000$  times stronger than steel. Now we should finally have realized that nothing can move through space, it must propagate. We and our world are just oscillation in impulses, nothing solid. It is this "empty space" that can be explained in its smallest basis by the structure of the matrix. It is the equilibrium of the cycle, which consists of 4 sub-cycles or conditions of the field unit. It is the elasticity that leads back to equilibrium or struggles to deviate from it. Let's look at this oscillation in the matrix in each phase:





Phase + + here Red (+) = compression in relation to the environment in the (+) time

The field builds up towards compression, reaches the zenith and falls back to the level of the environment in the first 90° of the time cycle.

Phase - + here Yellow The field falls through the zero compensation into the depression and is compensated in the second 90° time cycle again to the level zero

Phase + - here green (+) = compression in relation to the environment in (-) time  
The field builds up in the third 90° time cycle towards compression, and falls back to the level of the environment

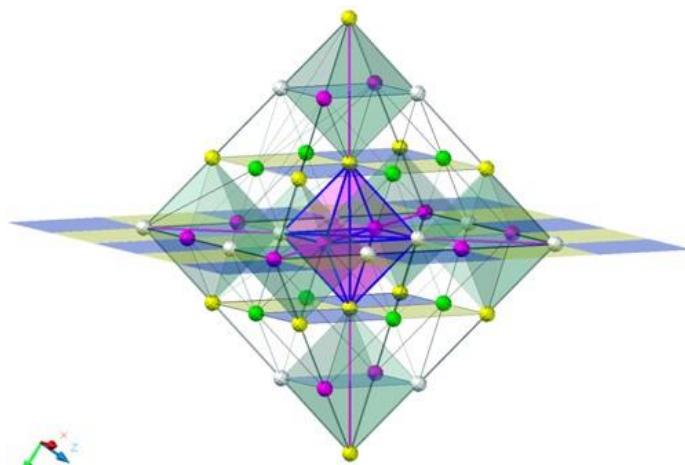
Phase - - here blue (-) = depression in relation to the environment in (-) time (from us).  
The field falls through the zero balance in the depression and is compensated by the elasticity back to zero level. The process ends the fourth 90° phase of the cycle and the second phase of time.

All 4 cycles give the full equilibrium of time and elasticity. Compression and depression change the space, which is compensated in 180° time cycle. Space and impulses have the same cycle.

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### The force barrier in the dimensional transition

Without an experimental background, the topic becomes either a statement or must be treated as a logical paradigm. The paradigm forms the field and its oscillation, which



presupposes elasticity. Assuming the same momentum, the field size becomes the variable reciprocal to the force. This can be presented in this way that the tension of the field in the contracted state is higher and in the widened state the values become (-) to the general tension. From the geometric explanation of a dimensional transition, we know that the field distance in the octahedron is

$\frac{1}{2} \cdot \sqrt{2}$  and the force-resultant is  $\sqrt{2}$  (the center of the octahedron is  $\sim 1.4$  of the vertex force if the surplus force (manko color) as an additional force is = vertex force. Normally, the center of the octahedron does not receive any impulses from the environment, since this compensates for all impulses in the equilibrium. If the pressure of the environment (entropy) is too high, as it could be of the case when the universe was born, a force arises in the center, which symbolizes the deficiency color here. There is a duel of this center force and the stability of the color differences. As a diagram, this stability results in a sloping,

proportional line in the ever smaller scales, while the elasticity of the medium results in a constant, i.e. a horizontal line. At the intersection of these 2 lines, the stability now seems to be sufficient due to the small distances between the color centers to withstand a collapse to a deeper scale. The force is directed into the deficiency color, the center of the octahedron. The center point collapses, which can then only discharge into the 4th dimension. This discharge creates an oscillation in the 4th dimension, which has vectors perpendicular to the 3D coordinates. The picture above symbolically shows the 3D space blue and yellow tiled. In the center, a bend in the 4th dimension is shown, which should not be confused with the z coordinate that is suppressed here. The bend happens in 2 directions, up in the (+) time and down in the (-) time. The later description of super symmetry (SUSI) goes into this in more detail.

