Unified Principles of Nature

Solving the „Problem of Time“

Introduction to the Final Master Theory (TOE)

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Abstract

Althougth the concept of time was discussed intensively by authors over centuries the „problem of time“ is prominent today again in quantum gravity. As quantum physicists believe a more detailed understanding of the entaglement of time could lead to a unification of quantum-mechanics with general relativity, the author solves the „problem of time“ final in a deductive approach. Upon the solution of the problem of time, unified principles of nature are then postulated to integrate Newtonian laws, general relativity and quantum mechanics into one framework, offering a perspective to a new world model and a framework for the TOE.

„If we do discover a complete theory, it should in time be understandable in broad principle by everyone, not just a few scientists. Then we shall all, philosophers, scientists, and just ordinary people, be able to take part in the discussion of the question of why it is that we and the universe exist. If we find the answer to that, it would be the ultimate triumph of human reason — for then we would know the mind of God.“

Stephen Hawking

1. Introduction

Einstein raised question in 1935 with Podolsky and Rosen : *„Can Quantum-Mechanical Description of Physical Reality Be Considered Complete?“* (N.Bohr, 1949). Since the famous Einstein-Bohr debate there is no final answer if nature could be described deterministic or if it is to accept a non-deterministic nature of reality.

A philosophical, sometimes psychological discussion to answer the questions about time and cause was held by David Bohm with Jiddu Krishnamurti in 1980 (Krishnamurti, Bohm 1980). While Krishnamurti argueed that in general thought is time, David Bohm pointed out that thought creates time. But in the end Bohm struggled to find a formalism for his ideas of conciousness. Bohm suggested a undivided universe, which should contain an implicate order. (Bohm, Hiley 1996). Following Bohm and Hiley, by intuition, quantum mechanics should be in some sence related to consciousness.

Carlo Rovelli summarized the unclear situation in his books „The order of time“ and „Reality is not what it seems“ (Rovelli 2017,2014). Following Rovelli, physics should be possible without the notion of time and he suggested a formalism to describe laws of nature without the notion of time, as the notion of time seems to be unsuitable for writing physical laws. This seems to be a common point of view by scientists in field of quantum gravity. Kiefer asks „Does time exist in quantum gravity?“ (Kiefer 2009).

As in everyday life the concept of time is the predominant concept to describe nature, the approach to describe nature without the notion of time seems to be impossible for any application by intuition.

Althougth the Wheeler de Witt -Equation suggests decoherence or other approaches to find a notion for time, the most simple point of view suggest that science is all about a clear concept of time, as a clear concept of time should be the concept needed to make clear predictions for „future“ variables based on knowledge of „past“ and „present“ variables.

Ernst von Glaserfeld suggested a radical contructivism as sientific approach to reality, that could be interpretated as psychological analog to the idea of a description of nature without the notion of time (Glaserfeld 1992). This concept of course lacks causality, because there can be no causality without time.

The reason for a struggle with the concept of time can be pointed straight at, if one looks at the definitions we are used to deal time, space and velocity. The concept of velocity depends on space and time. The concept of time depends on space and velocity: $s \sim t$ and $v \sim t$. As long as time was concidered as even flow in universe by Newton, there was no problem with this. With theory of general relativity, a new concept of time was introduced.

Having in mind the Logic of Scientific discovery (Popper 1989), a falsification in such model of reality is not possible, because the consequence of cause is already property of the cause (which is in fact a problem of induction).

To solve the problem of time and causality in quantum theory, it is necessary to use a deductive approach in order to define a model and theory of time, space and causality, which is free from contradictions and could be falsified.

2. Nature of Reality

2.1. Singularity of the observer

To start a new theory of reality in general, it is suggested to start with the most basic „ego“ of human mind „lost“ in time and space, that tries to find out something about surrounding „reality“. Assuming, that one doesn‘t know anything about reality yet, theoretically this can be done with the idea of radical constructivism (Glaserfeld 1992). One should first forget everything known and reduce the human ego to the most basic ego needed to preserve basic life-funcktions.

In the beginning there is a thought that questions reality. It is not known, if this thougth belongs to a phyiscal body of a thinker. Also, in the beginnig it is not known if in reality space or time exists. There is only a thought.

