Theory of Everything
by illusion

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Abstract

The Theory of Everything is The Holy Grail of Science. Scientists all over the world are searching for it. Today only three out of four known forces are somewhat unified. Gravitation is a freak without adequate explanation. This theory shows that there is adequate theory for gravitation. As a bonus, this theory presents The Theory of Everything.

This paper is only overview of the new theory of everything. Most important information is included. The theory itself is very simple and testable.

The Theory of Everything by illusion

The Theory of Everything by illusion (**ToEbi**) demonstrates that gravitation, strong interaction and electromagnetic interactions are generated from the same phenomenon and they are distributed by tiny **force transfer ether particles** (**FTEP**s). ToEbi gives equations for force calculations which apply in scale from atomic to astronomical.

The Theory of Everything by illusion is based on two hypothesis:

1. **The Big Bang created very tiny spiked sphere-like objects (physical particles) which vary in sizes.**
2. **Gravitation, strong interactions and electromagnetic interactions between particles or system of particles are purely mechanical (particle collisions and/or particle rotation).**

Early Universe formatted particles as we know today, like quarks and electrons. Only tiniest **force transfer ether particles** (**FTEP**) are not detected today. These tiniest particles create **force transfer ether (FTE)** around all masses. FTE is denser near mass surface (like on Earth). It is even more dense near atom nucleus. FTE provides medium for particles to interact. All particles rotate (due to the Big Bang) and therefore generate movement into the FTE. **Particle's rotation** is **the reason** why FTE gets denser near mass.

Both stated hypothesis together implies that there must be rotational component in force delivery. In ToEbi **rotational component is stated as G** (capital g). There is a link to the current gravitation constant G. The rotational component applies directly only to sphere shaped or nearly sphere shaped (like Earth, nuclei and so on) objects which are roughly homogeneously layered inside. Roughly homogeneously layered object's rotation axis position is stable or nearly stable.

Rotating sphere creates maximal movement of ether. The reason for this is obvious, speed on surface of rotating sphere depends on radius. On equator, surface speed is at greatest while on polls it's minimal. Speed difference generates flow of ether from equator towards the poles.

Rotation is the key concept to generate flow for an ether but it's not necessary to experience an ether. Moving object without external rotation (there is always rotation in atomic scale!) experiences existing ether. If an ether has a shape (like sphere) in means of density (density increases towards the center), then moving object will create greater amount of FTEP collisions between itself and the center of ether. Result of these collisions is denser local ether which provides better “grip” for an object.

In case of rotating sphere, flow of ether takes a bigger role. Everything inside and outside of this sphere experience the flow, from atoms to planets. This is the reason why rotating object on Earth doesn't generate so much pulling force towards other objects as expected by the first law of ToEbi. Earth's ether flow is so powerful (in means of density and velocity) that pulling force generated by rotating object is mainly experienced on that rotating object itself.

Power of ether's flow can be demonstrated with stationary objects [5]. In this demonstration two bigger objects creates local denser flow of ether. Objects are not moving but ether is and because of more powerful ether between objects there is pulling force generated. Flow of ether can be modified. Most effective results are achieved with objects of high density, like object made of iron or lead. Higher density means higher density of FTE nearby object and so enhanced ability to modify surrounding flow of ether.

Looking back

Rotation induced phenomena have troubled science last 60 years or so. Early rockets delivering satellites had rotation involved. This caused satellites to go too far from calculated orbit. Problem was solved when rocket technology stopped using rotation during escape from Earth's atmosphere. Rotation during delivery caused rockets to gain traction from moving flow of ether. Gained advance was round 20 percent for calculated energy consumption.

Little after these early rocket missions, scientists **Bruce DePalma** discovered that rotating object flew higher than non-rotating object with the same force. Also rotating object fell faster than non-rotating object. Phenomenon was observed by other scientists too. There wasn't good explanation for this phenomenon at the time. Same explanation than with early rockets applies with DePalma's experiments. During upward movement, object gets advantage from upward moving ether. During falling, rotation increases pulling force towards Earth.

Force transfer ether particles in detail

The first hypothesis stated that the Big Bang created very tiny spiked objects (physical particles) which vary in sizes. Current physics can detect many of these particles, like electrons and quarks. Exact shape is not known and that's why we need the first hypothesis. Every particle has tiny spikes. One may think that these spikes are actually the raw material from Big Bang. Because of high pressure those spikes got entangled with each other and thus created various spiked particles. At first smaller particles survived the pressure, like FTEPs, then neutrinos, then quarks and so forth. One can picture these particles like a toothed spheres.

From the first hypothesis we can explain for example phenomenon like faster than light breakdown of interference pattern in **double slit experiment**. Moving photon generates waves propagated through FTE. Because of the spikes, FTEPs are connected to each other. This pure physical connection causes interference pattern to disappear instantly in case of blocking or in some other way observing slits in the experiment.

In current particle physics there is known phenomenon named particle entanglement. Entanglement is direct consequence of physical shape of particles involved (like photons and FTEPs).