### **But what effect have these huge force we observe in the metric of our universe?**

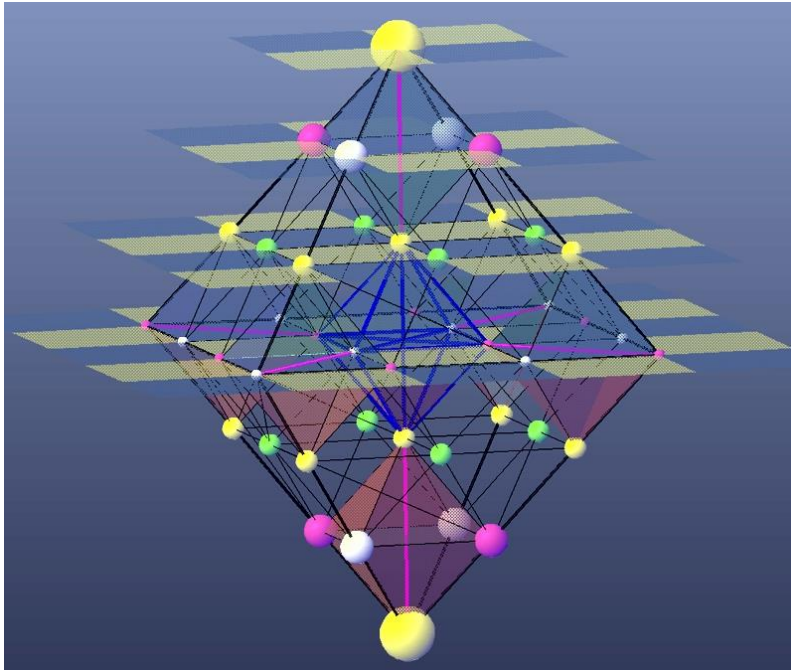
The answer would be until now we have been working in a basic metric like the proton size, and in this metric we actually have dimension transitions only in S1; S3; S5. This is described in detail later in the description of the fermions. In fact, the order of magnitude of our everyday world does not have much effect on the metric of this scale. If we consider that a quantum can be >100 m (radiowaves) in our field space (EM space) and much more in the case of gravity, then we must realize that classical physics deals with an unimaginable number of basic fields and from the digital value character of the matrix and Quantum Field Theory (QFT) it develops to the analogous character of classical physics known to us.

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### **Inertia and mass**

This thin layer of our 3rd dimension as a 4-dimensional layer has the strength created by the vibration amplitude of the fermion. Fermions have 3 strengths or, as stated in CERN; 3 families. However, we care only about the first family in terms of the matrix because their particles are stable. They have a vibrational vector perpendicular to the 3 space dimensions and therefore can hold their energy or the 4D momentum locally. This creates a standing point size field (or a standing local wave). Again, the Compton wavelength is the radius of this point size field, where it bounce back to zero position and swings to the upper side. An additional external momentum (kinetic energy) causes the space of the stationary field to experience a momentum, which (since the action comes out of the matrix) also has the cycle of 4 states (like a local photon). It is an impulse that makes this local field propagating without resistance from space-cell to space-cell. Thus, the movement of the field is retained without energy. In our world size we call it inertia. It is therefore the oscillation on a coordinates of the 4th spatial dimension, which, in contrast to photons, requires a certain amount of energy to propagate. This integral energy quantity or specific pulse quantity in turn can now be referred to as the unit of the rest mass. This pulse size is a peculiarity of the oscillation in the 4th spatial dimension. The proportional energy expenditure for a movement is considered inertia. A gravitational value is generated for each particle in proportion to the rest mass.

Restmass is therefore the generic term for inertia and gravity.



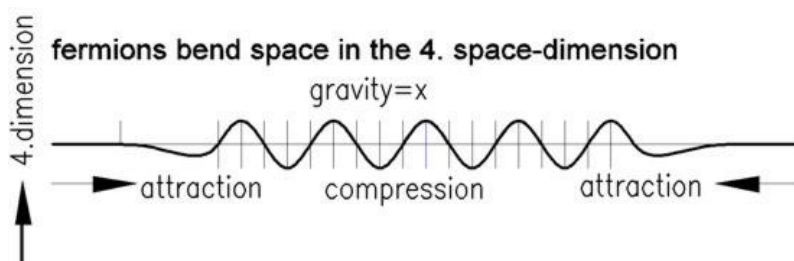
That sounds like a statement, which is here repeated again in slow motion. The oscillation of the 4 states or its colors, is a field in 3D space and forms the geometric relationships as tetrahedral and octahedral. As a network of relationships, it tries to achieve equilibrium of its states. The network of relationships in the form of an octahedron has a deficiency color, whereby these form the balance of momenta into the 4th dimension.

