Formalising the Heavens – Paper IV

Before the Big Bang

This is the fourth successive paper that I have been driven to write in response to the same article in New Scientist, and is perhaps necessary to dealt rather more fully with some of the points I have touched on in the earlier papers.
The main impetus for the suggestions put forward in that article were the discoveries of certain supernovae, which by all the usual means in the Standard Model seemed to be beyond the limits of the known (or seeable) Universe. This was, of course, anathema, and had led to the concept of Dark Energy, which is by some, as yet unknown, means forcing the Universe to fly apart at an accelerating rate.
Clearly, this was, to say the least, far-fetched, and very few were at all comfortable with it. But it had rapidly become the "only possible" explanation **within** the Standard Model.
The researchers featured in the New Scientist article were also not enamored of this explanation, and had looked for an alternative. But, (are you surprised?), they couldn't think of any clear alternative. That is until they started to muse mathematically.
This process allowed them to find a solution entirely to their liking, because it was purely mathematically definable.
They proposed a bubble (or void) of increased gravitation around that region of space which contained the Earth (and its immediate locality).

But there is another incredibly simple alternative!

These supernovae are not of our Universe!
The Big Bang was NOT the start of Everything.
It occurred in the midst of an already existing Universe which already contained Energy, Matter and even supernovae.

Of course, as soon as you address such a possibility, all sorts of other imponderables also begin to come into focus and make sense. Instead of Everything emanating from the Physical Singularity of the Big Bang, we have it occurring in a pre-existing Time and Space, which included all sorts of physical things in all sorts of Forms. Indeed, we can begin to conceive of causes for the Big Bang itself, which were FROM the pre-existing Universe. The explosion could then be a culmination of multiply contending factors which up to that point balanced one another, but which then were pushed beyond some threshold causing the almighty breakdown. The accepted consensus that even Time and Space were created by the Big Bang bites the dust in this scenario. There would be both Energy and Matter pre-existing in the older Universe, but moving (perhaps locally) to some prodigious critical situation.
So we can use processes known to be taking place in OUR Big Bang Universe as a template for the previous one, but assuming that there they were at a much more advanced stage of development.

The expanding front of our Universe from the Big Bang – both the radiation front and the following matter front, would come into contact with things from before in a cataclysmic series of interactions and collisions, and the current KNOWN distribution of things would be much more reasonable than if it SOLELY came from a ***Singular*** Big Bang. Major and minot collisions would take place and the results would a major redistribution of the pre-existing situation WITH the transforming explosion of the Big Bang. The unevenness of our Universe thus makes much better sense.

As the avalanche of radiation and matter from the Big Bang would all be outwards from its original location, it could not but whoosh all things it encountered along with its own tremendous momentum, and generally cause everything to join the general rush.

> NOTE: Without being too radical, such thoughts don't have to necessarily stop at TWO Universes. If there could be more than ONE, then there could be more than TWO. The Multiverse could be a succession of such Big Bangs over colossal periods

of time, and would mean that the Multiverse would be far from homogeneous or Isotropic.

In addition, the puzzle over the Background Cosmic Microwave Radiation being completely isotropic (spread equally over all possible directions) might well receive a much better explanation than that proposed currently. For, in the old theory this radiation would fast outstrip any matter from the same direction, because the radiation would travel at the much faster speed – that of Light. Now this outstripping of matter, which is the only conceivable source for its scattering into total isotropism, could be answered quite simply by the radiation hitting matter from the previous Universe, which would be ahead of it.

Indeed, many phenomena which are currently put down to post Big Bang causes, might be remants of the previous Universe, or indeed the effect of the interactions of both Universes.
I never did credit the colliding of Galaxies which BOTH are supposed to have emanated from the same single "point source"

The actual nature of our Universe and its stars with the giant contractions and explosions would be extended in this new scenario to some higher level involving truly inconceivable contractions and explosions, and just as the similar incidents in our Universe don't generally include everything, why should that "necessity" be so for the Big Bang?
These suggestions see the Big Bang as some stupendous gathering in of amazing amounts of material into something akin to a giant Black Hole. And, instead of the assumption that all such gathering would be infinite and finally result in both the demise and the disappearance of the whole Universe, so it too could terminate at some FINITE threshold, even if colossal in aggregation, and would on passing that necessary threshold explode in to the Big Bang. This scenario is not provable, but I contend that it fits the available facts much better than the current Standard Cosmological Model, or the dinky little voids of our latest theorists.

To be continued

(967 words)