Energy

What particle attributes contribute to particle's energy at rest (in our reference frame)? Current answer comes from Einstein, rest mass and speed of light. Mass is totally understandable but the speed of light sounds a bit strange. From ToEbi hypothesis only reasonable definition for particle's energy is

The First law of ToEbi

$$E = mn \tag{1}$$

where m is mass and n is rotation frequency (1/s) of particle. Energy unit is Joule.

Based on The First law of ToEbi we can make relation between particle's energy and kinetic energy

$$mn = \frac{1}{2} m v^2 \tag{2}$$

so in our reference frame particle's velocity distributes to particle's rotation frequency with relation

$$\Delta n = \frac{1}{2} \Delta v^2 \quad . \tag{3}$$

Relation in equation 3 is actually quite obvious. Higher particle's velocity causes increased amount of interactions with FTEPs and thus making particle rotate faster.

Gravitation

Physical mechanism behind gravitation is (created by FTEP collisions) greater ether density between objects compared to density of other side of objects. Object gets a better "grip" on denser ether and mechanically moves towards it. In case of both objects rotate and are not moving in relation to each other or movement is very slow compared to rotation frequency then rotation direction of objects determinate if generated force is pulling or pushing force. Pushing force is clearly experienced for example with magnets. More on that in magnetism chapter.

The Second law of ToEbi

$$\vec{G}_{rotational\ component\ of\ force} = N\left(\frac{m \cdot s}{kg}\right)^2 \frac{1}{2}(\vec{n})^2 \tag{4}$$

where $\vec{n}$ is rotation frequency (rounds per second) of object. Rotation (axis) vector direction is selected so that rotation counter-clockwise gets positive value (like in case of Earth, vector points to north). Acceleration generated from mass and rotation is

$$\vec{a} = G_{rotational\ component\ of\ force}\frac{M}{r^2} \tag{5}$$

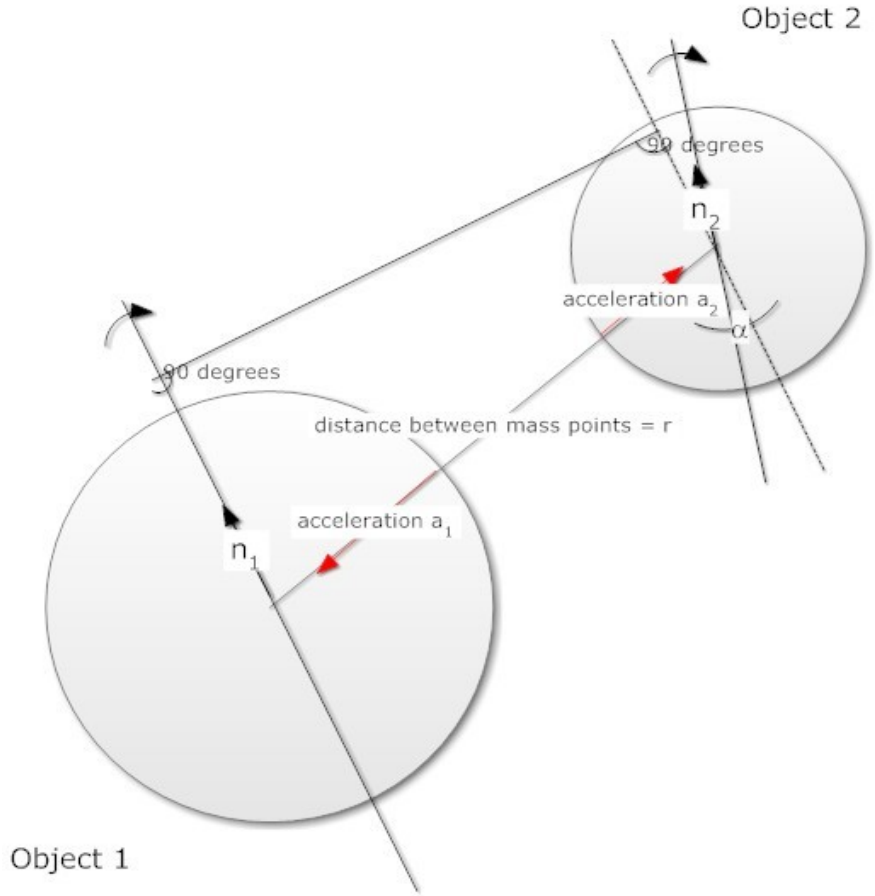
where M is mass and r is distance from object's center. Acceleration $\vec{a}$ points to mass point of object.