It is obvious that thought cannot create a thinker physically, but tought must be created by a thinker as material body or some kind of physical energy. Thought therefore represents energy. If we apply the idea of Newton (action = reaction), thought as physical action of the thinker leads to reaction of the body of the thinker and an action of body of the thinker may lead to a thought of the thinker at the same time. Therefore thought can be concidered as a material representation of a thinker. To proof this, it could be measured if a physical reaction or action in human brain goes along with each thought and each penetration of the body of the thinker leads to a physical reaction of the brain ot the thinker.

One can assume the same for emotions of the thinker. Emotion is a physical action or reaction from the material body of the observer.

To define an „observer“ who likes to proof existance, measure and validate anything of nature or reality outside thought or emotion, the thought and emotion of the observer represents therefore (partly) a material body of the thinker who wants to observe reality.

The „will“ to oberve itself seems to induce thought → cause → action → reaction into any experiment with reality. In simple experiments this might not be obvious at first hand. On the other hand, the observer himself induces the concept of time into the experiment, as he defines the order for things to happen in his brain. At first is the thought and action of observation, while at second is the observation (reaction). There is no sence in questioning if this could happen simultaniously, because the order for things to happen is caused by the observer. As the observer decides to observe, at the same time „time“ is created to represent an order (causality).

> Thought represents physical action that creates cause (time)

If it is assumed that only the thinker creates cause and time in reality by creating cause with thinking, the premise must be:

> The observer (thought) is the observed.

This model of reality seems to be an egocentered concept of reality, as the only cause within this basic model of reality is the thinker. If it is assumed that the thinker is only part of reality and reality does create cause (time) as well, the premise must be:

> The observer (thought) interacting with reality is the observerd

While the discussions between Bohm and Krishnamurti are very interesting and philosophical (The Limits of Thougth 1982), it should be possible to transform these philosophical ideas into a scientific mathematical formalism.

2.1.1 Time

One could imagine a brain that takes pictures every „second“ to store these pictures in mind. (Barbour 2000). This „storage“ of pictures creates „time“ within the observer. The order of those pictures within the brain declares the direction of time. Trying to find causality, our brain needs to find probabilities or rules within and between the stored pictures, that allow to predict the future by finding cause. There is no direction of a time-arrow within this kind of „time“, as the mind is free to change the order of this pictures as every computer could do.

In this fundamental concept of time, the thought induces at the same time a concept of "infinity",a concept of order, direction and therefore a concept of cause. (t0 is cause for t1).

Each observer having its own storage of pictures makes time a concept of fragmentation between different oberservers.

When science in general is trying to seperate cause from consequence, time is induced by the observer in the scientific experiment, that likes to measure reality „outside“ the thinker. In fact, the thinker and therefore the tought is always part of reality and part of the experiment. We cannot detect something like time in nature or reality, but as one wants to predict the "future" one needs to induce the concept of time into reality.

One doesn‘t know what representation time should have in reality outside the observer. If it is fragmented or continous - limited or infinite.

To define time as a general concept one could argue:

Time is the thought of the observer asking for causality

2.1.2. Space

Using "space" as a concept one can find this concept to have similar properties as the concept of time. Robinson (1982) suggested that materiality cannot be defined only by representation of occupied „space“ or geometrical properties of an object, but must have some kind of further properties (Robinsion 1982). One can't measure or proof space without any physical objekt interacting with the observer. One doesn't know at first, if space in reality is 1,2 or 3-dimensional, if it is infinite, ending, curved or free of any forces. Before knowing something about space, it must be argued, that space is created within the thinker as a storage for pictures from reality and time is used to order / index those pictures.

Space is the observer asking about observation (reality)

2.1.3 Time and Space

Neither space or time are an illusion or not existing in reality. Time and space are reality because the observer carries the concepts and informations in his thoughts, which are part of material reality.

But time and space must first be concidered to represent properties of the observer as part of reality and not properties of reality outside the observer. To measure properties of reality outside the observer, the observer needs to concider space and time beeing induced by the observer into any experiment or any scientific theory about law of nature and nature itself.

