Wavefunction collapse and Human choice-making inside an entangled mirror symmetrical Multiverse.

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Abstract,

If the process of wave function collapse of two entangled particles into mirror symmetrical states, is the basic process for all created particles, then we should live inside one part of a mirror symmetrical entangled copy MULTIVERSE with one central origin.

We will give it the name: Raspberry Multiverse.

Even human choice making should be subjected to this mirror symmetrical process. Benjamin Libet described a choice experiment, which we could use to measure how many copy universes there should be.

Introduction.

The Schrödinger's cat thought experiment, is an example of how the problem of choice making at the quantum level, or wavefunction collapse in physics can be described. According to the Copenhagen interpretation of Quantum mechanics: only by looking into the box, we seem to be able to influence the collapse of the wave function of the living cat. Before that moment we have to accept that the cat is in two uncertain states alive and dead. At the same time it is assumed that our conscious mind as observer, should be able to influence the wavefunction collapse as soon as the box is open.

The logic of this interpretation seems to be that we HUMANS are the unique observers of a unique universe.

However, if we live inside one of the two (or even more) mirror symmetrical entangled Copy universes, then the problem is solved, because in that case there is no uncertainty any more about the cat at the quantum level or our own choice making.

Then, at the quantum level the choice is already made about the collapse of the wavefunction between the mirror symmetric quanta by the entanglement relation between each set of quanta, even if these quanta are separated at huge distances.

If in our material universe the cat stays alive, he also will live in the mirror anti-material universe, caused by the mirror symmetry of the entanglement relation. In this way those mirror universes will always stay each others mirror copies even at the quantum level. In addition to this interpretation of the wave function collapse, we described the possibility that the Big Bang process should be interpreted as part of a continuous process of the cyclic raspberry shaped multiverse, in reference[1].

The Big Crunch black hole nucleus, filled with most of all the Higgs and other particles Ref. [2,-5,], making the universe what it was before, should be the start of a new evaporation and splitting process of matter creation and distribution in the form of the so called Lyman alpha Forest inside each egg shaped universe. (figure 1 and 2).

Thus the splitting of the giant Big Crunch Black Hole is assumed to be an entangled mirror symmetrical process in the Raspberry Multiverse and the start of all matter creation.

TIME in the Multiverse, is assumed to run forward (right-handedness of clocks) because the universe seems to be a huge pinball machine. The energetic oscillating Higgs particles are in constant collision with real spinning Fermions.

Spinning Fermions (the pinball) are driven by the oscillating Higgs field (the electric pinball machine springs) which is also supposed to be the origin of the general increase of entropy base of the second law of thermodynamics. Ref.[2].

However dark matter in the form of black holes will eat the dark energy of the Higgs field and decrease entropy again, reason to postulate a pulsating and cyclic universe.

Universal Symmetry is not broken if we accept that each material universe is entangled at a long distance with an anti-material copy universe, equipped with opposite chirality inside the 4 oscillating Higgs lattice field. As a consequence Time never runs back in anti-material entangled universes, clocks have left-handed rotation over there. Ref.[2]

However, as a consequence, it is a shock to realise that I am not alone inside the Multiverse, there must be at least ONE entangled COPY of ME who also tries to make decisions and is influencing me.

Benjamin Libet's experiment on human decision making could help us understand this phenomenon. Libet measured electronic brain activity differences between Readiness Potential I and II, which he did not understand.

Future Libet-experiments focussed on the statistics of the differences between RPI and RPII will be indications of the number of entangled universes inside our Multiverse.(fig.6)

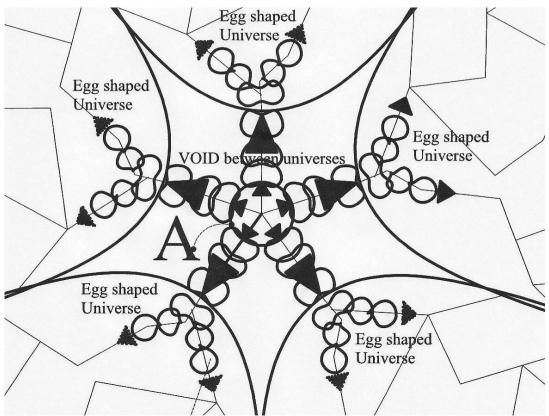
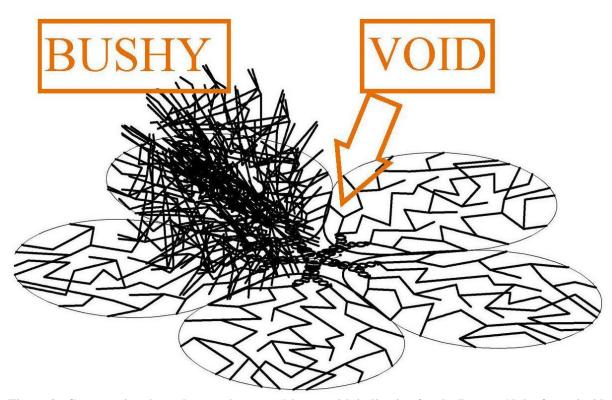


