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Physical theology

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Dear Colleagues,

I wonder if you would be interested in physical theology,
<http://www.god-does-not-play-dice.net/quantum.pdf>

My first presentation was delivered on 23 March 1994 at the Conference on Science and Theology (ECST V) in Freising near München (March 23-27, 1994), but the organizers of ECST V did not publish it. More on physical theology, as the natural extension of quantum gravity and cosmology, can be read at my website below.

Kind regards,

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Note on Physical Theology

Physical theology is based on the doctrine of *trialism*, according to which there are two *complementary* paths toward understanding Nature: see Fig. 5 and p. 5 in *The Physics of Life* at chakalov.net. Notice the so-called *evolution equation* at p. 28 (last) in *The Physics of Life*:

$$|\mathbf{w}|^2 = |\mathbf{m}|^2 + |\mathbf{m}_i|^2 \quad (\text{Eq. 1}).$$

Eq. 1 can be rewritten as

$$|\mathbf{0}|^2 = |\mathbf{0}|^2 \quad (\text{Eq. 3}).$$

Eq. 3 corresponds to [John 1:1](#):

In the beginning was the Word, and the Word was with God, and the Word was God.

The creation of the Universe at 'Time zero' is the *atemporal* transition from Eq. 3 to Eq. 1: a perfectly quiet and smooth (no "big bang") *polarization* of the right-hand side at Eq. 3, leading to Eq. 1. Namely, at Time zero the difference between $|\mathbf{m}|^2$ and $|\mathbf{m}_i|^2$ is *already* tending *asymptotically* toward Time zero, but can never *actually* reach God: once created ([John 1:1](#)), the Universe is *already* eternal. The total mass-energy of the *physicalized* 4D partition is being perpetually *re-created* and *re-balanced* at *zero* (not "conserved"), in line with Eq. 1. Thus, at every consecutive 4D instant 'here and now' from the arrow of Time, God lives *inside* us at *absolute infinity*, being located *exactly* (not asymptotically) at Time zero.

In the *physicalized* 4D partition of the Universe, governed by the so-called Relative Scale (RS) spacetime (p. 14 in *The Physics of Life*), the *rate* of the light-travel Time (*ibid.*, pp. iv - v) tends *asymptotically both* toward zero in the Small *and* toward infinitely-large in the Large. Physically, it is impossible to *actually* reach the Time zero at *absolute infinity*, not even with thought experiments. Recall the [Thomson's lamp paradox](#) and the [dichotomy paradox](#), and think about a grasshopper jumping half the distance to a wall (Time zero) each time it jumps, but never *actually* reaching the wall/end point toward the Small or the Large, and stop there:



If the *rate* of the light-travel Time (read above) is *rescaling* the invariant spacetime interval as "slowed down" toward the Small and "speeded up" toward the Large, the 4D grasshopper could never *actually* reach Time zero by freezing the *rate* of its light-travel Time *exactly* to zero, nor could it "inflate" the *rate* of its light-travel Time *exactly* to actual/absolute infinity to *actually* reach the unphysical Platonic state of the Universe, which *wraps the physical world* "under" the Small and "above" the Large. Physically, the Beginning at Time zero and the End at Time infinity are indistinguishable. Hence God ([John 1:1](#)) is a unique *mathematical* object, quietly residing *within* every consecutive 4D instant 'here and now'. We need Mathematics.

Again, the *physical* theology is the natural extension of quantum gravity and cosmology. It is not religion and we do not address the question about God as Love ([1 John 4:8](#)). In the doctrine of *trialism*, there are two *complementary* explications of Nature (p. 5 in *The Physics of Life*): the Universe as ONE (physical theology), and God as eternal Love. Choose what suits you best. Or both.

D. Chakalov

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Explanatory Note

The first term at the r.h.s. of Eq. 1 above, $|m|^2$, is the **re-created** (Slide 1) 4D physical world observable with light (p. 12):

$$4 \text{ apples: } T^{ab}{}_{;b} = 0 \quad 5 \text{ apples: } T^{ab}{}_{;b} = 0 \quad 2 \text{ apples: } T^{ab}{}_{;b} = 0 .$$

The gravitational energy-momentum is "conserved" *individually* in the three cases 4, 5, and 2.

The second term at the r.h.s. of Eq. 1 above, $|m_i|^2$, is the **Platonic** world:

The eye of the Universe



Physical (blue) and potential (red) forms of reality, complemented by the *colorless* non-reality of the **Noumenon**: the doctrine of *trialism*. In the context of Maximal Set Theory, the **Noumenon** has zero cardinality, matching 'the *unknown unknown*', also known as God (John 1:1) and 'the Universe as ONE' in physical theology.

NB: In the doctrine of *trialism*, God (John 1:1) and the Universe as ONE are not identical but **indistinguishable**.

The left-hand side of Eq. 1 above, $|w|^2$, is the *colorless* non-reality of Noumenon. To understand the doctrine of *trialism*, read p. 3 in [talk.pdf](#). More in [text.pdf](#).

At my talk on 23 March 1994 (*ibid.*, p. 1), mentioned in the email above, I did not suggest experimental tests of the theory. They were sent by snail mail at the end of March 1994 to [Max Planck Society](#) in Germany and to the U.S. Department of Energy (p. 20 in [quantum.pdf](#)). Nobody showed any interest. It was like talking to [Russians](#).

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