In case of two **rotating, horizontally stationary** (no prior orbiting in relation to each other), objects 1 and 2 combined acceleration to object 2 can be calculated by

The Third law of ToEbi

$$\vec{a_{2\to 1}} = (\vec{a}_1 - \vec{a}_2)\cos(\alpha) + \vec{e}_3 n_1^2 n_2^2 \frac{M_1 M_2}{4\mathrm{r}^4}\sin(\alpha) \tag{6}$$

where $\vec{e}_3$ is unit vector perpendicular to the plane containing $\vec{e}_1$ and $\vec{e}_2$ (rotation unit vectors of objects) in the direction given by the right-hand rule. The acceleration into direction of unit vector $\vec{e}_3$ can be considered rotation frequency altering acceleration of object (**RFAA**). This acceleration effects mainly the area closest between objects. That's because distance weakens acceleration with factor $1/r^4$. RFAA has a very important implications for example in energy conversation and in stellar orbiting.



Two rotating objects

If objects have **different** spin directions (**90 degrees < angle between rotation vectors < 180 degrees**) then combined acceleration **pushes objects away** from each other.

Pulling (or pushing) force generated by two rotating objects is

$$F = M_2 \| \vec{a_{2\to 1}} \| \quad . \tag{7}$$

Rotational component of force is easily observed with modified Cavendish experiment. Larger ball is put near smaller ball, then by rotating larger ball there will be measurable “gravitational” effect [2]. Experiment on larger mass, like on Earth, effects greatly experiment's results. But still the effect is measurable. The Forth Law of ToEbi will handle this issue.

Measured gravitation constant is a little less than calculated G on Earth. Difference is due to other masses outside Earth (like Moon, Sun and our galaxy center). Also possible slower rotation frequency of Earth's core is a factor. With high precision measurements there is detected small differences in gravitation constant [3].

ToEbi can explain current binary star observations where two stars are “too” close to each other [4]. If two objects rotates “too” slowly, they can be “too” close to each other. Slow rotational speed of a galaxy is natural explanation for oddly behaving galaxy spiral arms. In this case slow rotational speed of galaxy overpowers huge galaxy mass.

Orbiting speed

Object's orbital speed effects generated force. This is due to increased ether interactions between objects. In general case where object moves to any direction in relation to other object (like a comet in relation to Earth), movement should be divided into horizontal and vertical component. Horizontal component generates additional pulling force between objects.

Example A

For example in case of Earth, our orbital speed is roughly 30 km/s around Sun. The force holding Earth in it's orbit is

$$F = \frac{mv^2}{r} \approx 3.6\text{e}22\,N \quad . \tag{8}$$

We can image that Earth stands still and Sun rotates faster in order to create same ether interaction effect when Earth is actually orbiting Sun. Therefore total rotation frequency of Sun is

$$\frac{1}{25.38 \cdot 24 \cdot 60 \cdot 60}\frac{1}{s} + \frac{2\pi \cdot 30000\,m/s}{149597870700\,m} \approx 1.7\text{e}{-6}\frac{1}{s} \quad . \tag{9}$$

Total acceleration generated by Earth and Sun by The Third Law of ToEbi (excluding orbit inducing acceleration) is

$$a_{tot} = (a_{Earth} + a_{Sun})\cos(7.155) = (1.8\text{e}{-8}\,m/s^2 + \frac{1.7\text{e}{-6}^2\,x}{2 \cdot 149597870700^2}\,m/s^2)\,0.9922 \tag{10}$$

where x is the mass of Sun. Resolving x from

$$F = m_{earth}\,a_{tot} \approx 3.6\text{e}22\,N \tag{11}$$

gives the mass of Sun, which is roughly 8.9e31 kg. Current calculated value is 1.9891e30 kg.

Example B

Planet Venus orbits Sun, but it's spin direction is different than any other planet in our Solar system. Originally Venus had the same spin direction, but a collision with an other object made it to flip upside down. Because of Venus's orbiting speed, Venus generates pulling force inducing ether interactions between Sun and itself and therefore we can image that rotation axis of Venus points to North.

But there is one measurable effect because of Venus's different spin direction, slowing rotation frequency! Based on The Second Law of ToEbi, orbiting inducing acceleration between Sun and Venus is breaking Venus's rotation frequency down. During 16 years Venus has slowed down about 20 km [8].

By approximating mass of Venus as 4e26 kg (current estimation is 4.86732e24 kg) we can calculate braking acceleration for Venus's rotation frequency. Breaking acceleration is roughly 1.5e-13 m/s^2. During 16 years that acceleration would cause offset as large as observed 20 km.

Strong interaction

Strong interaction can be calculated with the laws of ToEbi. In case of Helium-(3,4) we can ignore angle, because protons and neutrons are in position where rotation axises are parallel. Based on The First Law of ToEbi proton's rotation frequency (8.98755e16 1/s on Earth) and distance in nucleus (~2.4e-15 m, particles center-to-center distance), we can calculate force between two protons with

calculated G used with Newton's gravitation force equation. Strong interaction force (in case of two protons) is roughly 3.9e9 N, which is sum of both particle's generated force towards each other.

At the same time there is repulsion between rotating particles. Repulsion prevents particles in nucleus to collide. At ground state force of repulsion is equal to pulling force. Strong interaction force inside Helium-4 nucleus can be calculated by sum of all individual forces between every particle pairs, for Helium-4 strong interaction force is roughly 23.4e9 N.