In the 4th dimension, they again form a layer, which in our view is a 3D space. In this turn, also deficiency colors are created, which form a relationship as an octahedron and turn (if the surplus energy is sufficient) with their deficiency colors new 3D spaces as layers in the 4D form.

Thus, a large surplus energy can manifest deep into the 4D space. However, this mechanism works only for space sizes S1 and S2. The larger field sizes divert their surplus energy into the next smaller space size after only one generation of deficiency colors (one layer in 4D space). To generate inertia, the surplus energies should be greater than the equilibrium energy (entropy of space size 1).

Mass is the acceleration of an object with inertia and has no axiomatic character. Since gravity acts as acceleration, it is the reason why we ascribe mass as a **force**. In non-gravitational space there it can only have inertia.

## Gravity



Einstein interpreted gravity as a curved space. He was under stress to annihilate the ether as a concept. Although this interpretation is

incorrect, it offers mathematics for precise application. Space warping is an effect and not a cause. The local compression of space causes spherical equidistant areas in space. The matrix theory offers an explanation here.

It is the stability of the basic space size 1, which provides an explanation. There, all deficiency colors bend into the fourth space dimension and form the fermions with their rest mass as bent fields into the fourth space dimension. It is the same mechanism as a swinging string of a harp, where the strings are attached at right angles to the body what

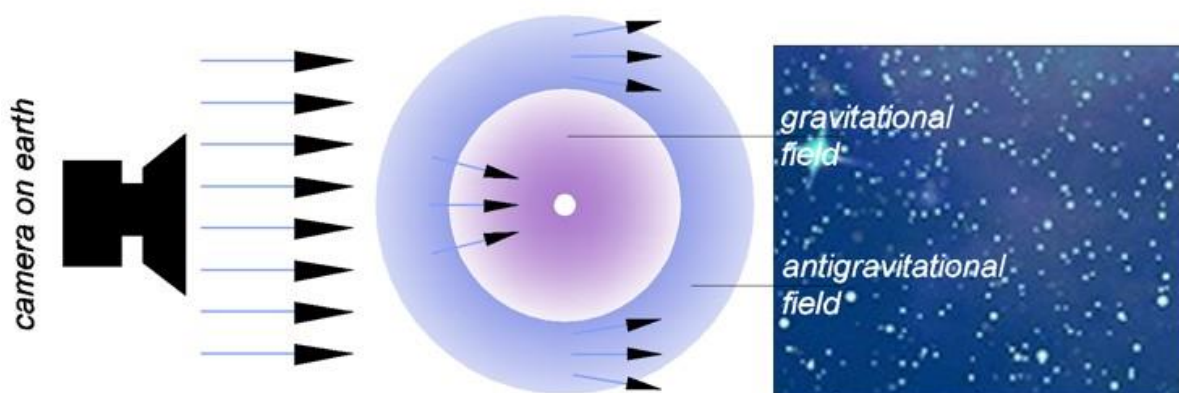
should theoretically have no effect (because of the rectangle angle), nevertheless the vibration of the strings goes into the sound-body (with loss of a direct effect) and causes a new secondary vibration. The string is one-dimensional, the oscillation is perpendicular to the second dimension of the sound body. The vibration in 4D space makes no difference between the ++ phase or the -- phase. Both increase the spatial tension, which as a momentum with very large wavelengths in turn obeys the law of basic elasticity and causes a quant  $E = h / \lambda$ . As a multiple process, the mini-tensing forces accumulate to gravity.

