## Brain-Controlled Cold Plasma (BCCP)

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Regarding 'macroscopic effects', p. 31 in *Time and Continuum: Zenon Manifold* at http://www.god-does-not-play-dice.net/zenon.pdf

Let me begin with two excerpts from Wikipedia:

Quantum mechanics and classical physics https://en.wikipedia.org/wiki/Quantum\_mechanics#Quantum\_mechanics\_and\_classical\_physics

Many macroscopic properties of a classical system are a direct consequence of the quantum behavior of its parts.

Macroscopic quantum phenomena https://en.wikipedia.org/wiki/Macroscopic\_quantum\_phenomena

Macroscopic quantum phenomena refer to processes showing quantum behavior at the macroscopic scale, rather than at the atomic scale where quantum effects are prevalent. The best-known examples of macroscopic quantum phenomena are superfluidity and superconductivity; other examples include the quantum Hall effect.

I suggest new macroscopic quantum phenomena: quantum fluids at room temperature, dubbed 'brain-controlled cold plasma' (BCCP)<sup>1</sup>. Namely, "macroscopic effects of so-called topological bridge (CQV) connecting the *potential* states of the human brain (p. 22) with the *potential* quantum-gravitational states (p. 29) of the physical system entangled with the brain": read p. 31 in *Time and Continuum: Zenon Manifold* at

http://www.god-does-not-play-dice.net/zenon.pdf

Let's dig deeper. To understand the measurement problem in QM, recall the so-called macroobjectification problem, from GianCarlo Ghirardi: http://www.informationphilosopher.com/solutions/scientists/ghirardi/

We have now reached the point where we can face the so-called problem of the macro-objectification of properties: how, when, and under what conditions do definite macroscopic properties emerge?

The measurement problem and macro-objectification problem are not solved: read Erwin Schrödinger from 1935 at p. 2 in *The Physics of Life* and, e.g., Maximilian Schlosshauer, arXiv:quant-ph/0312059v4, 28 June 2005.

The main reason why the measurement and macro-objectification problems in QM are not solved is that the so-called quantum waves (Wikipedia), presenting the *potential* quantum states (read p. 31 above), possess *complex* (not real-valued) phase (Chen Ning Yang).

Think of four quantum dice, which you toss in the air, after which they drop on a table. All dice have to be correlated "in the air" (atemporal *Quantum Spacetime*) in such way that the

<sup>&</sup>lt;sup>1</sup> Download the latest version of this paper (BCCP.pdf) from this http URL.

sum of their readings must be already (Sic!) confined in the interval [10, 20] at the instant they are fixed/dropped on the table. Due to the "speed" of light (read below), you can see the four dice *only* on the table, where they exist as *physical* 'facts'. Suppose you observe four consecutive sets of readings, (3, 5, 1, 6), (6, 4, 3, 5), (5, 6, 2, 6), (1, 3, 5, 1), all of which are pre-correlated by the *atemporal* requirement [10, 20]. The trajectories of all dice are comprised *only* by their *physical* states 'on the table', which were pre-correlated (Henry Stapp), like the school of fish below. They will be bootstrapped into holistic 'school of dice' and will display *wave-like* holomovement, without any *physical* source (Erwin Schrödinger) of such "quantum wave" endowed with *complex* (not real-valued) phase (Chen Ning Yang).

The same phenomenon works in your brain, while you've been reading these lines. If the human brain seems too complicated, think of a centipede: how does it correlate its legs? With some invisible "dark" computer, which does not emit nor reflect light? I can't help but quote Sir Arthur Eddington: "Something unknown is doing we don't know what."

I suggest that the *potential* quantum states (read p. **31** above) are *atemporal* Platonic reality (Wheeler's "cloud", p. **7** in zenon.pdf), known as *Res potentia*. But what is 'atemporal'?

Read the answer to the question at Quora 'Does light only exist at the speed of light? Does light accelerate and decelerate?' by Andrew Jonkers from 30 March 2018 at

https://www.quora.com/Does-light-only-exist-at-the-speed-of-light-Does-light-accelerate-and-decelerate

The whole concept of acceleration or deceleration has no meaning in this context. It started here, and ended there, with a certain probability. That is all you can say. Mathematically it is a plane wave traveling out spherically in three dimensions. Not really a satisfying answer. Let's try something else.