Larger atoms nucleus can be created from simpler nucleus (Hydrogen and Helium isotopes). Some isotopes are stable by themselves but some are just unstable when they are out of larger nucleus (due to radioactive decay or collision). Size and physical particle positions in nucleus (rotation axises parallel) explains why Universe contains mostly Hydrogen and Helium.

Strongest binding energy by nuclei account has Fe-56. It can be build from 12 He-4 atoms and one He-8 atom. He-4 atoms are in three layers, four He-4 atoms per layer. He-8 is in the middle of the stack. Each layer is positioned so that proton in layer below is next to neutron in layer above. Also proton in He-4 is next to neutron in another He-4 at the same layer. Per nuclei releasable force is roughly 9.26e9 N.

Electromagnetism

Electromagnetic force can be calculated with ToEbi laws. In non-excited state an electron has the same spin direction when compared to nucleus's spin. Opposite spin direction (positron) means pushing force between electron and nucleus (III Law). It is possible to change electron's orbiting direction but the change will cause bigger repulsion force between electron and nucleus. Bigger repulsion force means larger orbit for electron [6].

High FTE density inside atom prevents electrons (in normal conditions) to collide with nucleus. Even high orbiting speed doesn't generate pulling force big enough to make any significant change to orbiting radius of electron. Therefore we can treat orbiting and stationary electron with same calculated pulling force which is mainly created by rotating nucleus.

One interesting phenomenon is proton-electron parity. Normally in atom there is a same amount of electrons and protons. Obviously proton's ability to pull electron is optimal in one-to-one situation. More than one electron per proton is weaker construction because amount of FTEPs around one proton is limited. Every extra electron per proton experiences smaller pulling force. All this is very important with electric current. In electric current extra electrons move on atom's “surface”. Movement causes valence electron's orbit or at least FTEP waves from orbiting electron to bend a bit sideways (amount is related to current strength).

Described bending is the key element in order to create pulling or pushing force with electric current. There is force calculation for two copper wires with electric current in chapter Force calculation between spherical objects on same level on rotating sphere.

Changes between different electron orbits (towards nucleus) in atom causes photon emission. The reason for photon emission is purely physical. When electron returns to it's original orbit, it will cause shock wave of FTEPs toward nucleus. Shock wave of FTEPs towards nucleus creates force big enough to create (compress FTEPs) photon particle. Photon delivers its energy mainly in form of kinetic energy. Light's wavelength is actually photon's rotation frequency. Frequency is depended on how near created photon can get to nucleus during the compression process and that depends on electrons released potential energy.

Photon emission happens also when heavier particles collide nucleus. With large enough energy, heavier particles can be created from photons. This phenomenon is actually created with high

energy lasers.

In case of Hydrogen, there is one proton and one electron. Pulling force between particles is roughly 2.2e-3 N.

Magnetism

Orbiting electron creates FTEP waves around atom. In case when material crystal is magnetized, its electrons are orbiting at parallel position and therefore FTEP waves experience interference. Flow and interference of FTEP near magnetized material can be demonstrated with iron powder.

The reason why for example iron, cobalt and nickel are ferromagnetic is the **shape of nucleus**. In all those cases nucleus is a box like. With smoother shaped nucleus, electrons can orbit more freely around nucleus. Box like shape keeps electron orbits more easily parallel. Magnetization orders these ferromagnetic atoms into uniform direction inside a crystal. Direction of orbiting electrons rules magnetic pole. Because of The Third Law of ToEbi same spin (in this case valence electron orbiting) directions causes pulling force and different spin directions pushing force.

Krypton nucleus is also a box like. In normal conditions Krypton is present in gas form. When Krypton is brought to magnetic field there won't be pulling force, so Krypton is diamagnetic. The reason why Krypton is not generating pulling force towards magnet is because of the freedom of Krypton atom. Instead of pulling, Krypton starts to rotate in magnetic field (used in MRI). Solid form of Krypton (in crystals) can be magnetized and its more magnetic than iron based magnet.

Force transfer ether

Obviously force transfer ether (**FTE**) varies in density. FTE density conversion factor is roughly (based on proton-proton nucleus)

$$\rho_{conversion\ factor} = \frac{3.9e9\ N}{2.4e17\ \frac{kg}{m^3}} \approx 1.6e-8\ \frac{Nm^3}{kg} \quad . \tag{12}$$

For example in case of Earth where mean density is $5515.3\ \frac{kg}{m^3}$. Repulsive force of FTE is roughly 1e-4 N on surface of Earth. Calculated repulsive force can be detected with Casimir effect experiment on Earth. As demonstrated, repulsive force of FTE is only significant in atomic scale. Because neutron's (compared to proton) different structure there won't be big enough ether repulsion force between two neutrons. Because of that two neutrons can't create nucleus by themselves (at least on Earth).