**To a Quora-question I answered: Gravity is a different kind of wave. I call it a “pile up” wave. It is a high pulse perpendicular to all 3 dimensional coordinates toward the 4. space-dimension and has a very high frequency by its oscillation. Because this oscillation is perpendicular to 3D-space, it is independent of the Planck-constant. But it has a faint side effect in 3D and thus a very long wavelength. The result is a very long wave with very high amplitude (what violates the equation  $E=hF$ ) and that’s why it becomes to be piled up. The pile runs out and distribute in space in the  $1/r^2$  way.**

Normally, e.g. our planet earth, gravity is an unimaginable collection of minute pull forces or, in view of the matrix, smallest negative energies that form a global tendency to get filled up with other spatial units (fields of pulling forces). However, this unfortunate property, creates an even greater accumulation, which in turn creates even more tension, which in the most extreme case can create the space collapse. In contrast to official physics, however, I like to ask where it collapses into.

It is a hot topic among physicists, whether a distribution of the gravitational forces has a clean and everlasting  $1/r^2$  distribution or the spread also has a quantum character. Although 99% of Newton's physicists are holding on the old rod, there are few who have important reasons why a quantum distribution is also likely here. For a deeper understanding, the chapter on the multiple wave in Part 4 should be read. It is shown there that effects are possible even with mega-wavelengths with the corresponding unimaginably small quantum value of their amplitude, since it results in a huge culmination.

This effect produces a weak "lensing" in normal stars, which is not the gravitational lensing of NASA's images, but has the same nature. Here is an example: Pearl necklaces of the stars:

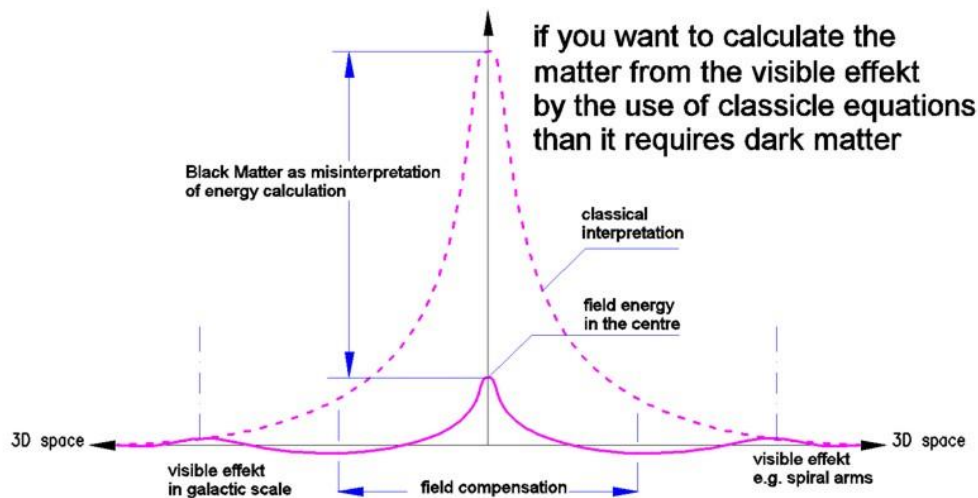


The inner gravitational field focuses the rays and thus limits the number of stars of the stars behind the field. The outer field (compensation area of the gravitational field) disperses the rays and thus collects considerably more stars than parallel rays in the same area. These fields are often larger than the star distance and interfere with each other. The often-mentioned counter-argument claims that the stars are born that way and the birthplaces



have this structure. This argument becomes obsolete if galaxies are also included in the visible star chains, proving that this can only be an optical effect.

That stars can have such large fields of action is the proof that a QFT also has to apply in this order of magnitude. Newton is no longer valid here. It also explains the dark matter needed