In consequence each single observer represents a singularity, where time and space are individual and no general physical law of nature applies.

2.2. Duality of reality (nature)

To research physical laws in nature, one needs to introduce the oberserver (singularity) as a measuring instrument into reality. Every axiom or premise about nature, that could theoretically be falsified for any case of any observer or oberservation could be candidate for a law of nature.

Figure 1. : Particle O, representing the mass / energy of the thought of the observer in empty universe

At first, there is no space or time, but only the thought of the oberserver, that represents a mass ,energy, load or force. We can concider this to be the smallest possible particle in universe which is able to interact or any general force, load or law of nature that affects every observation or experiment we will do. As it is a projection of thought, it represents human being (thought that wants to observe). As this object representing the mass / energy (thought) of the observer has no other object to interact with, it cannot measure if space does exist, it cannot measure if time exists, it cannot detect wether it is moving in space, accelerating, rotating, having energy itself or representing any force or gravitation and it cannot measure if itself even exsists. Concidering that the observer is part of the experiments he likes to do with reality, it must be accounted by rational thinking that one cannot measure the measuring instrument itself. Having the observer in mind as part of reality, one first needs to „test“ the own existance. To do so, the possibility of interaction with reality must be prooven.

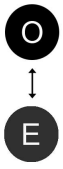

Figure 2. : Particle O prooving own exitance on existance of particle E (existance)

By adding a second elementary particle into reality, the obersever becomes able to proof his own existence, which is the most simple representation

of duality, as to proof own existance it is necessary to be a pair at least. No space or time are needed at this step.

If the distance (space) between observer and object gets smaller, the oberserver is not able to point out if the object is moving towards him, or if he is moving towards the object or if space between observer and object is moving. The oberserver will come to the conclusion, that object E in interaction with himself represents himself and is only a proof of his existence. If the observer assumes by thought, that a 3- dimensional space should exist (there are no forces involved yet) he must „find“ 3 more particles / objects with different (individual) properties, other than object E. Using this individual particels he could „create“ a 3-dimensional space mathematically as a container for observations. If the observer wants to intruduce a concept of causality into reality, another elementary particle with individual properties must be found to represent „time“.

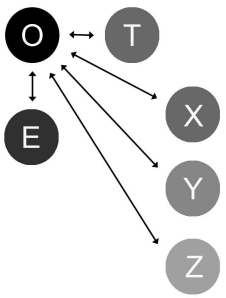

Figure 3. : Observer creating (empty) 4-dim. space-time by finding 6 elementary particles.

In Fig. 3 is shown that six elementary particles are needed to create a universe that has three dimensional space. This first six elementary particles do only model the observer observing „empty“ space and time, although time and space are not empty in reality. The existence of empty space and time including the observer already needs six elementary particles to exist for each „point“ in time and space.

This concept at the same time proofs aether-theories to be right and wrong. Space by definition is made out of elementary particles in this theory, but empty space carries no particles „outside“ the observer, because this space and time are properties of the observer, and therefore materialized only in the mind (brain) of the observer.

This is one important aspect to formalize principles of nature, because it is likley, a reader may think that planets and galaxies are located in a universe / space outside the observer, because one can see those in the sky. It is shown here, that space and time created by the observer is property of the observer. While the observer looks into the sky and can detect a galaxy, this galaxy is proven to exsist, but depends on a location in space and time, that is adressed and materialized in the brain of the observer. One could say that the visible universe is a projection that is materialized physically in the mind / brain of the observer and not outside.

The observer himself is able to go forward and backward in time on its own at this stage as he is the cause for this empty universe, but he cannot go forward and backward in time as soon as there is any other object in universe that is not under „control“ of the observer. As long as the cause of any other object cannot be forced by the observer there is no possiblity to go back in time, while in experiments where the observer is dealing with objects he can force or control, he can go back in time within a universe that carries only the oberserver and the „measuring“ particles. The arrow of time therefore is a necessary definition by the obersver, asking for observation and cause. The properties of those particles are defined by the observer. This physical concept is based on the ideas of a readical constructivism, which also covers a theory of human mind and ego. Als long as an object is under control of the thinker, the thinker has to „think“ of this object as his own property (ego). While a thinker has control over his body and can cause his leg to move back and forth, this leg is classified by mind as property of the thinker, because the mind can force the leg to travel back and forth in „time“ and „space“ that are created by the mind. In most cases, these principles of human mind are not recognized consciously and the observer is not always aware that any object he can control or influcence, if it is a car, an experiment setting or another person is a projection of the ego and mind of the observer.

