Explaining nearby objects that are old in time dilation cosmologies

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One of the problems with time dilation theories is that they explain objects at cosmological distances but not objects in local space. How can old objects exist in nearby space, such as the white dwarf (WD) star orbiting Sirius.

Sirius B is a Carbon-Oxygen (C-O) WD with a measured temperature of 25,000 K.[1] Like other WDs, it has no energy source but is steadily cooling down from its former hot stellar state. In fact, Sirius is itself a mature, spectral type A1V star only 2.6 parsecs (8.6 light-years) distant from the sun. Its white dwarf exhibits an elliptical orbit which varies from 8.1 to 31.5 Astronomical Units (1 AU is equal to the semi-major axis of the earth as it orbits the sun, or the average distance between the two bodies), so it has little interaction with its companion. The binary system is thought to be about 200 Ma years old, based on stellar evolution and cooling rates of WDs (see the Solar Age Condition, or SAC,[2] which brings these large absolute ages into doubt).

C-O WDs are cores of massive stars that began with masses 4–5 times that of the sun. These systems have gone through various nuclear burning stages, the first core burning hydrogen to helium. After the hydrogen burns itself out, it continues on to shell burning, leaving the helium 'ash' in the core. As the core helium increases in density, its pressure and temperature also rises. Finally, after a stage of degeneracy, it attains a temperature of about 100 million K and begins burning the helium, converting it to carbon and oxygen. The core never attains a temperature high enough to burn the C-O products. But it goes through an unstable 'AGB' stage as a red giant, where it loses a great deal of its mass to the interstellar medium. The leftover debris is called a planetary nebula. The final WD, called Sirius B, has a mass of only 1 solar mass.[1] So it is believed to have lost 80% of its previous mass.

How does such an old system exist near our youthful, directly created solar system, which is less than 10,000 years of age? The answer is the existence of a timeless region![3] Russ Humphreys found that there is a timeless region inside the white hole (or a black hole for that matter) (see figure 1).

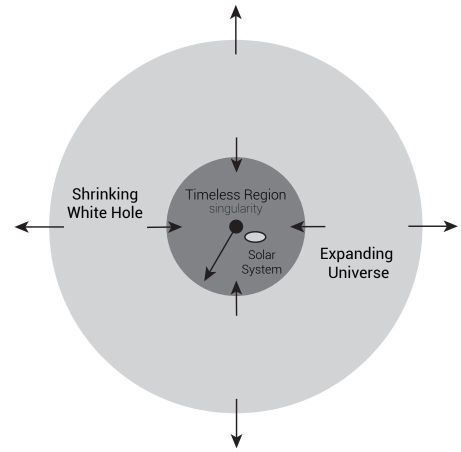

Figure 1. Inside the expanding universe, during Creation Week, the shrinking white hole is sustained down to small radii with a singularity at its core. In this phase, matter is still escaping out of the white hole and the Schwarzschild radius (R) is still shrinking. The shrinking white hole will eventually pass the solar system and the time dilation event will be over for the earth-based observer. The white hole will eventually dissipate, ending its effects on space-time.

In the 'White Hole' (WH) cosmology of Russ Humphreys or in his more recent cosmology,[3] as long as the earth is inside the event horizon of the WH (and therefore inside the timeless region), objects outside of it continue to age and their light continues to impinge upon the earth. So nearby objects *are* old in the model. That is the simple answer. The actual details may be more complex. For this process to work up close to the solar system, the event horizon may have dispersed (evaporated) somewhere between the solar system and the nearest mature star, Proxima Centauri, about 4.2 LY's away. This would allow aging in the Centauri system also. The minimum radius to take in the entire solar system, including the Kuiper Belt, is ~70 AU. This would require the presence of a 3.5-billion-solar-mass singularity at the core to maintain a 70-AU-radius WH. (Here we have ignored the Oort Cloud since there is no direct observational evidence for its existence.)

Of course, it's not only the earth that's within the white hole as it collapses but the entire solar system, including the sun, created on Day 4. The singularity will cause the aging process of objects external to the white hole as seen from the earth to continue until the event horizon gets close. After it loses sufficient matter, we would expect the WH to evaporate and the time dilation apparent to Earth-based observers to cease. All other related phenomena that affect space-time would also cease, e.g. blue-shifts. The WH would evaporate quickly as the event horizon collapses inward and all matter leave the timeless region, much the same as a miniature black hole does.

References

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