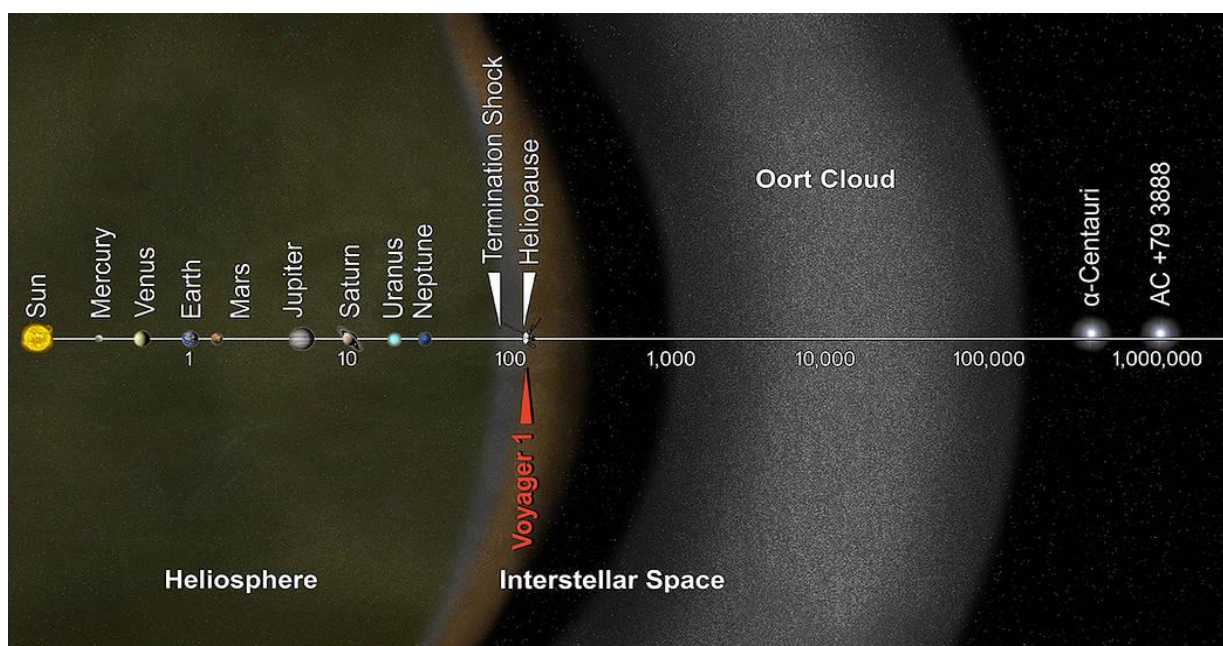


in Newton's formula by the distribution  $1/r^2$ . In the new computation, (+) and (-) fields appear, which can be carried far out into the

intergalactic space and allow ever greater impact by culminating.

Gravity is a multiple mega-field that does not reveal a quantum structure and thus becomes pure analogue for us. Nevertheless, it consists of mini-field sizes, which have very large wavelengths because of the weak amplitude of their oscillation. They all have approximately the same starting point (with an inaccuracy in terms of our solar system size) and start with a (+) value. This creates tension or train in 3D space. And here the elasticity intervenes. It is responsible for the compensating for these forces. Although gravity seems to us to be an overall analogous quantity, it cannot be seen from the Matrix Field Theory (MFT) view. It would have  $h / (\text{weight of the entire earth} / \text{the tremendous number of their fermions})$  give the radius of the Compton wave. That would be the theory. It is replaced with the constant  $G$ . However, this does not recognize the term wave. The wave effect is thus replaced as dark matter.

The lens effect or the formation of star chains probably begins in the Kuiper Belt, then goes

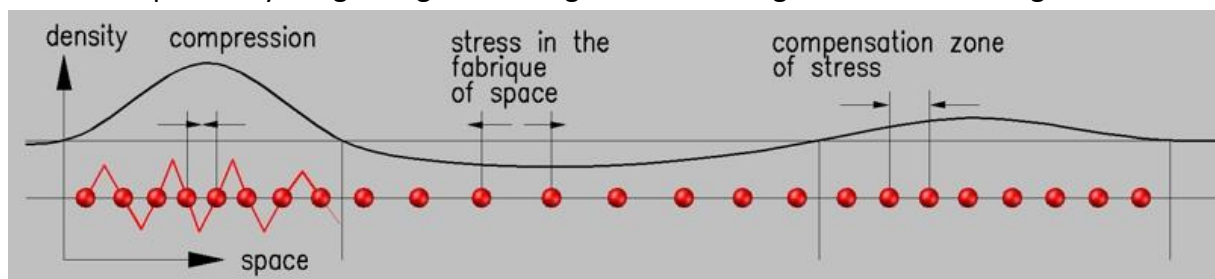


over to the Oort cloud in order to exchange information with other fields in the galactic space.