Denser FTE means bigger repulsion between objects. Even our own planet experiences this for example in case of Sun's effects on radioactive decay rate on Earth [6]. While orbiting Sun, Earth experiences different densities of FTE around Sun (distance varies). In case when Earth is at nearest to Sun, combined FTE between Earth and Sun is most dense. This puts atom nucleus under increased destructive force induced by electrons. Increased destructive force happens because denser FTE keeps nuclei in longer distance to other nuclei than normally. Orbiting electrons get lever from this new nuclei distance. Larger destructive force induces more radioactive decay as measured.

Also solar flares create FTE shock waves and denser FTE on Earth. Incoming FTE shock wave can be measured and protective measures can be made against following electromagnetic radiation.

Radioactive decay rate can be accelerated artificially by rotating radioactive material [7]. The

reason for this phenomenon is acceleration generated by rotation. Rotating material generates acceleration and particles of that material experience force (III law). Increased force eases radioactive decay process, so decay rate increases.

Force calculation between spherical objects on same level on rotating sphere

Rotating object generates acceleration. When rotating object is located on larger mass compared to object itself, the acceleration is experienced mainly by the object itself. In case we want to calculate force between two relatively small spherical objects on Earth we have to consider Earth ether's absorbing effect.

Acceleration between rotating object A and stationary object B on same level on large rotating mass C can be calculated by using multiplier of

The Forth Law of ToEbi

$$T_{A,C}=s^{-2}kg\frac{x_{A,C}^2}{n_C^2 M_C r_{A,B}^2} \quad , \tag{13}$$

where $mass_C \gg mass_A$, $x_{A,C}>0$ is object's A mass point distance from the surface of object C in meters and n_C is rotation frequency and M_C is mass of object C. Distance $r_{A,B}$ is between mass points of objects A and B in meters. In future version, objects on different levels are covered.

On surface of Earth (1 m above) The Forth Law of ToEbi is valid down to 3.5e-8 m. Below that atom's own ether density movement overrules Earth's ether movement. Given value 3.5e-8 m is derived from The Forth Law of ToEbi when $T_{A,C}=1$ applies. 10 000 m above the surface of Earth, The Forth Law of ToEbi is valid down to 3.5e-4 m. 1 cm above the surface of Earth, The Forth Law of ToEbi is valid down to 3.5e-10 m.

Modified Cavendish experiment [2] is one easy way to verify ToEbi force equations.

Example A

Coulomb's law states that force between two elementary charges with different signs create attractive force (over 1 m) 2.3071e-28 N. Because of such a small force, measurement of it is impossible. Calculated value based on ToEbi is

$$F_{p,e}=\frac{1}{2}8.98755e16^2\cdot 1.67262158e-27\cdot 9.10938188e-31\approx 6.15e-24\,N \quad . \tag{14}$$

Absorbing effect of Earth's ether over 1 m is (above 1 m from surface) approximately 1.24347e-15. So actual pulling force between proton and electron is approximately 7.65e-39 N, again too small for measurement.

At Bohr radius Coulomb's law gives approximately 8.2e-8 N and ToEbi (no absorbing effect at this distance, 1 m above the surface of Earth) gives approx. 2.2e-3 N.

Example B

Two parallel copper wires, diameter 2.05e-3 m, length 1 m each. Copper crystal size a=3.615e-10 m. Each copper wire surface contains roughly 2.466e16 copper crystals, so roughly 6.2e16 outer electrons. Outer electrons per wire weight roughly 5.6e-14 kg.

All nuclei rotate on parallel axes inside nucleus (parallel to Earth's surface). Orbiting valence electrons under no stress rotate around nucleus axis parallel to wires. Phenomenon is caused by

difference of FTE density inside and outside of wires. Therefore we can handle those outer electrons of the copper wire as a single rotating mass.

Force created between wires at rest at distance of 1 m is

$$F_{rest} = T_{wire,\,Earth}\, n_{valence}^2\, 5.6\text{e}{-14}^2 \approx 3.9\text{e}{-42}\, n_{valence}^2 \tag{15}$$

where n_{outer} is orbiting frequency of copper's outer electron. Based on

$$F = \frac{mv^2}{r} = 2.3\text{e}{-4}\, N \tag{16}$$

where 2.3e-4 N is force needed to keep valence electron in it's orbit. Velocity of copper atom's valence electron is roughly 1.8e8 m/s and so rotation frequency $n_{valence} \approx 2.3\text{e}17$. So wires generate approximately force of 2e-7N. Because wires are not spheres there won't be needed ether flow pattern to actually deliver calculated force.

In order to deliver calculated force there is a need for electron movement parallel to wires. Movement is achieved by conducting current through the wires. With bigger current there will be additional force generation due to larger number of electrons on wire surface. If we feed the same current but from different ends of wires then because of The Third Law of ToEbi experienced force is pushing force.

Planck constant

Modern physics states Planck constant h and it's relation in photon's energy and frequency

$$E = hn \tag{17}$$

where n is (rotation) frequency of photon. Direct consequence from The First Law of ToEbi is that Planck constant presents in reality mass of photon!