Figure 1, Cross section through the Big Crunch Black Hole splitting process starting at point A. A VOID is left behind between the EGG shaped individual universes because here no quarks of fermions will survive.



Figure~2,~Cross~section~through~a~raspberry~multiverse~with~indication~for~the~Lyman~Alpha~forest~inside~one~egg~shaped~universe.

The Big crunch black hole splitting and pairing process is assumed to be the origin of a BUSHY structure of the matter distribution in our visible universe, which is known as the so called Lyman Alpha forest.

The raspberry multiverse.

The CPT symmetric raspberry universe seems to be the result of Fractal shaped evaporation, of the content of a cyclic central big crunch black hole, into egg shaped bubbles with individual Cosmic Microwave Background. (CPT= Charge Parity and Time)

3-D suggestion for the solution of the so called "MISSING GALAXY SHADOWS". All the Galaxy (clusters) located behind the WMAP CMB boundary (outside our own universe) do not create some kind of SHADOW on the 2.7 Kelvin cosmic background radiation.

2-D Section through the raspberry multiverse, with huge void in the middle.

The void in the middle is supposed to be originated by the start of the Fractal process, when the vacuum density of the former cyclic multiverse was still too high for a fine grained fractal process (see my book).

Boundary of observation, the edge of the visible universe.

The Earth liceation.

These angles are available and about our position in our own universe.

WMAP CMB Background radiation bubble (egg shaped) of our own universe.

 $Figure \ 3, Cross \ section \ through \ a \ Raspberry \ Multiverse \ with \ 12 \ entangled \ universes \ in \ dodecahedron \ structure.$

The absence of a Cosmic Background shadow in the WMAP is called the Sunyaev-Zel'dovich effect and found in a sample of 31 clusters. Ref.[8].

Future research should provide evidence that the distribution geometry of galaxy clusters without a CMB background shadow, is found in the inner part of our egg shaped universe, due to the presence of the external Multiverse galaxies.

In the external part of the hemisphere of our egg shaped universe, all galaxy clusters should show up with a clear CMB background shadow. The angles which could be measured between the inner and outer hemisphere will be an indication of the observer location inside our own universe.

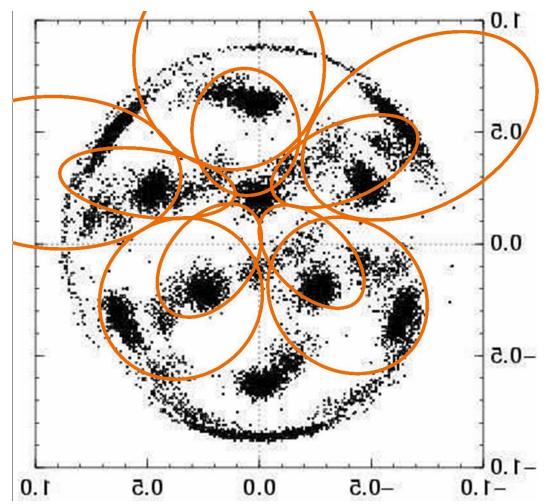


Figure 4, The Dodecahedron structure inside the WMAP sky found by F.Roukema et all. It is called: Image from: The optimal phase of generalised Poincar'e dodecahedral space hypothesis implied by the spatial cross-correlation function of the WMAP sky maps.