Today's physics assign the spin value 2 to gravity. This is to be understood if it is assumed that spin  $\frac{1}{2}$  can have 2 values (+) or (-) for an interaction within a  $\lambda$  value. Spin 1 has 2 values simultaneously (+) and (-) within one wavelength ( $\lambda$  value) and can therefore interfere. Spin 2, however, can only culminate because it rotates  $720^\circ$  and also has no (-) at the phase shift ( $720^\circ / 2 = 360^\circ$ ).

In the MFT this makes no sense, since SPIN is not a rotation but one of the 4 field phases. In that sense, gravity is not a field because it has no phases. This can only be understood if gravitation is generated by the 4 field phases from the 4th space dimension, where each field phase can only have one single effect, the 3D space contraction. As I said, it's like a swinging string: no matter where the vibration goes (left right, front, back), it only has an effect of increasing the tension on the waistband. This circumstance can be seen as further proof that the matrix must be at least 4 dimensional.

Another explanatory image for gravitation gives us the image of a beaded string.



The thread on which the beads hang is the substance of the medium whose elasticity produces the speed of light  $C$ . In the area of a fermion group, increased stresses are generated in the space, which shows up as compression. This region is local because it is generated by vector oscillation in 4D. Since the surrounding parts of the space also consist of individual fermions, they are stimulated by the compression into a stressed train zone. However, as fermions they cannot balance with  $C$  and are overrun by compression with  $C$ . The next zones are similar, with their amplitude becoming ever flatter and correspondingly  $\lambda = h/p$  getting bigger and bigger. This effect eventually causes very thin and huge fields around a star, which, by culmination on a larger scale, produce galactic gravitational effects, which according to Newton require the dark mass for their explanation, but here become a logical explanation as fields.

### The criticism at Newton

Gravity, as a force,  $P = G \cdot m / r^2$ , with a distribution of  $1/r^2$  what becomes ever smaller and never ends, carries the effect beyond the size of the universe into hyperspace, adding up on a universal scale as a non-balance of the whole Systems without finding a compensation. Such a size cannot exist in terms of balance in our universe. All forces have to compensate at some point or they just do not belong to the system. In the case of gravity, there is an entropy of the forces of the universe, which swallow the amplitude of the last compensation range as a size  $> \text{zero}$ . This means that the fine gravity/antigravity fields depend not only on their source but on the density of the surrounding space. It is this gravitational entropy that, according to current knowledge, is responsible for the expansion of the universe.

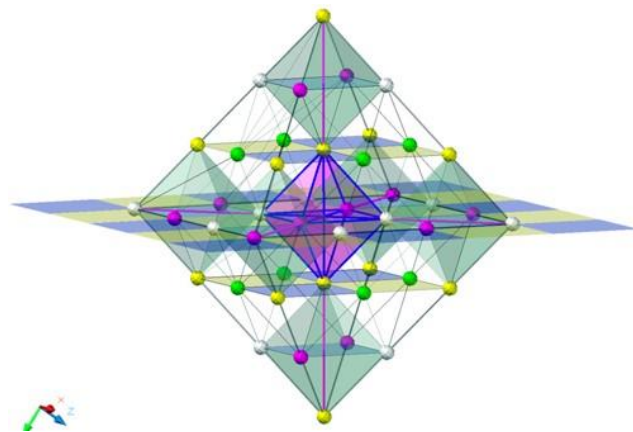
## Criticism of the concept of spin value:

In the field theory of the matrix there are no particles and therefore no spin with an axial vector. A fermion is a local field with an oscillation in 4 different states. Although the Stern - Gerlach experiment was contemporary interpreted at that time, it can only be understood through field oscillation. The effect is the same, but not the cause. The polarizer in the experiment split the direction of the electrons in two directions, which was interpreted as  $\frac{1}{2}$  rotation. In field theory, it is one of two states that interact with the magnetic field of the polarizer. It is always only interactions of 2 states that act. A spin is not needed as an explanation.