Photon's energy is increased for example when photon enters denser FTE. In that case photon encounters more and more FTEPs in it's path. This induces higher rotation frequency for a photon. This phenomenon is known as blue shifting. Opposite case is when a photon exits denser FTE. Encounters with FTEPs decrease which decreases photon's rotation frequency. This phenomenon is known as red shifting.

De Broglie relation

The First Law of ToEbi can be stated with mass of photon (= Planck constant)

$$E = hn = \frac{hc}{\lambda} \tag{18}$$

and momentum

$$p = mv = hc \quad . \tag{19}$$

Therefore based on equation 18

$$\frac{E}{c} = \frac{h}{\lambda} \tag{20}$$

and based on equation 18 and 19

$$\frac{p\lambda}{c} = \frac{p}{n} = \frac{E}{c} \tag{21}$$

By selecting n = 1 (rotation frequency) and combining equation 20 and 21 we get de Broglie relation

$$\lambda = \frac{h}{p} \tag{22}$$

Speed of light

Why speed of light is a constant? Gravitation effects only on wavelength of light and bends its path. The reason is actually quite obvious. During creation of a photon new particle experiences strong rotation frequency of proton. Proton induced FTE movement gives photon rotational movement opposite to protons rotational movement, in other words, different spin direction.

Based on Second Law of ToEbi this opposite rotation direction causes pushing force between proton and photon. Generated acceleration is massive and very quickly photon achieves velocity where its interactions between incoming FTEPs causes it to change orientation of its rotation axis aligned with its trajectory. At that point proton and photon doesn't generate pushing force anymore and photon has reached its maximum constant velocity.

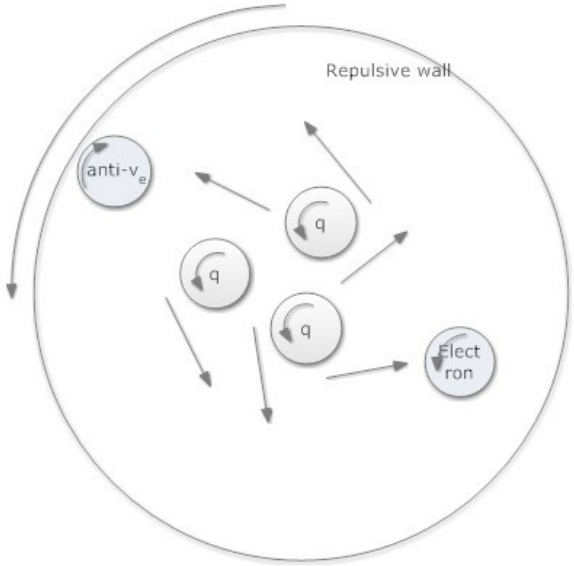
Neutron

Neutron is made of proton, electron and electron anti-neutrino. The unique feature which differentiates neutron from proton is very close proximity between electron and proton. There is two ways for the neutron production.

1. Electron is penetrated repulsive wall of rotating proton and created an electron neutrino and anti-neutrino in pair production (like in electron capture).
2. Anti-neutrino approaches proton's core through increasingly denser FTE. Dense FTE causes anti-neutrino rotate faster and gain mass to the point of electron-positron pair production. Because of different rotation direction positron is pushed away from proton and electron is captured with slowed down anti-neutrino.

Inside proton three rotating quarks generate repulsive wall and the space inside the wall is big enough to contain electron and it's anti-neutrino.

Repulsive wall is made of continuous jets of FTEPs from between the quarks. Electron and electron anti-neutrino inside this wall causes neutron's ability to connect with proton. These two particles inside repulsive wall decrease greatly neutrons externally observed attractive force (similar but stronger phenomenon than electron shielding). Reduced force enables proton-neutron nucleus because there won't be too powerful initial interaction between proton and neutron.



Structure of neutron

In case when proton approaches another proton they generate very strong pulling force (both rotating fast). Generated acceleration causes these protons just repulsive bounce and flyby each other. In high temperatures connection between two protons without neutrons can happen.

As a side note, neutrino oscillation is similar to red or blue shifting of light. When neutrino enters more dense FTE it will experience more interactions with FTEPs and rotate faster. Faster rotation frequency generates bigger energy for the neutrino. When neutrino enters less dense FTE it will experience less interactions with FTEPs and rotate slower. Slower rotation frequency decreases the energy of neutrino.

