

Re: Independent/Dependent Phases

Source: <http://sci.tech-archive.net/Archive/sci.physics/2005-10/msg00133.html>

- *From:* "OsherD" <mdoctorow@xxxxxxxxxxxx>
 - *Date:* 4 Oct 2005 01:03:48 -0700
-

>>From Osher Doctorow mdoctorow@xxxxxxxxxxxx

Where is matter in all this, and what does it mean for the Universe to "solve a problem?"

I think that the two questions may be related. One definition of the microscopic or quantum "phase" or domain might be "that which can be reached by contraction," while the macroscopic or (modified/generalized) GR "phase" or macroscopic phase might be "that which can be reached by expansion." I mention this in earlier postings in various places (I'll have to look up where when I have time).

So when the Universe did its first acceleration, perhaps it was problem-solving in the sense of practicing expansion-contraction and exploring its macroscopic and microscopic phases.

But if such an exploration and practice is even conceivable, what could the Universe have learned that would satisfy it until the next major acceleration so to speak? Arguably, it learned how to move, which involves velocities and accelerations and some control of them including "attention" to simplicity of control as an especially important way to move.

But mass doesn't seem to be required for this. In fact, it's positively a hinderance at both galactic/intergalactic and microscopic scales in a certain sense. So the Universe learned that it didn't need mass to move, and Sir Isaac Newton's inertial mass which resists change of motion didn't stop the Universe.

Yet the Radiation-dominated era eventually turned into the Matter-dominated era, and it is generally explained as condensation of Matter with cooling of Temperature by expansion.

But what if this appearance of Matter which looks to us as though it followed from geometric expansion was actually "Independent", and our Universe is actually two Universes, one Nonmaterial Geometric-like and Radiation-like, the other Material? This seems to us rather abstract if not unmotivated, but suppose for a moment that it's true. How did

Re: Independent/Dependent Phases

the Universe 1 (Nonmaterial) "experience" this in some not quite fully lifelike sense? My guess is that it experienced a Problem, what Jauch and Piron and Mackey in quantum logic called "question-and-answer" or "yes-no" experiments.

>>From this viewpoint, the Universe did not "understand" or have Knowledge/Semantic Information about its Universe 2 (Material