

sci.physics: Re: Where all the physical laws in place before the Big Bang occurred?

Re: Where all the physical laws in place before the Big Bang occurred?

Source: <http://sci.tech-archive.net/Archive/sci.physics/2004-09/8898.html>

analog57_at_yahoo.com

Date: 09/23/04

Date: 23 Sep 2004 10:16:42 -0700

Donald Hamilton wrote:

> *Did inertia, gravity, EME, chemistry, etc. exist before the Big Bang?*

>

> *Don Hamilton*

> <http://novan.com>

1. With a little earnest thought, one realizes that the concept of "ultimate randomness" is logically absurd.
2. The laws of physics are time independent. They hold for all frames of reference.
3. Also, even if an ultimate physical randomness is/was true, physical randomness would not exist without time, or "change" – from one state to the next.
4. But if the physical laws are time independent then the physical laws, by definition, did not arise "randomly".

???

[1.] Nothingness is a difficult concept, or rather, a difficult "non-concept" since it is ...nothing.

[2.] To say that nothingness exists is to create a contradiction, since nothingness is non-existence. Nothingness "non-exists".

[3.] Nothingness is non-existence; therefore nothingness is non-relational. Nothingness has no distinctiveness in and of itself, hence nothingness cannot be recognizable.

[4.] Being-ness means basically "to be", and to exist. Being-ness exists.

[5.] Take any two distinct quantities-attributes of existence:

sci.physics: Re: Where all the physical laws in place before the Big Bang occurred?

A<-----P----->B

A and B perceive each other to be different with perception P. That is to say A is perceived to be different from B and B is perceived to be different from A.

A and B are different elements of a larger picture, but they also[must] share certain common attributes of the larger reality including them. From that perspective A and B are the same, because aspects of A transform into B and aspects of B transform into A. At a higher level of generality and symmetry, A cannot be distinguished from B, and B cannot be distinguished from A. For example, dogs and cats are distinctively different, yet dogs and cats are the same from the perspective that both are "mammals".

[6.] Following this premise, it stands to reason that all attributes & aspects of reality can be transformed into each other, and hence they have no distinctions from each other[at continually higher and higher levels of symmetry].

[7.] Therefore, it follows, that at a top[infinite?] level of symmetry, everything is nothing[non-distinctional].

QED.

Construct physical properties of the hypothetical "string", as necessary elements in an algebraic language. Define "states" as objects that act upon physical properties – with the association of a real number to each property. Then it corresponds to taking expectation values in the normal QM approach.

But with the algebraic approach, one can treat the states that arise in all unitarily inequivalent structures – on an equal basis, thereby enabling one to define the theory without the need for a preferred construction allowing for unification of GR and QM. Symmetry forms the basis of unification.