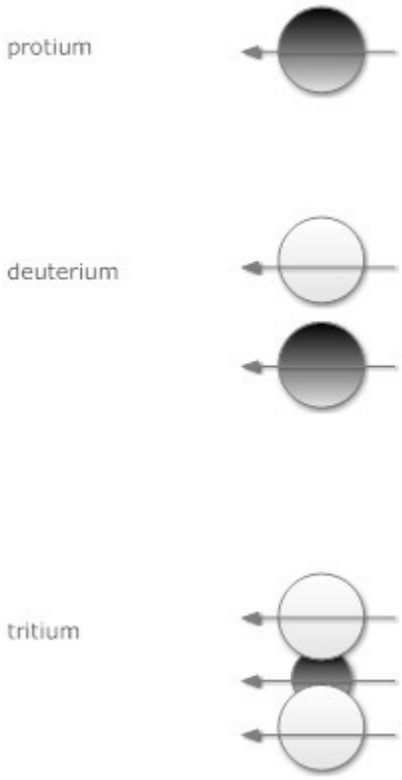
Spin

Quote from Wikipedia:

> Spin is an intrinsic form of angular momentum carried by elementary particles, composite particles (hadrons), and atomic nuclei. Spin is a solely quantum-mechanical phenomenon; it does not have a counterpart in classical mechanics (despite the term spin being reminiscent of classical phenomena such as a planet spinning on its axis).

Actually it does have a counterpart in classical mechanics. Spin is indeed particle spinning on its axis! That is the core of ToEbi. With that interpretation theory of everything is possible.

Nucleus spin is generally determined by calculating protons and electrons. If both sums pair up it is said that nucleus spin is zero. If only one of them pairs up it is said that spin is half and if both sums are uneven it said that spin is one. There is natural explanation for the nucleus spin and it's very much a classical. It also explains the calculus of nucleus spin. In trivial case of hydrogen spin is labeled as half, in case of deuterium it is one and in case of tritium it is half.

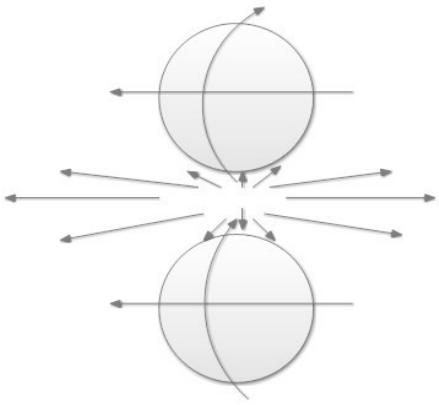


Hydrogen isotopes

Protons and neutrons have different external rotation frequency which explains why destructive interference works separately for protons and neutrons in other words only proton can eliminate other protons spin totally. In tritium there is two neutrons in nucleus and they eliminates each others spin.

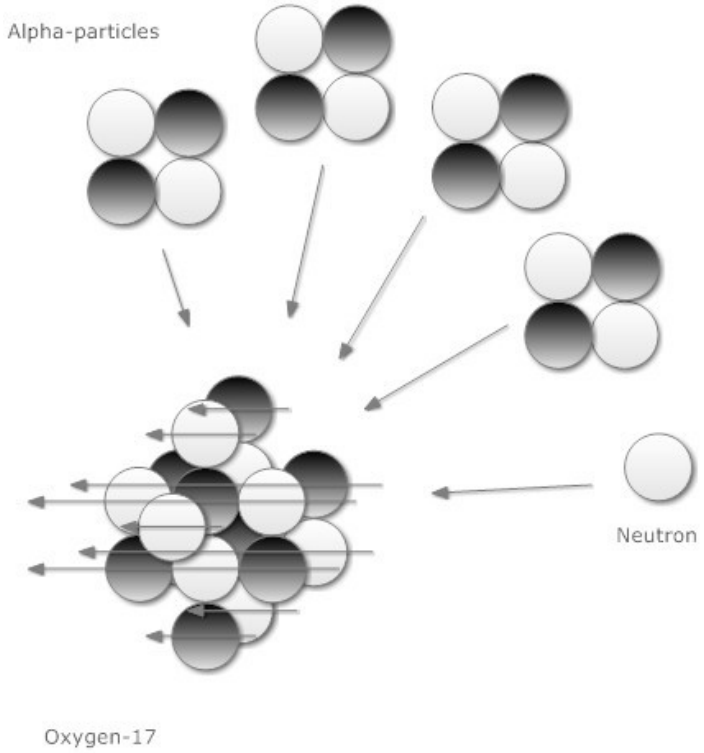
With third neutron created hydrogen isotope decays very quickly but based on measurements neutrons around proton are evenly distributed. In that setup neutrons won't eliminate each others spin due to distance and small external rotation frequency (compared to proton) that's why spin is 2.

Elimination of spin means that when two same kind of particles with same spin (different spin means antiparticle) are at very close proximity generated repulsion causes turbulence in FTE between those two particles. Turbulence prevents nucleus ability to resonate with external waves in FTE (like with waves of magnetic field). Turbulence generated between proton and neutron also effects resonating ability but not as totally as in case proton-proton.



Repulsion

Other often observed atom isotope in MRI is oxygen-17 (8 protons, 9 neutrons) and its spin is 5/2. Why 5/2?



Construction of Oxygen-17

There is three alpha-particles which have combined spin zero. Two proton-neutron pairs (total spin 2) and one standalone neutron (spin half). Total nucleus spin is 2½ = $\frac{5}{2}$.

