GOD & Hawking

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ABSTRACT

For reasons stated below, I do not find the classical physics view about God selecting initial conditions very interesting. Hawking should find himself more demanding challenges than killing for all practical purposes already dead God of classical mechanics.

Key Words: GOD, grand design, Stephen Hawking, M-theory.

There has been a lot of discussion about Hawking's new book <u>The Grand Design</u>. <u>Lubos</u> applaudes Hawking for believing in M-theory but not so much for deducing the non-existence of God from this belief.

<u>Not Even Wrong</u> in turn strongly criticizes Hawking for his belief on M-theory. I cannot but agree with his criticism. The fact is that M-theory has gained no experimental support hitherto and the standard media hype nowadays is that after these forty years superstring theory has finally been able to make a prediction. M-theory of course contains many mathematical ingredients of the next theory but involves spontaneous compactification as ad hoc element responsible for the landscape problem. The need for spontaneous compactification is in turn due to the wrong identification of fundamental objects as strings. The dead end is admitted also by many of its main proponents. The quirk of psychology of vanity is that in many brilliant minds the catastrophic weakness of M-theory of not being able to predict has gradually transformed to its greatest virtue. Sad that Hawking wants to advocate this kind of give-up-the-attempts-to-predict-anything philosophy after the absolutely fantastic successes of theoretical physics during the last century.

In <u>viXra</u> the comment of cosmologist <u>Lawrence Krauss</u> about Hawking's book related to the notion of energy in General Relativity is discussed but Hawking's basic claim is not discussed. I glue below the main part of my comment in this blog relating to the notion of God against which Hawking is fighting against.

Before doing it I have however a request to make. "Do not classify me!". Neither as an atheist nor as a proponent of some religion. With all respect to the proponents of these views, I regard these views as inconsistent with what we already known from fundamental physics and its deepest problems. Indeed, my own view point has developed from an attempt to resolve one of the most pressing questions of recent day quantum theory: what state function means physically and for world view and how it should be described mathematically.

From what I have understood from a discussion in Lubos Motl's blog I understand that Hawking's view about God is badly in need of updating. It is essentially the God allowed by classical deterministic physics. God dictated the initial conditions of Big Bang and lost interest on the Universe after that. This because Godly intervention would break the laws of classical physics. In quantum measurement theory we encounter the same problem: quantum measurement apparently breaks the determinism of Schroedinger equation. Now we cannot however claim that state function collapse or something equivalent with it does not occur. The irrational manner to get rid of the problem is to say that there is no objective reality at all.

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In TGD inspired theory of consciousness can be seen as a generalization of quantum measurement theory in order to overcome this difficulty. It leads to a quantal view about divine as ability to recreate the whole 4-D Universe (or more precisely, their quantum superposition) again and again. This allows to understand biological evolution as something genuine and generalize the concept of evolution. Zero energy ontology means that physical states correspond to pairs of positive and negative energy states so that symmetries and conservation laws do not restrict the free will of quantum jump. Every physical state is in principle reachable from a given physical state by quantum jumps. Free will is completely consistent with the determinism of the laws of classical physics since the free will of quantum jump is outside the space-time and Hilbert space: entire time evolution of Schroedinger equation is replaced with a new one. Consistency with physics does not anymore exclude divine.

Accepting this view means also a new view about relationship between experienced time and geometric time. They are not one and same thing as should be clear already from the fact that subjective time is irreversible and geometric time reversible. Their identification can however make sense approximately and locally applying to one particular system from which the contents of consciousness of one particular conscious entity is about. Everywhere in 8-D Universe there are space-time sheets about which a contents of sensory consciousness of a particular conscious entity comes from.

In this framework there is no sense in asserting that consciousness is a kind of 3-D time=constant slice moving towards geometric future. The time slice idea is also in conflict with General Coordinate Invariance since a special time coordinate would be relevant for consciousness. And our conscious experience is not about time=constant snapshot. We have memories- even sensory ones- and the experiments of Libet demonstrated that our volitional act induces neural activity in the geometric past. The contents of our conscious experience is about 4-D space-time region, and the challenge is to understand why our sensory experience is localized to about .1 second wide interval of geometric time in the usual wake up state of consciousness.

For these reasons I do not find the classical physics view about God selecting initial conditions very interesting. Hawking should find himself more demanding challenges than killing for all practical purposes already dead God of classical mechanics!