## Criticism of the idea of an electric charge

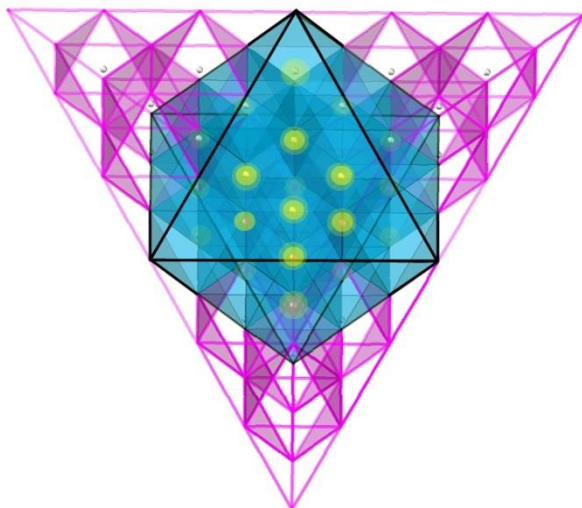
In the matrix field theory everything can be interpreted geometrically. There is no charge field, since the idea of the electric charge should already work in the internal range of quarks, but in this field sizes there is no electricity possible. In official physics it is an

independent constant of nature; in the new field theory it is a geometric state, which is required in a logical connection with the fourth space dimension and a side effect of oscillation. The charge field is not a separate force, it is one of the 2 states of vector oscillation in 4D. As we shall see later in the description of a proton and neutron, it is an oscillation state of the oscillation perpendicular to x, y, z or into the 4th space dimension.



The picture shows the 3rd dimension as a blue-yellow checkered area with a field development upwards and downwards into the 4th space dimension. This 3D space shown here as a surface, is affected and bent accordingly by the bent-up's into the 4D. It becomes the charge field in 3D-space by its vibrations, what will be explained later in detail. This but is

many thousands of times larger than the field bond to the vector into 4D.



Since everything oscillates in field theory of matrix, nothing is permanent, nothing is univalent, so does the charge. A proton has the charge (-) and (+), depending on its phase. The same goes for electrons. It must always be remembered that there are actually no particles. It is the vibration of the space at this point that produces the effect of the particles. If an electron is in a (-) place, then a proton is in the (+)

place in space and vice versa. Further details in the explanatory picture are shown in Part 4, "The family relationships of the Fermione".

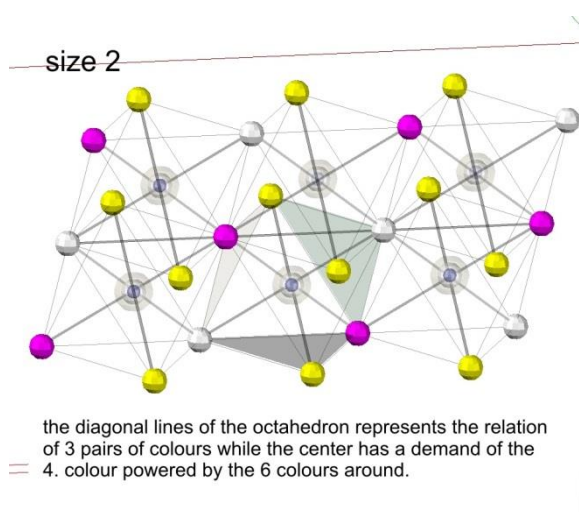
## Criticism of the Bosons idea

A boson is the name of particles (now fields) with spin 1. Now that there is no spin, what is it? Spin 1 is equated with (+) (-) oscillation in a media, here the space with its scaled structure called as matrix. The only true Boson is the photon, a free running cycle (+) (-) in the vacuum field space. W&Z-bosons, gluons and higgs-particle don't exist as particle, but only as debris of violent destructions in LHC-Centers. While particle like protons have a lifespan larger than our universe and photons a lifespan without a limit, bosons as debris only have lifespan of  $\sim 10^{-18}$  seconds. They come in existence by smashing particles in pieces. Because of the matrix structure in this small scale the rubble can appear only in certain values, what caused scientists to give them names.