Source of inertia

Elementary particles have same rotation direction (spin). All particles are aligned on/in large mass, like on Earth. Particle's rotation axis is parallel to large object's surface and axis projection onto rotation axis of large mass. Alignment is caused by pulling force generated by particles rotation. None-aligned particles in relaxation will precess (The Third Law of ToEbi) and eventually achieve alignment.

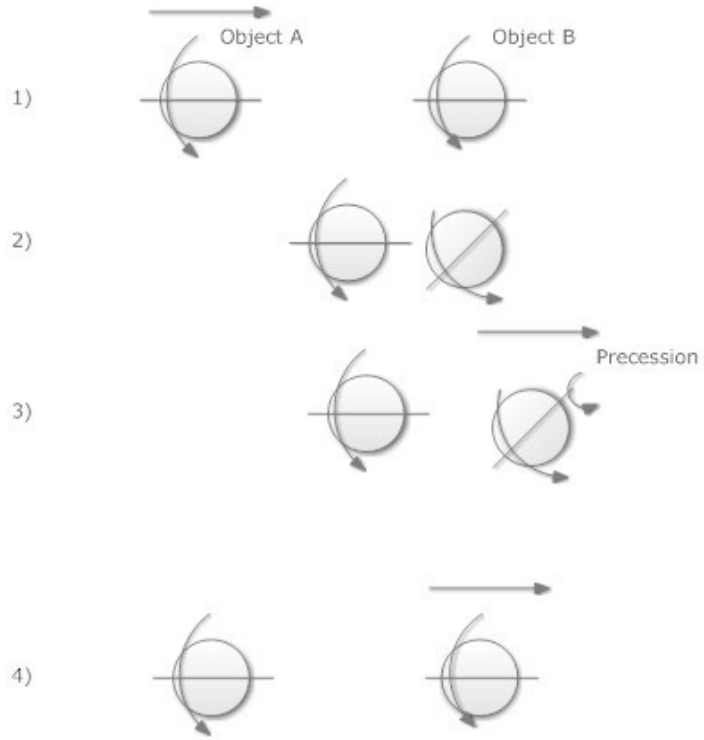
Free particle with opposite spin creates pushing force towards other particles. Only in special case when two different spin direction particles with same mass is brought together rotation axis poles head on, there will be pulling force experienced ending to particle annihilation. Same spin direction particles will generate pushing force when brought together axis poles head on. In other cases same spin direction particles generate pulling force but at certain distance repulsion prevents a contact. In nuclear fusion repulsive force is overcame.

On larger scale, single atom nucleus or many nucleus in matter crystal or in molecule spin to the same direction in an aligned fashion.

So, what causes inertia? In a situation where an object is at rest its all atom nucleus are in described alignment with Earth. Object in this example is elementary particle or atom nucleus. Same principle

applies for larger objects because objects are constructed from atoms. If we exert force (phase 1 in picture) to the object B that alignment will break away. Emerged inertia is actually work against a pulling force between Earth and object B (gravity).

Object A has it's energy stored in higher rotation frequency of its particles. During impact (phase 2 in picture) stored energy causes object B none-alignment in relation to Earth. Bigger the energy bigger the none-alignment.



Particle interaction

In phase 3 pushing force between object A and B overcomes used force and object B starts to precess. Precession is caused by interaction between object B and Earth (Third Law of ToEbi applies). Result of precession is bigger rotation frequency of object B in phase 4. Momentum and energy are conserved.

Some part of energy is released in form of photon emissions when electrons find their natural orbits after impact. Electrons also experience none-alignment and precession. Because close distances between atoms in matter crystals or molecules used force is experienced in every particle involved through FTE. Rotation axis directions in picture are irrelevant, same pushing force and precession is generated regardless of impact direction.

One interesting phenomenon because of higher rotation frequency is weight gain of mass. Higher rotation frequency of particles generate bigger pulling force against other masses in this case towards Earth.

Very similar idea on energy conservation and inertia is presented by physicist **Vesselin Petkov** in his paper titled “On inertial forces, inertial energy and the origin of inertia” [9].

Future development

Modern physics is too broad for one man to take over and explain through ToEbi. Here is few action points for future development. Items are not in any priority order.

- Enhancing The Third Law of ToEbi
- Electron orbits in different atoms, electron's orbiting effect on other electrons in atom. In other words, taking over quantum mechanics.
- Photon entanglement limits and possibilities through ToEbi

This list holds only first actions points by author. Every scientist can come up with bigger list. Purpose of this list is to encourage other people to develop ToEbi further.

Consequences

Main consequence (at least to the author) of this new theory is ability to understand, modify and utilize FTE. Also proper understanding of antimatter opens new possibilities to the mankind. There is already pending patents on these matters. Because patent legislation it's not reasonable to reveal those yet. However, main distribution of these inventions is in energy production area.

Naturally modern physics feel the impact of this theory. Both relativity theories and quantum mechanics need some rethinking. Also EM gets a new insight into it's phenomena.

And finally, we do have a proper explanation for gravitation.

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