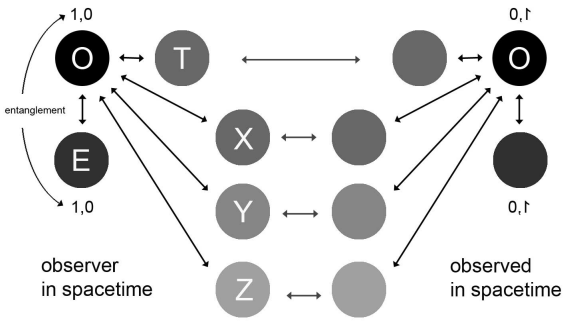

Figure 4. : 12 elementary particles and 4 interactions representing observer in interaction with observed

If the observer asks for a three-dimensional space and time to observe four interactions between the elementary particles are needed, where these interactions could be modelled as interactions between space and time, as the observer sets as premise that in reality interactions should take place in 3-dimensions and should include causality (time). It is not possible to measure time, space and existence in this picture at once, because two times (causes) are involved, whereas the observer asks for one cause only. By intuition, Fig.4. shows some analogies to the standard-model of elementary particles, as there are 12 elementary particles needed to model an interaction in four dim. spacetime. If a third party likes to observe this interaction between observer and observed from outside the universe another five particles are needed to measure the interaction, while the observer from outside needs no representation in the experiment. (The measuring instrument represent only five elementary particles)

If one introduces "time" as a concept based on relative motion (earth vs / sun or particle / lightspeed) which happens simultaniously, nothing can conquer a fixed maximum speed, because time is definded using the concept of speed and speed is defined using the concept of time. As time is just a representation of cause, one cannot „go or travel“ faster than cause.

Introducing time as a concept of cause, which is representing thought of the observer, the observer will find out, that everything started in the beginning with his thought, which will lead to a big bang-theory, that represents the entrophy of assuming that human mind an thought could be able to find a cause for the existence of thought. This is not possible, as in the beginning first was the thinker and second was the thought.

3. General law of time

When Newton suggested the mathematical principles of Natural Philosophy, he adressed the properties of space and time to be properties created by God. It might have been a problem at that time to speculate what kind of role God might play in principles of nature. Einstein adressed the problems which arises from Newtons laws of motion, where a concept of time is not defined well.

Having in mind that human consciousness is the oberserver that tries to create a model of reality, the reason for cause is the consciousness of the oberserver as long as this cousciousness does exist. Therefore outside this frame, it is suggested to model time as something we guess or belief to exist without the oberserver (nature / reality / God)

To define time to be a cause as a general law of nature one can first identify and adress the nature of both concepts of time which are used today:

Individual Time = Individual Cause

the observer himself is cause for the obervation

(Singularity)

General Time = General Cause

probability distribution

between the observer (human thought) and reality (representation of nature / „God“) is cause for the oberservation

(Duality)

Using a concept of time (causality) that describes a probability distribution between two causes / actions in consequence lead to a non-deterministic description of nature. In consequence, the idea to eleminate the concept of time in quantum-gravity is logical, as such time-concept can‘t work. On the other hand, a useful concept of time is necessary to achieve causality and the possibility to make predictions not based on probabilities.