## Criticism of the concept of kinetic energy

In principle, there is no direct movement in field theory; the moving fields are only states of cycles of the medium. As with the falling domino stones only the state of falling moves, not the domino-stones (their position remains), so the fields of the matrix do not move themselves, since the "themselves" is indeed the medium, which does not move. The moving fields are only states or phases of the medium. Under this fundamental condition, it becomes difficult for classical physics to imagine a spin or thermal energy. This also applies in particular, in the theory of relativity recognizes each viewer, that in the assumption of propagation through a medium such e.g. as the universal vacuum space, a movement never could be faster than the elasticity of the medium allows (here  $c$ ). Nevertheless, the question must be clarified: where is the energy ( $m \cdot v$ ) or the force ( $m \cdot v^2$ )? These kinetic energy systems are an increase in the basic vibrational state of the matrix. With this kinetic energy  $E$  ( $E = h \cdot c / F$ ) they form fields of size  $r$  ( $r = h / F$ ) with the frequency  $F$  ( $F = h \cdot c / E$ ). If  $h = 1$ ,  $c$  and  $F = \text{integer value}$ , then the energy value is always quantized, it means here it has an integer value. Only the conversion to values of our scale yields the hardly readable broken values.

## Criticism of the concept of quarks



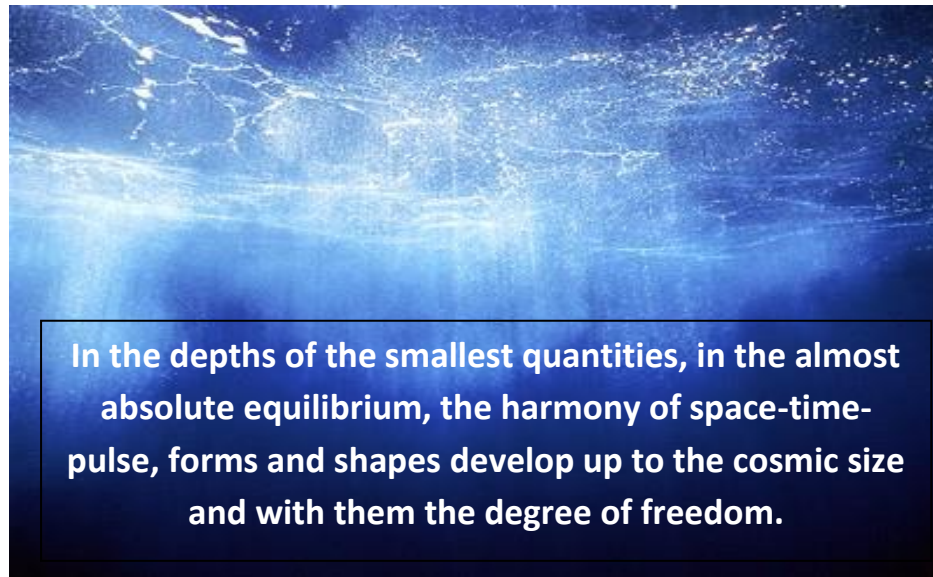
Quark, that German synonym for something that is actually nothing clear defined, like the soft residue of fermenting milk. Not milk anymore but not cheese, a name for an embarrassment. Quarks have dubious properties such as  $1/2$  spin (in all directions) or  $1/3$  or  $2/3$  charge and can never be observed alone. They have a Compton wave that is about 100 times larger than the proton, even they are supposed to be inside (how?). An exact study of the current state of knowledge on the subject suggests that

fundamental errors were made. The field theory showed in the description of the matrix space sizes above, that excess momenta propagate on lines of matrix fields of the same



color. Since this happens especially in the centers of the octahedron, it becomes clear that only the 3 directions of the x-x; y-y; and z-z axes could be meant. When CERN shatters the shells of the protons, the kinetic energies have 3 different states (colors) and 3 different vectors, whose interaction thus always results in 3 different value repeats in the magnetic fields. But magnetic fields only have 2 values, thus it causes only 2 values, one the double in size of the other. We recognize here that all fields have a Compton size in the area of which the structure of the medium manifests. So it's not a structure less quark-gluon soup. More simply, a quark is one of the 3 highways of a 3-way interchange what can only indicated by 2 (+ and -) values (quarks) in 3 vectors (3 quarks).

17



Christmas 2016 I began to describe my idea of a space matrix in the web page "The Field Space". In 2017 and 2018, the ideas in my mind and my 3D CAD platform grew into a zoo of solutions that demanded a logical order. In July 2018, I started to document these ideas in a Word-File in a logical sequence with word and picture. The individual topics

actually produced themselves and staggered me with their surprising solutions. I now realize that the MFT should actually need a team of partners, which of course is only a wishful thought.

Gunter Michaelis, Griesbach, den 6.1.2019