It is not even as if the energy spreads out in all directions, and then chooses all at once to clump in one place as a single packet of energy. It is like a large number of zombie copies head out in all directions, each with the energy of a photon, and also in total number only with the energy of one photon! The moment one is observed, all the rest disappear. Mmmm that description is not much better.

However you describe it in English, it won't quite make sense. But that is what Nature does! Perhaps a better explanation is (from Feynman), following emission, all the possible paths are explored, assigned a likelihood, and then the photon takes one. Feynman went a bit further and adds up all the paths it can't take as well, just to show they happen to sum to zero probability.

The *atemporal* Platonic reality is residing "between" the emission and absorption of a photon, which is why I suggested an *extension* of the light cone: read **NB** at p. **16** in zenon.pdf. This is the correct interpretation of the Feynman path (Wikipedia), without "zombies".

Now, what will happen if we create a new collective *atemporal* quantum state "of the physical system entangled with the brain" (read above)? All constituents of the *physical* system will exhibit *holomovement* (Wikipedia), like a correlated school of fish (YouTube) bootstrapped by their "cold plasma". Hence the term brain-controlled cold plasma (BCCP).

Check out my proposal (8 August 2019) for producing electricity at p. 8 (last) in *Can We Replicate Stellar Nucleosynthesis*?, and the suggestion by a prominent theoretical physicist.

You may ask, what is the origin of the energy? We only have to follow Mother Nature: *tweak* the cancellation mechanism producing an immensely small — but not zero — "positive energy density of about 6×10<sup>-10</sup> joules per cubic meter" from the vacuum (John Baez), and we will unleash *unlimited* positive energy density, for example, to produce electricity (p. 8 therein). Recall that gamma-ray bursts (GRBs) can release "as much energy in a few seconds as the Sun will in its entire 10-billion-year lifetime" (Wikipedia).

But how to *tweak* this cancellation mechanism? With BCCP and the so-called 'evolution equation' at p. 4 in zenon.pdf. Notice the re-interpretation of "negative mass" (Wikipedia) and "negative energy" (Wikipedia) at p. 23 in zenon.pdf. We need Mathematics and quantum gravity, not some "meditation" or "ecstatic visions" à la St. Joseph of Cupertino (Wikipedia).

For the record: I suggested 'atemporal quantum reality' on 5 February 1987, ensuing from the transactional interpretation of quantum mechanics (TIQM) and the first off mystery in QM, known since 1911, thanks to Charles Wilson. Read about it at p. 4 in *Penrose-Norris Diagram*. To understand the current situation, read p. 28 in zenon.pdf.

Watch 'Spacetime Engineering 101' on 15.01.2020 at <u>this http URL</u>. To obtain the password for the video (720p, MP4), please follow the instructions at pp. 2-3 in *Spacetime Engineering*. For other inquiries, notice the excerpt from my website at <u>this http URL</u>.

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## Post Scriptum

This is my photo from June 1994 (left), with my one-year old daughter. It was taken three months after I sent by snail mail my updated proposal for *atemporal* quantum reality from February 1987 to many academic institutions, in March 1994. And this is how I look now.





Why is this important? Because now I can claim, with the benefit of the hindsight, that I could have offered my theory of spacetime and its testable predictions twenty years ago, by the end of 1999 at the latest, if only there was a trace of interest in quantum gravity and Mathematics by members of the theoretical physics community. In other words, I believe we could have unlimited ecologically clean energy by the end of 1999 (Sic!), instead of going to war on Iraq and killing 650,000 people, as estimated in the second Lancet survey from 11 October 2006 (Wikipedia). I can also claim, with the benefit of the hindsight again, that we could have also avoided the forthcoming climate catastrophe (p. 28 in zenon.pdf). Not to mention that I could have a normal family life, when my three kids were small and I was young and happy.

These statements of mine are, of course, counterfactual. Nobody knows what could have happened to me, if I had offered unlimited clean energy by the end of 1999. I could have been hit by a truck or killed with heart attack, whichever comes first.

Now I am really old, and if people are still uninterested in my project — fine (Matthew 7:6). As I wrote on Easter 2019, "I keep exploring my "carrot" (p. 1 in [4]), it works like a charm, better than a Swiss watch" (p. 2 in zenon.pdf). I am only scratching, very gently, the tip of the iceberg, yet it is more than enough.

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