4.Unified Principles of Nature

To advance and complete Newtons principles of nature for motion by adding the missing cause, the author introduces as general laws of nature:

1. Law: time = cause
2. Law: action lead to reaction
3. Law: reaction equals action
4. Law: time ~ mass, mass ~ space space ~ time

There is no conservation of energy in nature. To define a closed system, the sum of force within this system must be constant / balanced.

$$F = m \cdot a = \frac{s^4}{t^3} \cdot \frac{s}{t^2} = const. \qquad [F] = \frac{m^5}{s^5}$$

(As time ~ space, m^5 / s^5 must be constant to have conservation of mass and energy and no external force or acceleration working on the closed system)

Starting from scratch (modelling a „big bang“) an external time = cause from outside the universe as well as from inside the universe must be introduced, to create an (action) as well as an object that represents the reaction to this action. F = time outside universe (cause) / time inside universe (reaction) = t_r / t_c . Space within the universe is then created by introducing a fundamental concept of motion:

$$F = \frac{t_r}{t_c} = 1 = \frac{t_r + s}{t_c} \qquad v = \frac{s}{t_c}$$

5. Space-Time

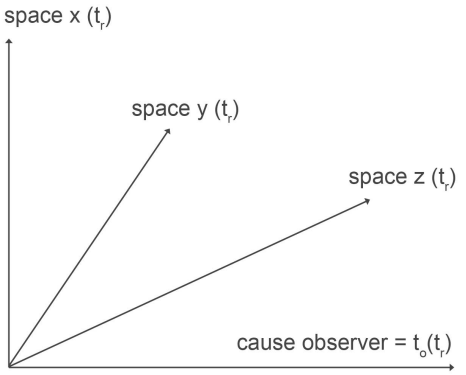

Figure 5. : creating 4-dimensional spacetime

Figure 5. shows how 4 dimensional spacetime like modelled with a Minkowski space. Problem: There are 5 dimensions hidden in 4 dimensions (t,x,y,z) because there are two times ($t_{reality}$ and $t_{observer}$). The general time (reality) is represented by condition of fixed light-speed within the spatial dimensions. The local time (oberserver) is modelled as additional timelike dimension. Using such 4 dimensional space-time makes it necessary to work with curved space.

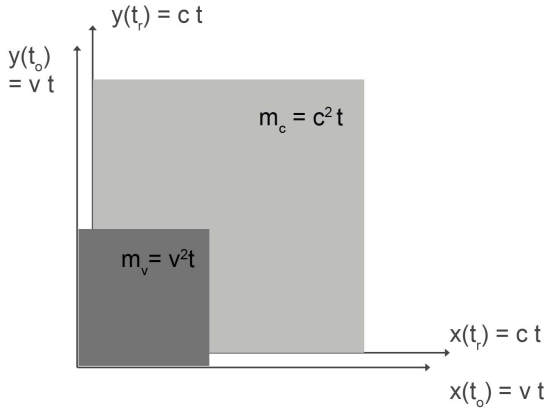

Figure 6. : creating 4-dim. spacetime with 2x2 dimensional space

Figure 6 shows a different interpretation of 4 dimensional space-time, where two 2-dimensional euclidian „flat“ spaces represents reality. One works with fixed time (speed of light) and one with the local time (observer). This way the problem becomes more obvious, as the model lacks a third spatial dimension to represent 3 spatial dimensions. It can be demonstrated, that mass and gravity are resulting out of the missing 5th dimension, which is needed to model 3 spatial dimensions.

6. Gravitation, Quantum-mechanics and Electrodynamics

Köhn (2016) showed that there will be a minimum length and a constant speed of light if two timelike dimensions are added to 3 dimensional space. By reducing 4 dimensional space-time to three spatial dimensions, it is possible to construct the universe from scratch geometrically, if $m \propto s$ and $m \propto t$ are applied. Following Fig.4 6 dimensions (elementary particels) must be taken into account that need to be transformed in three spatial dimensions.

As there need to be a cause for matter to exist, t_c can be modelled as cause. Adopting to the the 4 dimensional Minkowski space, one velocity must be fixed to fit the known SI-System.