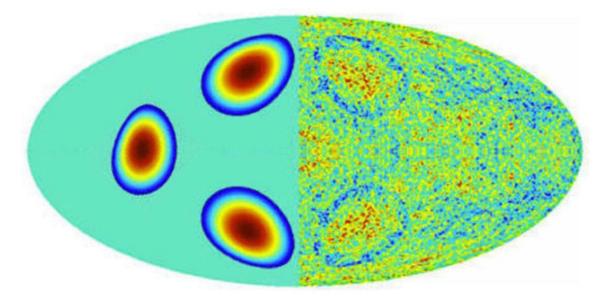
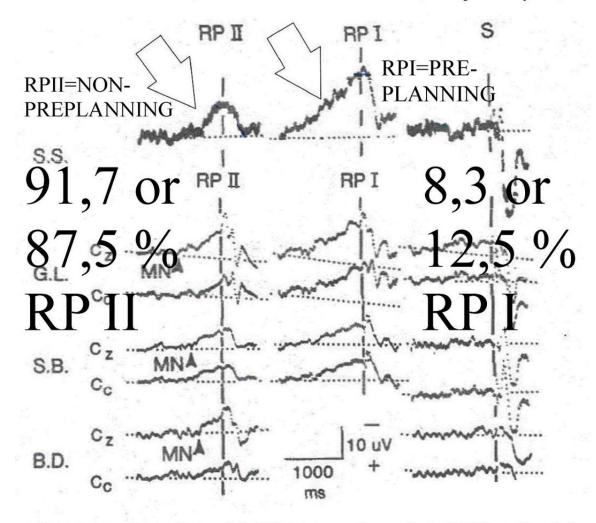


Figure 5, There are by now only four Low Variance circles found inside the WMAP sky. However we expect to find a fifth circle at equatorial position now hidden behind our own Galaxy. This would be a clear indication for a raspberry shaped Multiverse with 12 entangled universes in dodecahedral structure.

If humans are cooperating decision makers inside the postulated 8 or 12 entangled but separated universes, then for every decision we need one preplanning test-person who pre-plans his choice. The other 7 or 11 test copy-persons are only able to follow **OR REJECT** this decision.

As a result we may be able to measure (in the future) the number of copy universes involved, by counting the average percentages of preplanning persons in test situation like the Libet test..

For 12 universes the RPI percentage will be 100/12=8,3%. For 8 universes RP I will be 12,5%. For RP II it will be 91,7 respectivily 87,5%.



Electric Readiness Potential (RP) Test results made by B.Libet, listed for test persons (4x) and for the test person's ideas about preplanning before making the decision to press the bel.

RPI is without preplanning, RPII is with preplanning!.

Figure 6, The difference between RP I and RPII found by B. Libet, with offprinted percentages for different numbers (8 or 12) of entangled universes to be found in future experiments.

Entanglement between universes can be interpreted as a new vision on reality. Perhaps this is also the case for a new kind of entanglement between evaporated silver atoms in- and outside the oven.

This would solve the Stern Gerlach mystery described by John S. Bell.

The traditional Stern Gerlach experiment.

The new proposed experiment, with two S-G magnets always ON

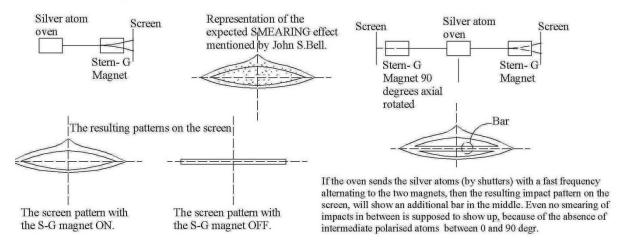


Figure 7, To solve the Q.M. problem described by J.S.Bell about the standard Stern Gerlach experiment. Experiment proposal to support the existence of a new kind of Entanglement, which should show up inside a double Stern Gerlach experiment with two S-G magnets with different orientation.

The proposal for this experiment, is based on the hypothesis that all heated and vaporized silver atoms inside the silver oven are entangled as a whole and that magnetic measurement of one atom travelling outside the oven influences the magnetic polarity of all the other atoms in the oven.

If the oven sends the silver atoms (by shutters) alternately to the two magnets, then the resulting impact pattern on both screens will show an additional BAR in the middle of the original impact pattern. (see figure 7)

This could be the explanation for the fact that only up and down orientated atoms should enter into the S-G magnet to explain the "non smearing" effect on the screen.

John S. Bell described his doubts about the Stern Gerlach experiment interpretation in his book: "Speakable and unspeakable in Quantum Mechanics on chapter 16 page 140-141.

Ref [7]

John Bell argued that there is no logic to be found behind the fact, that there is a so called "absence of smearing" of the particle impact pattern on the screen.

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