Speed of light:

(10^9 is multiplier to fit SI-System)

$$\frac{d}{dc}[\frac{d}{dc}[c^3]\pi c^2]=constant=1\cdot(10^9)^3$$

$$12\pi\cdot c^3=1\cdot(10^9)^3$$

$$c=298.233.409\frac{m}{s}$$

(This calculated speed of light should not be understood as measurable speed of light in vacuum. It is a geometrical calculated general constant valid as a fixed frame for the universe. This constant does not change in vacuum or in water)

Mass:

$$m=c\,t_c\cdot 4c^3 \qquad [M]=kg;\frac{m^4}{s^3}$$

Gravitational constant:

$$\epsilon_{0rav}=4c;\mu_{0grav}=\frac{1}{4c^3}$$

$$G=\frac{1}{4\pi 4c}=6{,}67073\cdot 10^{-11}\frac{m^3}{kg\,s^2};\frac{s}{m}$$

Elementary charge:

$$e=\frac{3}{4}\cdot\frac{3}{4}\cdot\frac{1}{(2\pi c)^2}=1{,}601955\cdot 10^{-19}C;\frac{s^2}{m^2}$$

$$\frac{1}{3}e=\frac{1}{4}\cdot\frac{3}{4}\cdot\frac{1}{(2\pi c)^2}C$$

Boltzmann Constant:

$$k=\frac{3}{4}\cdot\frac{5\pi^4}{c^3}=1{,}377088\cdot 10^{-23}\frac{J}{K};\frac{s^3}{m^3}$$

Reduced Planck‘s constant:

$$\hbar=\frac{5}{6}\frac{1}{c^4}=1{,}053400651\cdot 10^{-34}\,Js;\frac{s^4}{m^4}$$

It can be shown that all fundamental constants in physics can be derived from $m\propto s$ and $m\propto t$ by geometric projection only.

A comparison between electrical and gravitational field:

$$E_{el}=\frac{Q}{\epsilon_{0el}\,\epsilon_{rel}\,A}$$

Using the geometrically calculated

$$\epsilon_{0rav}=4c;\mu_{0grav}=\frac{1}{4c^3}$$

this can be transormed into gravitation:

$$E_{grav}=\frac{m}{4c\cdot 1\cdot\frac{1}{4c^3}}=mc^2$$

In radial field geometry:

$$F_{el}=\frac{q_1 q_2}{4\pi\epsilon_0\epsilon_r r^2} \qquad F_{grav}=\frac{m_1 m_2}{4\pi\cdot 4c\cdot r^2}$$

In homogenous field geometry:

$$F_{el}=E\cdot q$$

$$F_{grav}=t_c\,4c^6\cdot m=m_1 c^2\cdot m_2=E\cdot m$$

It is shown, that E=mc2 can be derived from the gravitational force.

$$E=mc^2=4\,t_c\cdot c^6$$

Some comparisions with the SI-System:

Power $[P]=\frac{m^6}{s^6};Watt$

Energy $[E]=\frac{m^6}{s^5};Joule$

Force $[F]=\frac{m^5}{s^5};Newton$

Mass $[M]=\frac{m^4}{s^3};kg$

Pressure $[Pa]=\frac{m^3}{s^5};Pascal$

Electric Charge $[C]=\frac{s^2}{m^2};Coloumb$

Electric Current $[I]=\frac{s^3}{m^2};Ampere$

While the gravitational constant and electric charge seem to fit, the planck‘s constant seem to not fit

into the system of units in 6 dimensions. While it should have s^4/m^4 , it is calculated as m^6/s^4. The author suggests, that this should be consequence of the fact, that gravitational force is not yet integrated into quantum mechanics.

$$[\hbar]=Js=\frac{m^2}{s}\cdot kg=\frac{m^6}{s^4}\neq\frac{s^4}{m^4}!!$$

$$[E]=\frac{m^6}{s^5};Joule=\frac{m^2}{s^2}\cdot kg=\frac{m^6}{s^5}$$

The correction should be:

$$[\hbar]=kg^{-1}\cdot s=\frac{s^4}{m^4}$$

As it should be $E\propto m$, it looks like planck‘s constant unveils an inverse proportionality is used compared to the gravitational force $E\propto\frac{1}{m}$

To check the Boltzmann-Constant

$$[k]=\frac{J}{K}=\frac{s^3}{m^3}!!$$

one can look at the Unruh-Hawking Effect:

Unruh-Temperature with correct $\hbar,k$:

$$T=\frac{\hbar a}{2\pi kc};[T]=\frac{s^4}{m^4}\frac{m}{s^2}\frac{m^3}{s^3}\frac{s^2}{m^2}=\frac{s}{m^2}$$

Unruh-Temperature with incorrect $\hbar,k$:

$$T=\frac{\hbar a}{2\pi kc};[T]=\frac{m^6}{s^4}\frac{m}{s^2}\frac{s^5K}{m^6}\frac{s^2}{m^2}=K\frac{s}{m}$$

$$G=\frac{1}{4\pi 4c}=6{,}67073\cdot10^{-11}\frac{m^3}{kgs^2};\frac{s}{m}$$

The unification of Gravitation and Quantum-Theories might not work yet, as the energy-scales of current physics seem to depend on an inverse proportional understanding of mass (energy) between the different scales / theories. This seems logical, as if at the beginning „time“ as concept is introduced as a circular argument. This leed to the conclusion, that the concept of mass is calculated upside down. Force of gravitaion could be

$$F_{grav}=\frac{\hbar\cdot a\cdot m_1m_2}{2\pi\cdot k_b\cdot c\cdot r^2}$$

(Where a ist the uniformly acceleration in vacuum field.)

The force of gravitation should be proportional to the Unruh-Hawkins Temperature, which is proportional to the uniformly accelleration in vakuum field. Today, this seems not possible, as the energy-scales does not fit.

All calculated natural constants (speed of light, gravitational constant, elementary charge, Planck‘s Constant and Boltzmann-Constant) are slightly different from the CODATA values, as they are calculated out of only one premise, which is the constantcy of 12 particles and an euclidian space of three spatial dimensions. These constants are not subject to a measurement, but only to mathematical calculation.

7. Conclusions

Assuming that the oberserver as well as reality (nature) are acting with a will that is not deterministic, general relativity and quantum-mechanics can only be united with one timelike dimension of cause representing the will of the oberserver and one timelike dimension of cause representing the will of nature. Then it will be possible to describe the action and reaction between the observer and reality.

It is obvious, that the suggested Principles of Nature include the prediction, that „God“ exists and must be factored in any scientific theory. This idea should not be refused as non scientific as there is no connection to „Religion“. It is simply obvious that reality described with the Principles of Nature is predominantely a „living“ system that follow rules of „negative“ Entropy.

More likely seems to be that the universe could be part of a „bigger“ „biological“ (negative entrophy) system that set rules or has a will. Imagine a cell in human body becomes conscious and tries to do scientific research in order to research his own origin an the rules of universe or nature it lives in.

As there should be no doubt that human being is not the only living species in this universe (at least we know of trees and animals living in this universe too), the question if other intelligent live in universe could be found seems irrational, as it is already found that our universe is a living environment / universe.

A TOE therefore must include a concept of a living environment as law of nature. Trying to understand the universe as a set of rules / laws where life is created accidently (non deterministic) will logically lead to research that does not include life as law of nature, but as a mistake or a peace of luck. In consequence each individual existence as well as the existence of human being in general then would be pointless and mindless.

Following the still predominant multiverse approach in sience will lead in consequence to further irrational an destructive actions of human society, that will keep experiencing results of their actions, that will be the opposite of the original intention by thought.

Adressing nature or „God“ in physics should not interfere with religion at this point, because this approach suggests a theory of reality which includes the observer as measuring-instrument, which is a „living“ organism.

The author invites specialists to set up field-equations based on the suggested principles, to introduce the corrected energy-scales. As well society has to deal with the consequences this scientific theory predicts.

If one act against time (nature) in order to preserve a constant state or trying to outperform the cause (time given by nature), time will put pressure against this action, which causes pain.

If we flow with the wave of time not trying to violate the laws of nature, one could flow on a healthy wave as individuum, as community, as society and as globalized economy.

“If there were anything we could discover in nature that would give us some special insight into the handwork of God, it would have to be the final laws of nature.” - Steven Weinberg -

Althought there was no religious intention to propose 12 elementary particles with a radical constructive deductive approach, the postulated principles of nature coincide with the description of a new world proposed in the book of relevation of john where 12 foundations (4 x 3 gates) and a cube of equal lenght, width and height are described as a fundamental structure.

8. References

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